Chapter 4

LITARARY WORK
Shool is a type of pain. It is a symptom i.e. “Rugnasamvedya Lakshan” of many diseases; as well as, according to Ayurved, Shool is disease also. Generally Shool is considered as a disease in which pain in abdomen is a main symptom. But I think this meaning of Shool only as a Udarshool is very limited and due to bias only. Correct meaning of Shool is a type of pain and it may be anywhere in the body. In “Sushrut Samhita” Shool is defined as follows:

शूल सघं तिव्र ज्वाला तिव्रत्व महान वेदना।
शूल सघं साध्व कानो तिव्रत्व शूल इति महान वेदना।
(सु 42/81)

Making commentary on it Dalhana says that:

शूल सघं तिव्रनव्यूह ज्वाल तिव्रत्व महान वेदना। (डल्हन)

Means Shool is a type of severe pain, which is similar to the pain produced by penetrating a nail or any pointed or conical object. After referring different Samhitas and their commentaries we come to know that, the word “Shoula” is used at different places for different types of pains or pains of different organs. e.g.

1) Angashool अंगशूल, अंगनेयशूल | (चि 3/244)
All above and other references indicate that the word *Shool* means not only *Udarshool* but any type of pain also. Rather there are different meanings of word *Shool*, but all of them tend towards *Pratikul Vedana* i.e. unpleasant feelings. The word *Vedana (Anubhutee)* means feeling or bearing. This feeling is finally transmitted to the “*Chikitsadhikrik Purush*” i.e. a living body or body with soul and mind. There are two types of feelings viz. *Anukul* (Pleasant) and *Pratikul* (Unpleasant) and termed as *Sukha & Dukha*. *Patanjalee* had defined them as:

\[
\begin{align*}
\text{अनुकुल वेदनीय सुखम्}  \\
\text{प्रतिकुल वेदनीय दुःखम्}
\end{align*}
\]

(Patañjali Yogadarsan)
pratikul vedana i.e. unpleasant feelings and indicate abnormal status of that particular part or body or mind.

There is one more aspect according to another meaning of the terms Sukha and Dukkha which is related to the concept of Srotas in Ayurveda. While describing the Samprapti (Pathogenesis) of any disease “Sushruta” says that

कुषितान्त हि दोषाणां शरीरे परिधायताम् ||

यत्र संग ख वै गुण्यात् व्याधिः तत्र उपजावते ||

(सू. सू. 24/10)

It means when aggravated Dosha when increase beyond certain limit they first scatter all over the body; and then after getting stick up to the organ or part of the body where there is some abnormality or defect, fault and thus the disease commences. While writing commentary on it, Dalhana says that

खौ कै गुण्यात स्तोण्यात् इत्यथा: ||

(सू. सू. 24/10-सूर्यान) ||

i.e. Kha or space means strotas. Thus sukha means Avikrut (Normal or natural working), undefective srotas; which is responsible to the healthy status of individual and Dukkha means abnormal or defective srotas, which is essential for diseased condition and ultimately for many types of pains. That is why in the pathogenesis of any type of pain, role of srotodusht is quite important.
"VEDANA-KOSH"

A Vedana-Kosh is a sort of dictionary of having about 800 words, which are either definitions, synonyms or words related to Shool or Vedana, prepared from Samhitagrant and their commentaries.

1) अंग्रग (च.चि. 29/96) – अंगमंग

Body ache, Seizing Pain

2) अंग्रग (च.चि. 2/12) – अंग्रग

Body ache, Seizing Pain

3) अंगुदन (र.16/77) सुचिवेधवत् अंगवेदना।

Pricking Pain

4) अंगमंग – (अ.य २४.१२/५०)

अंगानाः जयोरं प्रभृतीति भंग इव भंगवर्णानं इव अंगमंग।

Pain like breaking or pulverising different body parts.

अंगानाः स्फोटनं इव वेदना।

Breaking pain

5) अंगमंग – (च.चि.5/11कुष्ठ उपद्रव) – अंगानाः भेदः।

Breaking pain

6) अंगमंग – (सु.उ.55/16 बल्लण)

अंगमंगः अंगादृङ्खलं इव वेदना, स्फुटिनां हती अवे विश्रामः।
Cramps or breaking pain
- (सु ् ू. २५/९) अंगमार्द इति वेदना विशेष, स्फुटनिका इति लोके।

A sort of pain like breaking different body parts.
- (सु ् ू. २४/५) अंगानि सम्बन्धिते हय।

Pain like smashing the body parts.
7) अंगवदना - (चि. २/६) अंगवदना अंगर्मद्।

अंगपिका।

Body ache
8) अंगरूढ़ - (चि. ३/२४४) अंगर्मद् अंगवदन शूल।

Breaking pain
9) अंगलशन (अ ह. २५/१०) अमण्डविल्य।

Looseness of body.
10) अंगसाद (सु ् ू. २५/९) अंगसाद इति अंगाना अगुरार्त।

Exhaustion, Fatigue
11, अंगवशान (चि. १/३३) अंगाना दीर्घत्वा

Emaciation
12) अंगवशान (सु ् ू. १५/१३ धौण) अंगवशा विकलातो शरीर।

Faintness of body and mind.
13) अवप बोन (सु ् ू. २८/११ धौणा) संवृण्वत संधन।

Pain like smashing the body parts.
14) अवपातिति - (चि. १/२१) एक्देशोपायितम्।
Localised pain like roots out.

15) अवयवायसाद - ( सू. 25/36-37) अवयवस्य स्वरक्षमै असामाध्यम्।

Fatigue of any body part.

16) जीर्णी - (मा. (च. व. (22/6 8 क्ष.) चोला।)

Pain

17) अनुबद्ध शूला : (च. च. 19/7)प्रभात सातचेन शूलायुतम्।

Pain after some pathological act like loose motions etc.

18) अततदाहं - (च. च. 3/39)स्वास्थ्यावातीज्ञादो उष्णास्यायो दाहः।

Burning sensation at internal organs like stomach, intestine etc.

19) अत्रकृति - (सू. 1/23)अयक्त शार्दु गुगुर्दांदि शार्दो या पक्षायग्यथ कृपित वातकृति।

A bubbling sound

A symptom produced by aggrevated Vata at Pakwasheya.

20) अत्रजनन (च. च. 13/14) अत्रेन मेदनकत् वेदना।

A breaking pain from intestine

21) अवश्यायी (च. च. 13/14) अत्रेन वियोजन।

A bursting pain from intestine.

22) अपवधनम् (सू. 27/13) ममपीडाकर्मम्।

A pain particularly at Marm (Vital points)

23) अतरः - (अहे सू. 1/33) (च. च. 3/36) मनसामयजित रोगलक्षणम्।

Discomfort

24) अनुपाद्यं - न केन्त्र अपि स्थानासनादी अवस्थाय चेतसो निविडित।
Uncanny feeling, Not being well, Discomfort

25) अनवस्थान - (च.सू. 29/38) अग्राशय, दखलकलम।

Emaciation, Heaviness of the body.

26) अग्राशयदारण - (च.सू. 20/14) अग्राशय, अक्षरणम्, रक्तन, विदाहरण च।

Pain due to cracking of the skin.

27) अंतरह - (च.सू. 30/48) अतिवस्थात।

Severe burning sensation

28) अनवस्थान - (च.पि. 1/21) चावलम्, अस्वस्थतम्, श्लेष्मिलच।

Unsteadiness, Unstability.

29) अनिलप्रभ (का सू. 27/19) वातावरण: अशीतिवाद शाकयु एक।

Stiffness due to Vata (obstructed)

30) आनाह - (सुि 33/46) आनामनम् वक्तुकरणम्।

Pain due to bending the body parts.

31) आनाह - (च.वि. 2/7) छायाप आनाम, वायुध गरोगुणम्।

- (सु उ. 56/20) अरण्य निमित्त आम, श्रवण वा मुच्यो विमुख अनिलो (अन्नाम वायुणा)

बिक्षुद सदा यथार्थग्न नप्रवत्तते स आनाह।

Abdominal pain due to flatulence, indigestion or constipation.

32) आनाम - (च.सू. 26/102)

- उदरे वायो: अतीव संचय: अनिलप्रभम।
Severe pain with bubbling sounds and distension of abdomen due to excessive flatulence.

35) आयाम - (च. सू. 14/24) अपयवान अनेक्षुक क आयामः।

Involuntary stress and strain on body parts due to Vikrut Vata.

34) आयामनः - (सू. सू. 22/11 ठल्लण) आयामन अपकरितर। ते स्थीतिकरिता हृतिः।

- (सू. सू. 43/6) आयामते विद्वीक्रिते इत्यः।

Stretching pain.

35) आद्यागः - (च. सू. 28/23) आक्षेपणम्।

Convulsions.

36) आरंभजन - (च. सू. 2/59) निर्धुणः।

Stirring pain, agitation, churning pain.

37) उत्तराता - (सू. सू. 22/11 ठल्लण) अंगस्य उच्चनवणम्।

Tossing up or lifting pain.

38) उत्तरांकण -

Pressing out pain.

39) ओष्ठा - (सू. सू. 1/87 ठल्लण) ओष्ठो दाहः।

- (सू. सू. 5–8 ठल्लण) उष्ण नलसमीय इण्डशितः। बंदनाविष्कः। इति अन्यः।

Burning sensation
Penetrating pain.
42) अंत्युन्य - (तु. 16/42) तालुकदेशी लोहित, सतव रूक्क, ज्वालाह, रोग.

Inflammation with fever, pain & redness at palate.
43) अन्त्नावाह - (चत. 9/84) (तु. 25/13-14) शिरोरोग, अस्तमन मद्यधारा, अतिलोध, रुक.

A disease of head in which there is severe pain at neck pharynx, eyes, eyebrows & temporal region.
44) अन्त्नावात - (चत. 1/21) वातलमु, अस्तित्वरोग.

Unsteadiness, trembling.
45) अन्तिलोध - (का. 27/19,20) वातदैविक, अशिवातरोगेनुम एक.

Obstruction in the pathway of Vata.
46) अन्त्रमुक्षेन - (चत. 13/39) अन्त्रपित्तलमु - कदुमुद्रस्य हेतु एक.

Intussusception.
47) अन्त्यतावात (अस. उ. 18) नेत्रोग, योजनुदुक्कार्णिकलिनासुखो मन्यातो वा अन्यतो गतो वा.

वात. अविलोचने वा रूजा करोत्ति सोत्तमात.

(तु. उ. 6/27) अन्यत. स्थित. पागु अन्यतो वेदनाः करोत्ति इत्यत अन्यतावात.
Severe pain at eyes, neck, temporal region due to *Vatprakop* at neck, chin, temporal region or other sites.

A disease created by obstructed downward *Vayu* with *kapha*. There is pain in heart, head, temporal region and convulsions and dyspnoea. It is also called as *Dhanurvats*.

A disease created by obstructed downward *Vayu*; in which there is pain in heart, head, temporal region and convulsions with dyspnoea.

A disease in which there is contraction of tendons and muscles of shoulder joint with painful movements.

Anaesthesia, loss of sensation of touch.

Hyperthermia.

Generalised hyperthermia, Pyrexia, fever.
Pressing, smashing pain, compressing pain.

A disease in which there is sour throat, sour belching, chest pain and heat burn.

A type of pain

Unilateral lumber pain due to Prakupit Vayu.

58) A voided — (सू उ 25/16) सिरोरोग अथवामेद — पथाय।

Unilateral headache, migraine.

59) अर्धशिरोरूजा — (का. दुष्प्रयात वि. 11-12) अथवामेदक।

Unilateral headache, migraine.

60) अथवामेद — (अ.ह.उ. 23/7) (व.वि. 9/74-76) (सू उ 25/15) (सू उ 27) अर्धसु मुर्ल।

A disease created by Prakupit Vayu and Kapha in which there are cutting, breaking, penetrating pains at one sided neck, eye brows, ear, temporal region, eye and forehead with giddiness.

61) अलाभव — (सू उ 14/20) गीरिव| लाब्धयसवभाल।

Heaviness.

62) अधारणा — (सू उ 6/13) विदारणम।
Crack

62) अर्नमाद - (चं ० २४ /३) (अ.ह. २४/१९) अस्थायी पूर्ववर्त्ती वेदना।

Needling pain at bones.

64) अस्मान्द - (चं. ६/६) (चं. २५/३२) अस्थायी निम्नत इन गर्भां िा वेदना।

Pain like breaking the bones.

65) अस्थायीतता - (चं ० १५/७) रिकाताः।

Feeling like emptiness in the bone.

66) अर्नमाद - (चं ० ११/४९) (चं ० ४/१९) (चं २०/३८) अस्थायी पूर्ववर्त्ती वेदना।

67) अस्मान्द - (चं ० २२/२३) अस्थायी पूर्ववर्त्ती वेदना।

68) अस्थायी- (चं ० २२/२३) अस्थायी पूर्ववर्त्ती वेदना।

69) अस्थायी - (चं २०/११) (सु. १/५१) हस्तस्माददुःखसेव वैद्यालयानात् अस्थायी अस्थायी।

70) अस्थायी - (चं २८/५०) (सु. ५२/५८) अस्थायी अस्थायी।

Penetrating pain at bones.

Trembling

(चं ० ५/३२) अस्थायीम

Soft

A type of pain like tractioning Pain

71) अस्थायी - (चं २०/११) (सु. १/५१) हस्तस्माददुःखसेव वैद्यालयानात् अस्थायी अस्थायी।

72) अस्थायी - (सु. १/५१) अस्थायी।

Convulsions

(सु. ५२/५८) अस्थायीकरणेन अस्थायी।
Convulsions, Involuntary contractions of limbs etc.

1) आटान — (च.नि. 8/6) उदरे गुडगुड शब्द।

(सु.नि. 9/80) शूर्याक क्षोभ।

Pain and irritation (abdominal) due to flatulence and bubbling abdominal sound.

1) आजाम — (च.चि. 28/44) आकर्षणम् श्वासवनम्।

Tractioning or splitting pain.

1) आघाध — (सु. सू. 46/438–39) पीढा।

Pain

1) आयास — (सू. सू. 17/66) (व सू. 25/40) (च.चि. 7/4) दु खम्।

Stress, strain.

1 आव्रोध — (सू. सू. 8/37) (सु. सू. 10/9) प्रसववेदना।

Labour pain.

1 उच्चवासारोधक — (सु. उ. 42/132) उच्छवासस्य आसमन्त्वाद रोधक।

व्यातामक्ष्यम् आसमन्त्वाद रोधक।।

Difficulty in breathing or dyspnoea

1 उच्चवासाबौध — (प्र) व्यासमांगाबौध।

Difficulty in expiration.

1 उच्चवासाबौधण — (सु. नि. 9/81) व्यास ध्रुवस्य अवरोध।

Difficulty in inspiration.

1 उच्चवासापरोध — (आ. सू. 29/16) व्यासागमस्य अवरोध।
Difficulty in inspiration.

82) उद्धारन - (सु. सू. 22/11) प्रणवदन॥

Pain like roots out any foreign body.

51, उद्भवन - (अ.स.उ. 22) दरण

Splitting on breaking pain

82, उदारवेदन - (च. सू. 19/4) उदस्थ आकषण इव आवेदन। अवश्य दातिवाचिकारं एक।

Spasmodic type of abdominal pain

83) उद्देष्य - (च. वि. 8/98) वेषयु कम्य।

Tremors, Trembling

84) उद्धरन - (सू. च. 36/45) (अ.स. उ. 43) वेष्टितवत वेदना, अगमंतरम्, अगमस्त्रय इव।

Spasmodic pain, cramps

85) उरोरुजा - (च. वि. 11/13) उरोद्वमुदुम्ब्।

Chest pain.

86) उदारबिष्का - (अ.ह. सू. 4/8 हेमादि) रक्ष्यादिनिः उदारमान इव उरसि दुखम्।

A chest pain like tightening with rope.

87) उपा - (सू. च. 2/22,23) दाहः। (अ.ह. सू. 29/4) अरतिमान दाहः।

Burning sensation.

88) उद्धार - (अ.स. सू. 6/इ०) उष्णन कृतो दाहः उष्णन कालोन उष्णणाहारादिना च दाहः।

Burning due to hot substances, hot climate, hot diet etc.

89) उद्धारत - (सू. सू. 12/38) (सू. उ. 58/23)

Dysuria with burning micturation.
Localised burning sensation.

Localised burning pain.

Burning pain with sweating or localised burning pain.

Itching, Pruritis

Lumber pain.

Lumber pain

Lumber pain
Lumbar pain.

Pungent retching test with burning in mouth.

Sore throat.

Sensation like expelling fumes from throat.

Burning sensation like expelling fumes from throat.

Pharyngitis.

Sore throat.

Dryness of the throat.

Itching, Pruritus.

Itching.
Tremors, Trembling.

Body tremors, trembling.

Tremors, trembling

Burning sensation at palms and soles.

Tenderness, hardness, hardness, roughness

Grasping pain with dysfunction at lateral sides of the Abdomen

A disease created by undigested food i.e. Aam in which there is pain at lateral sides of the abdomen.

Grasping pain at lateral sides of abdomen.

A hump on a back.

Painful and forceful defecation.
Painful opening of eye lids.

Dysurea.

Body ache with fatigue.

Reddish wheels with itching.

Gangrene.

Pain in Abdomen.

Burning pain in Abdomen.

Pain in Abdomen.

Excessive movements in stomach, intestines, etc.

Flatulence

Loss of power of hand.
128) कोठ्ठ - (सू.शा. 10/46) क्वेंचरावम्।

Kyphosis.

129) क्षथ - (सु.चि. 40/16) अक्समात्व उच्चवासावरोधः।

Sudden expiratory obstruction.

130) क्रथन - (सू. सू. 15/32) (च.शा. 8/21) अक्समात्व उच्चवासावरोधः।

Sudden obstruction in expiration.

131) क्षम - (सू. सू. 7/23)(सू.शा. 4/51)(सू.शा. 4/49 उल्लेखः) मनविद्येयस्यनागे। अनायास: श्रमः।

Fatigue with exertion.

132) किल्लू - (च.सि. 6/13)(च.चि. 13/13) (च.शा. 6/31) आत्, पीडित, क्लेरहुयुक्तः, दु खयुक्तम्।

Having pain, exhausted

133) स्तनाचकण - (च.सि. 9/6) चक्षुआचकणकारा वेदना।

Pain like tractioning the Kloma?

134) चणन - (सु.चि. 7/36) छेंदनम्।

Cutting pain.

135) खजच - (सू. सू. 20/11) (सू.शा. 6/24) (सू.नि.1/78) (सु.चि. 5/23) एकवादस्यं पंजुलं विकलतः।

Dysfunctioning of one leg.

136) क्षंब - (च.सि. 12/53) अरुणः। क्षंबः।

Itchiness, pruritis.

137) वलिक्ष - (च.नि 5/7) (क्षंब) क्षंबं (चन्द्रहस्यप्रजाः)।

Tenderness, Intolerance of touch.

138) खलिक्षन - (सू.नि. 16/24)
Severe tooth ache due to *Vataprakop* at the time of dentition a
subsides after that.

139) खल्ली — (व. सू. 14/23) हस्तपादामोहनम् ।

(अ. स. नि. 15) विश्वाची युक्ती च तीव्रस्नानिव खल्ली ।

Contraction of palm and sole, severe pain due to sciatica and
brachial neuritis.

140) खुडकस्ताम — (अ.सू. 12) उरुस्तामः ।

Stiffness and at functioning, heaviness of legs

141) खुडककालिन — (सू. नि. 1/79) वाककककः ।

Sprain at ankle joint.

142) खंड — (च.चि. 1/24) अवसादः ।

Fatigue

143) गडस्वदन — (च. नि. 9/6)

Trembling at forehead and head

144) गमंग्लोधालिन — (अ.ह. नि. 7/14)

Pain in abdomen due to foetal growth.

145) गमङ्गशाय गूळ — (सू. शा. 10/57)

Referred pain at lumber, inguinal region and originated at

146) गमांगशाय गूळ — (च. शा. 3) गमांगशाय प्रकृतिम् ।

Abdominal pain due to foetal growth.

147) गांगशाय गूळ — (च. सू. 17/56) गांगशाय प्रकृतिम् ।
Hardness, roughness of body parts

148) गात्रजनन – (च.चि. 28/25) गात्रजननबंगवत्नपीडा।

Body ache

149) गात्रक्षेप – (च.चि. 3/78) हस्ताक्षर: इत्स्ततो विक्षेप।

Involuntary contraction of limbs etc. convulsions.

150) गात्रकोपना – (सू.सू.12/16) विक्षेपन।

Dislocation of the body part.

151) गात्रबद्ध – (च.चि. 7/49) पोलाशिष्य।

Pain like tightening or twisting of any body part.

152) गात्रचुडूठ – (च.क.7/44) गात्रबद्धन।

Localised pain in any body part.

53. गात्रसन्धि – (सू. सू. 35/23) अगलानी।

Fatigue

54) गात्रसंग्रह – (सू. सू. 39/164) अगलानी।

Fatigue

55) गात्रसुनकता – (च.चि. 28/22) गात्रस्य स्पर्श्चतनाभाव।

Loss of touch sensation.

56) गात्रस्पर्श्चोप – (च.चि. 28/15) गात्रस्य स्पर्श्चज्ज्जानामाथ।

Frembling of any part.

157) गात्रस्मायम् – (अ.स. सू. 11) अवधानस्य आचारम।

Stretching of the body part.
Grinding pain - *Vataj* pain at anus due to trauma at urinary bladder.

Cutting pain surrounding to anus.

Continuous pain at anus

Pain at anus, one of the 80 diseases of *Vata*.

Heaviness of the any part.

Heaviness of the any part

Generalised heaviness.

With Generalised heaviness

Dysfunctioning of ankle joint.
Pain at ankle joint.
168) गुज्जस्तम् - (च.सि. 2/16) गुज्जस्तम्।

Immobilization of ankle joint.
169) गुज्जस्तम् - (अ.ह.सू. 4/19) वायु वृषण मेघाना शूलम्।

Pain at anus, scrotum, penis, vagina etc.
170) गजस्त - (अ.सू. 16/13) (च.चि. 16/4) (रु. शा. 4/55) गुज्जस्तम्। किणासु असाम्यम्।

Dysfunctioning due to heaviness.
171) ग्राही - (का. जातिसुनियय.) आदि प्रजनस्वदना।

Labour pain
172) ग्रीवस्तम् - (च शू. 20/11) ग्रीवाया. सान्न।

Stiffness of the neck
173) ग्रीवलहुङ्डन - (च.चि. 28/22) ग्रीवस्तम्।

Stiffness of the neck.
174) ग्रीवायमद - (अ.स. शा. 11) ग्रीवाया पीड़ा। रिष्टं लक्षण नेंद।

Severe pain in neck - a sign suggesting soon coming death.
175) ग्रीवति - (अ.ह. सू. 6/30) ग्रीवति। ग्रीवति। ग्रीवति। ग्रीवति।

Fatigue
176) ग्रेके - (सु. शा. 4/54) (सु. शू. 39/64) (च.चि. 3/36) (च.सि. 1/1 ग्रेके)
(सु. शा. 3/13) (अ.ह. सू. 11/17) (अ.ह. सू. 9/9)

Fatigue, exhaustion, drowsiness, giddiness etc.
177) घटन - (सु.चि. 3/20) चालनम्।
Trembling

178. तल्लुःशब्द — पुष्पःगाराशब्दनः नकननःगुःगमः

Grunting with dyspnea

179. बित्तिक्षुः — (च सू 14/11) वित्तिक्षुः नं माय

A sort of VATA-pain like crackling.

180. बित्तिक्षुः — (च सू 14/12) कर्मा

A sort of VATA-pain like crackling

181. चन्द्रदरण — (च सू 20/14) चन्द्रदरणम्

Scratching or fissures of skin

182. चन्द्रदलुः — (च सू 20/14) चन्द्रदलुः

Scratching or fissures of skin.

183. छा — (च सू 20/12) सम्पन्नः

Pulsating, trembling

184. छा — (सू 7/17) कर्मम्

Pulsating, trembling

185. ग्रिन्द्रायम् — (च सू 10/5) सर्पणालिक्यदृशयानुमयम्

Irritation.

186. ग्रिन्द्रायम् — (च सू 8/26) सर्पणालिक्यदृशयानुमयम्

Irritation

187. छिम्मिकमण्यम् — (च सू 18/7) (च सू 7/21) सर्पणालिक्यदृशयानुमयम्

Irritation
188) दुःखानुभवः - (सू ४२/१० दल्हण) (सू १/२५) सर्वपलितवद दुःखानुभवः।

Irritation

189) दोषः - (सू ४३/७) (सू ३७/६७) दुःखमाणस्येव वेदना। आकृत्यमाणस्येव दाह प्रकारः।

Sucking on burning pain.

190) व्यवन - (च इ ३/४) स्वल्प संघीनम्।

Dislocation of joints.

191) चूर्त - (सू ४५/११२) स्वल्पितः।

Dislocated.

192) उदन - (च इ १/७९) (सू ४९/१६) (च इ ६/१४) (सू ४२/१०४) वपनम्।

Vomiting

193) चुर्दः - (च च वि २०/५) (च वू ११/४५) (सू ४९/६) वपनम्।

Vomiting

194) उदन - (सू २२/११) साक्षात् छेदनक्रियाजन्य वेदनासदृशः वेदना विशेषः।

Cutting pain

195) जाघारूजः - (अ २५/३०) (रू २/५३) जाघायः गूळम्।

Cramps in legs.

196) जाघारूल - (च सि २/१५) जाघायः गूळम्।

Cramps in legs.

197) जाघासंग्रहः - (च सू १४/२३) जाघायः आकृत्यनादि कर्म अक्षमलम्।

Stiffness in legs - Dysfunction of leg.
198. जागालभम् (वसि 2/16) जागालभम्।

Stiffness in legs.

199. जागसदन् (वसि 7/41) जागसदन्।

Cramps or fatigue in legs.

200. जापाति (वसू 14/23) जापाति।

Cramps in legs.

201. जाजर्वाद (र. 2/53)

Abdominal pain.

202. जाज्ञाज्ञान (र. 14/38/9 निष्पद) जाज्ञाज्ञान।

Heaviness.

203. जाजूभद (वसू 20/11)

Pain in knee joints.

204. जाजूवराष (वसू 20/11)

Dislocation of knee joints.

205. जाजूताल (वसि 2/16)

Pain in knee joints.

206. जाजवरधि (वसू 14/23)

Pain in knee joints.

207. जाजुग्रह (वसू 14/23)

Stiffness of knee joints.

208. जाजुसान (वसि 2/16)
Syncope

feeling like sinking in darkness, unconsciousness.

feeling like sinking in darkness.

feeling like sinking in darkness again & again

Continuous feeling of thrust.

Continuous feeling of thrust.

Pain like beating with lathi or stick.

Fever, Hyperthermia, pyrexia, irritation.

Hypothermia.
Faintness, syncope

Severe labour pains.

Pain, anguish

Anguish.

A type of transmitted pain from large intestines and bladder towards anus and penis.

Anorexia, heaviness of the abdomen even with food consumption.

Thirst

Thirst

Thirst
Excessive thirst.

229) तांद्रा - (सू. चं 7/1) (सू. 61/16) तुभ्ये इच्छे वेदना।

(र. 24-74) तुभ्ये इच्छे तांद्रा वायस्क इच्छे तुद्धनम्।

(सू. सू. 13/21) विचन शूलम्।

Perforating pain, cutting pain, penetrating pain.

230) तांद्रा - (सू. सू. 22, 11) सुधीर: तुद्धारोऽत्तिदान। वेदना।

Perforating pain, penetrating pain.

231) ध्रुवह - (सू. सू. 20/11) निकस्य प्र्याहः।

Grasping pain at sacral region.

232) तांद्रा - (सू. 28/28) (सू. 1/24) विचनार्य वेदना।

Pain at Sacral region.

233) तांद्रा - (सू. 20/14) त्य्राहः।

Burning pain of skin.

234) तांद्रा - (सू. 17/5) त्य्राह उच्वदनम्।

Detoliated skin.

235) तांद्रा - (च. 8/32) त्य्राहो भेदः।

Breaking or fissuring of skin.

236) तांद्रा - (सू. 44/5) त्य्राहो स्फुटं।

Breaking or fissuring of skin.

237) तांद्रा - (सू. 20/14) त्य्राहण त्यश यथायथद्विषुदम्।

Breaking or fissuring of skin.
Breaking or fissuring of skin.

236) तण्ड रक्तदान - (सु. 44/5) तच्चा रक्तदान।

Breaking or fissuring of skin.

237) तण्डवदरणम् - (च.सू. 20/14) बाह्य तण्डवादरणम्।

Breaking or fissuring of skin.

238) तण्डवदलन - (सु.चि 29/12) तच्चा भागां: पतनम्।

Defoliated skin

239) दार्शनल - (च.चि. 2/16)

Tooth ache

240) दंतवर्च - (च.चि. 2/22)(सु.चि. 16/30)(अ.सं.चि. 25)

Odontitis

241) दर - (च.सू. 17/31) दरदरिका, इत्यः।

Fibrillation of heart - Palpitation

242) दरण - (सु.चि. 43/6) आरणा दीर्घं इव वेदना।

Cutting pain

243) दव - (अ.सं. सू. 20) दाह तापं वा।

Hyper-thermia, burning sensation.

244) दवदु - (च.चि. 21/30)(च.सू. 26/43)(अ.सं. सू. 20/16) चकुआर्धिदु अत्यधिक तापः।

Excessive burning pain in various parts like eyes etc.

245) दवन - (सु.सू. 45/9) संतापः।

Burning pain

246) दरण: - (सु.चि. 15/3)(सु.चि. 4/9) विदरणम् पातनम्।
Splitting pain.
247) दासुन - (च. सू. 18/41) (चु. चि. 7/3) तीक्ष्ण, कठिनम्।

Hard, harsh,
248) दासुन - (चु. चि. 16/28) दन्ताच्या कृमिगणिता वाने तः।

Breaking a tooth with severe tooth ache.
249) दाह: - (सु. चि. 47/67) दन्तावकीणपत वेदना।

Generalised burning pain
250) दिवाकारापं - (क.चि. 5) सुर्यांवः।

Severe headache related with position to sun.
251) दुःख - (च.चि. 8/39) प्रतिकुल वेदनीयम्। (सु. सू. 1/23) कायवाक्यानाशी पीढ़।

pain
252) दुःख्विमाता - (सु. चि. 1/18) दुःख्विमायम्।

Severe pain
253) दुःखा - (च. सू. 17/54) दुःखान्यांत्र:। ((सु. चि. 41/25) अति वेदना।

Severe body ache
254) दुःखान् - (च. सू. 13/45) कठिनम्।

Hardness
255) दंहवणा - (का. सू. 25/4) शाश्री व्यथा।

Body ache
256) दंहत्व - (च. सू. 16/7) (चु. चि. 3/16) बलहीनत्वा। (च. चि. 1/33) वापिरवतानि: मांतोऽपवय।

Weakness, muscle wasting, debility, fatigue.
257) दुःखान् - (सु. 60/11) सुचिमाय।
Uncontrolled mind

258) धूपनः — (च सू 17/58)(च सू 18/7)(अ ह सू 30/48)धुमावनम्।धुमितत्।धुमिनिवाद्यमन्।

A throat pain like expelling out the fumes on smoke.

259) धूमकः — (च सू 20/14)(अ सं सू 20/14)(अ सं सू 20/16)धुमोवद्यमनिविव।

A Pittaja throat pain like expelling out the fumes on smoke.

260) धुमागमः (च नि 2/6)धुमांगमेवधुमानोपधीक्षेत्रोषे।क्षेत्रोषे।

A pain like smoke on fumes in mouth.

261) धुमावनः — (सु सू 22/11)(सु र 29/14)(अ सं नि 50/16)अगाना धुमोद्यमनः।व।क्षेत्रोषे।

A pain like expelling out the fumes or smoke from any body part or throat.

262) धृणः — (च नि 7/6)(अ ह सू 11/39हेमाद्रिः)(सु सू 19/20)चितनम्।चिता।

Anxiety, over thinking.

263) नरवशुलः — (च सि 2/16)नरवशुलवादन।

Pain at nail bed.

264) नामोरुजः — (च सि 7/9)नामी प्रदेशोरुजः।

Pain at umbilicus.

265) नामोशः — (च सि 13/341)नामीप्रदेशःशुलवादन।

Pain at umbilicus.

266) नामपूर्ति — (च चि 20/8)नामी शूलम्।

Pain at umbilicus.

267) नामयमानः — (अ ह सू 8/16हेमाद्रि)(अ सं सू 11/34)संकोचमनाम।
Pain due to contraction or bending of body part.

268) निषेधः – (च.सि. 6/55) स्थानन्वयता बहिरावता।

Protruded.

269) न्युनतः – (व.च 27/316) स्थितिरहितम्।

Dry

270) निक्कुण्डः – (च.सि.12/18) संकेतनम्।

Contraction

271) नियतः – (च.सू 16/8) अप्रृव्वत।

Flatulence obstruction to passing of abdominal gases.

272) निम्बुशुलः – (अ.स.शा. 4/16) निम्बुशुलिक्षात् वेदनासद्दश वेदनावती।

Pt. having continuous pain

273) निर्पलतः – (व.च 3/4)

Having continuous fever or Hyper-thermia.

274) निर्पलततः – (सू.उ. 39/40) विकलान।

Handicaped (bodyly)

275) निरुक्षणिनः – (सू.उ.42/80 उत्कृष्ट) निरुक्षणिनः।

Dyspnoea.

276) निकंत्रतः – (सू चि. 3/27)(सू सू. 32/4) विकल्पण।

Dislocated

277) निर्दंडः – (सू चि.1/7) भूमसात्त करणवत् वेदना। (सू सू. 22/11) विद्यमाना निषेषं द्वाराधारितवदं

वेदना।

Severe burning pain
Churning pain.

Extremely bending.

Cutting pain.

Forceful defecation.

Grunting

Rubbing pain, grinding pain, smashing pain

Spasmodic pain.

Penetrating pain.

Penetrating pain.

Heaviness of eyes
288) नत्रिधराव (चौरी 7/45) नत्रस्वंिक नत्रघनाणि सर्कल्यां घतनम्।

Involuntary movements of eye ball.

289) नत्रस्वंिकन (सुधि 36/26) नत्रघनाणम्।

Trembling of eye ball, nystagmus.

290) नत्रस्वंिकन (अहृ एू 22/26) अशिक्खलता।

Restricted movements of eye ball

291) पक्षिळुण (र. 4/18) परिणाम शूल।

A type of abdominal pain starts during or after the digestion of food.

292) पक्षिशूल (र. 18/143)।

A type of abdominal pain starts during or after digestion of food.

293) पक्षिलस्य शूल (र गु 7/8) परिणाम शूल।

Pain at large intestine i.e. around the umbilicus.

294) परिकर्ण (सुधि 55/8) (सुधि 2/8) कूंतन व त बेदना।

Cutting pain.

295) परिकर्णका (सुधि 34/16 दल्हण) परि सर्वत्रीवावै श्वसं लयाधिक छिंतल्यां बेदना।

Severe cutting pain.

296) परिकर्णका (अहृ एू 7/9) परित शातन पुलीभाव।

Formation of pus or Gangreen.

297) परिकर्ण (सुधि 55/18 दल्हण) आश्वस्त्र अवस्यै क्रियारहित समवस्यो भावेन कलश उपयश।

Severe fatigue, faintness, functionless.
Extremely weak.

Trembling

Generalised extreme heaviness.

A type of abdominal pain related with digestion of food.

Syncope, faintness.

Severe burning pain.

Severe burning pain.

With pains

Cracks on skin, fissures of the skin (superficial)

Squeezing pain

Cracked or blistered skin.
Cracked or blistered skin.

309) पृश्योऽत् - (अ.स.० 21/ 53) चर्मरचनां

Cracked skin, fissure.

310) परिपथत - (सू. मे 1/25) सर्पक्ष उच्छ उच्छायतनम् उच्छायतनवत् वा वेदना विशेषः

Pain like detaching of skin.

311) परेशुक : - (सं. शा. 8/19) (सू. सू. 46/353) आर्द्धार्द्धतितः

Extensive dryness.

312) परिस्रण - (वर. 6/18) कुष्टायण्य प्रभणम्

Spasmodic muscular pain

313) परिस्रण - (अ. सं. शा. 5/10) संनतायनः

Tremors, trembling.

314) परिलम - (च. नि. 5/7) ज्ञिनाज्ञिनकः

Tingling sensation.

315) पराहङ्करासेतात - (सू. अ. 24/5 वल्लण) उच्छरितिरसेतात

Horripilation, Bristling,

316) परिकर्त - (अ. शू. 4/3) कृततनवत् वेदना

Cutting pain.

317) पराशाङ्ग - (च. सू. 17/58) परि: संशोषणाम्

Muscle wasting.

318) प्रस्तु - (सू. नि. 2/15) (सू. सू. 14/21) कर्षणम् रक्षम्

Harsh, rough

319) पाणि - (सू. त्रि. 6/6 स.थलि) (सू. त्रि. 18) पाणिरश्च

Pain in interphalangeal joints.
Pain in interphalangeal joints.

321) पादस्पीत (सं. 2/16)

Pain in interphalangeal joints.

322) पादस्पीत (स.सं. 2/16) पार्षद स्तूपार.

Stiffness of interphalangeal joints.

323) पादस्पीत (अ.सं. 28/10) पार्षद स्तूपार.

Burning pain at interphalangeal joints.

324) पाददाह (स. सं. 43/6) दिशा कियत इब वेदना.

Splitting pain

325) पादस्पीत (स. सं. 1/37) हस्ताक्ष.

Burning sensation of palms.

326) पाददाह (सं. सं. 1/80) (अ. सं. 27/16)

Burning sensation of soles.

327) पाददाह (सं. सं. 20/11) (अ. सं. 20/13)

Pain in lower extremities.

328) पादस्पीत (सं. सं. 20/11)

Numbness and heaviness of leg.

329) पादस्पीत (सं. सं. 14/23) पाददाहांत और, जड़तादिर्दिप्रभान.

Heaviness and stiffness of leg - i.e. lower extremity.

330) पादस्पीत (अ. सं. सं. 3/61)

Numbness and heaviness of leg.

331) पादस्पीत (अ. सं. सं. 3/61) पादस्पीत. स्तूपार.
Stiffness of leg

Cracks on soles, Tylosis

Tingling sensation with numbness of foot.

Pain in lower extremities.

Burning pain around the anus.

Hardness, harshness, dryness.

Grasping pain in chest.

Breaking pain at ribs.

Pain at ribs.

Pain at ribs / chest.

Stiffness, penetrating pain etc. at ribs / chest
Perforating pain at ribs/chest

343) पाश्चस्फात - (चमन 9/21 डलण) पाश्चवाटितनामिव वेदना।

Rootsout pain at ribs/ chest.

344) पाश्चसहस्त - (च सू 14/22) पाश्चभाग।

Grasping pain at ribs/chest.

345) पाश्चसर्वोजन - (च मन 6/14) पाश्चवह, पृजनाम्।

Pressing pain at ribs/chest.

346) पाश्चवृत्ति - (च मन 3/21) पाश्चभुण।

Pain at ribs/chest.

347) पाश्चबधूत - (च सू 20/11) (च सू 20/13) पाश्चवह, पृजनाम्।

Penetrating pain at ribs/chest.

348) पाश्चशृंखल - (च सू 2/16) पाश्चशृंखल वेदना।

Perforating pain at calcaneal region.

349) पाश्चशृंखल - (च मन 2/16) पाश्चशृंखल वेदना।

Stiffness at calcaneal region.

350) पिच्छकोड़तन - (च मन 4/3 हैमाड़्र) (च सू 20/11) (च सू 7/8)

Cramps in legs .Calf muscles, thighs, biceps etc.

351) पिक्टवेदना - (च सू 4/37डलण) उष्णयोग्यिका।

Irritating ,burning pain.

352) पिपासा - (च मन 1/21) (च सू 2/24) तृणा।

Thirst.

353) पिपीलीका संचार - (असं सू 27/37) पिपीलिका शरीरे संचरीत्रवेदना।
Tingling sensation.
354) निमिलण चित्राचारे । (तंत्र 3/7) नितिकोन साधारे।

Tingling sensation
355) निमिलण कोल्हे । (चांद 30/10) नितिकोन साधारे।

Tingling sensation.
356) पीठन - (का. बालग्राम चि.) पीठा, दुखम।

Pain
357) जूति - (च. सूत्र 5/29) दुखतनम।

Inflammation with pus formation.
358) तस्तिमुखता - (च. सूत्र 20/14) मुखदीर्घचयम।

Bad breathing.
359) पुस्तिमुखता - (अ. सूत्र 20) मुखदीर्घचयम।

Bad breathing.
360) पुस्ति साधिता - (च. सूत्र 24/11) मुखदीर्घचयम।

Bad breathing.
361) पुस्तिके करती - (च. सूत्र 21/18) साधितकादरी दोषांक केलेला मुखदीर्घचयम।

Fullness or heavyness of abdomen.
362) पुस्तिग्रह - (च. कस 11/13) (अ. ह. सूत्र 17/26) पुस्त ग्रहणवाच वेदनाविशेष। पृष्ठ गृहक्ते इव वेदना।

Grasping backache, stiffness of the back.
363) पुस्तिसहाय - (च. सूत्र 14/22) पुस्तग्रह।

Grasping, backache, stiffness of back.
364) पुस्तिमंग - (का. खिल 12/10) पृष्ठमंगले पीठा।
Breaking backache

365) पृणायाम – (च.भि. 28/44 वचन) पृणायामविनोभि।

Kyphosis, hump on back.

366) प्रकृष्टिन – (च.भि. 23/5) प्रकृष्टिन:।

Gangrene, pus formation

367) प्रकोष्ठ – (च.भि. 23/5) प्रकोष्ठ: पुष्टिमय:।

Gangrene

368) प्रलाग – (च.भि. 1/21) अतिजागरणम्, निद्रामय।

Insomnia

369) असं - (च.भि. 56/7) तमारी प्रभासाद मानम्।

Feeling like sinking in darkness

370) प्रतस्थत – (च.भि. 33/18) प्रतस्थत मुखी।

Syncope

371) प्रतिलूकी – (च.भि. 1/87) प्रतिलूकीवर्धितम प्रतिलूकीवर्धितम विसृण्य वदनः। प्रतिलूकी यति

A type of transmitted pain from anus & penis towards umbilicus

372) पृष्ठी – (च.भि. 46/33) परिपृष्ठी।

A type of transmitted pain from anus & penis towards umbilicus.

373) प्रतिलूकी – (च.भि. 5/25) (ण.भि. 11/50) (छ.भि. 6/33) प्रतिलूकी।

A type of transmitted pain from anus & penis towards umbilicus.
374) प्रमेदः — (सू. 1/28) भेदनवत्त्योऽध।

Breaking pain

375) प्रमाधिन — (च. वि. 13/180) क्षोभकारी।

Instant.

376) प्रमौलय — (अ.स.उ. 27) स्वप्निञ्चरः।

Feeling like rapping the body with wet clothes.

377) प्रमुद्वा — (सू. 61/7 झलन) अतिसयोंविचेतनलवम।

Loss of sensation or Unconsciousness.

378) प्रमोह — (च.सू. 17/31) विचेतनलवम।

Syncope.

379) प्रमोक्ष — (च.सू. 2/6 वक) मूर्छा, मोह।

Syncope

380) प्रलय — (र. 12/99) संगतिशृंख्य।वक।

Irrelevant talk.

381) प्रस्पृत — (च.च. 1/33) (सू. 46/504) संगतिशृंख्य।वक।

Irrelevant talk.

382) प्रवाहन — (सू. 58/12 झलन) प्रवाहनम्, निकुञ्जनम्।

Forceful defecation.

383) प्रवाहन — (च.च. 15/46) कृत्यंरत चुरीधादिरैवजननम।

(सू. 13/61) प्रक्षेपण निवाहनम्।

(सू. 72/8) निकुञ्जनम्, कुष्ठनम्।
forceful & painful defecation

Pain

Trembling, tremors.

Dysnoea, hyperapnoea

Continues dyspnoea.

Loss of sensation of touch.

Hyper salivation.

Excessive stiffness or grasping pain.

Pulsating.

Tremors, trembling.
Perspiration.

Stiffness

Localized burning pain with sweating

Anurea, dysurea.

Anurea, dysurea

Constipation

Constipation

Loss of sensation of touch

Pain at urinary bladder.

Pain at urinary bladder.
Externally burning sensation

Pain in upper extremity or arm

Frozen shoulder

Loss of sensation of upper extremity due to huntered

*Ansaphalak Marma*

Anorexia

Anorexia.

Anorexia.

Anorexia.

Anorexia.

Foreign body sensation at ear.
Breaking pain, splitting pain.

Breaking pain, pain like breaking of skin.

Dysphasia.

Semiconsciousness.

Giddiness.

Anal prolaps.

Anal prolaps.

Prolaps of vagina / uterus.

Churning pain.

Churning pain.

Mental Irritation.
426) मनादेश्यः (सू.उ.57/17) विलापचित्तव्यः, विष्णुण मनस्त्वम्.

Sorrowness

427) मनोभिन्दापः (व.शा. 2/7) मनःसतः:।

Mental irritation

428) मन्धनः (ध.धि. 6/77) सहर्षम्भवनवद्व वैदना।

Churning pain.

429) मदरुजः (ध.धि. 28/36) मदवेदनम्।

Mild pains.

430) म-यादेशः (ध. सू. 17/14) म-यारंभः।

Stiffness of neck.

431) म-याशूलः (ध.भि. 3/7)

Pain in neck,

432) मन्यासतः (ध. सू. 20/11)(इनि. 1/67) मन्यासा. क्रियाहानी।

Dysfunction of the neck, Stiffness of neck.

433) मदरुजः (ध. भू. 13/1) अगमर्दन।

Body ache.

434) ममाणद्वन् (अ.सं.नि. 4/25) हृदयमदनम्।

Churning pain in heart.

435) ममाण्ड्वन् (ध.धि. 3/81) (सू.उ. 39/88)(सू.धि. 26/12) ममाण्ड्वन्तः पीढः।

Severe pain.

436) मासकाथः (सू. भू. 25/3) माससच्य पुलीभावः।

Gamphrene or pus formation
Rectal prolaps, loose anal sphincter muscles.

Stomatitis, glossitis.

Loss of test sensation.

Dryness of mouth.

Scrotal itching

Anurea

Dysurea, Painful micturation.

Obstructed urine, anurea.

Anurea,

Polyurea
Pain at inguinal region, pubic, and umbilical region due to anurea-retaintion of urine

448) मूर्वसंग - (च.चित. 3/60) (च.चित. 13/41) (सु.नि. 8/3) मूर्वसंगभूमतिः, मूर्वसंगभूमनेत्रः।

Anurea-retaintion of urine.

449) मूर्वाघात - (सु.उ. 58/3) (अ.स.नि. 9/2) मूर्वाघातः।

Anurea-retention of urine

450) मूर्वात्संग - (सु.उ. 58/15) (च.सि. 9/34) मूर्वाघातः।

Anurea-retaintion of urine

451) मूर्वाघात - (सु.उ. 59/3) मूर्वकुछः।

Dysurea.

452) मूर्वाण - (अ.ह.सू. 12/52) अम: मोहः।

Giddiness, drowsiness.

453) मूर्वाण - (सु.नि. 1/23) वंतनाभ्यूतिः।

Unconsciousness

- (सू.सू. 24/27) (सु.उ. 46/503)

Syncope

454) मूर्वाण - (अ.ह.सू. 5/40) मूर्वाणः।

Syncope

455) मूर्वमृगाव - (अ.ह.सू. 4/12) शिरोगीर्वनः।

Heaviness of the head

456) मूर्वपाद - (अ.ःसू. 5/33) शिरोभेदनः।

Headche.
Pain in skull

Anal pain.

Folding pain in chest, waist etc.

Stiffness of the penis.

Vaginal pain

Reddish wheels on skin with itching.

Reddish wheels on skin with itching.

Reddish eruption on skin with burning and itching.

Dysmenorrhoea.

Travelling irritation.

Inability of taste sensation.
Pain

469) रुज़ - (२.२/३) रुज़, पीड़ा।

Pain

470) रुज़ - (सू. सू. २८/२७) पीड़ा।

Pain

471) रुज़ - (सू. सू. ५६/१६) (सू. सू. ४१/११)

Dry, rough.

472) रोमध्युति - (अ. गृह. सू. ११/१२) रोमध्युति।

Loss of hairs.

473) रोमध्युति - (२.२०/१९७) रोमध्युति।

Loss of hairs.

474) रोमध्युति - (सू. सू. ४२/१०) रोमध्युति।

Horripilation, Bristling.

475) रोमध्युति - (ब. नि. १/३३) रोमध्युति।

Horripilation Bristling

476) राक्षस - (अ. सू. २०/११) (अ. सू. २०) राक्षस।

Dryness of the skin.

477) ललाटमद - (च. सू. २०/११) (अ. सू. २०) ललाटमद।

Breaking pain at forehead.
478) ललास्वचरण -- (का सू 25/8)

Hyper-salivation

479) ललस्वचारण -- (सि 9/6)

Hyper-salivation

480) ललस्वचारण -- (चि 30/247) तत्त्वभाषागृहता

Hyper-salivation

481) लांडन -- (चि 3/106) इत्यतः नवनम्

Involuntary movements, trembling

482) लांडन -- (चि 28/81) रोमहर्षः

Horrripilation Bristling

483) लांडन -- (असि 2) लांडनम्

Involuntary movements.

484) उक्रोश -- (सू 52/9) मुखोशः

Dryness of mouth.

485) उक्राध्यवकर्ता -- (सि 1/70) अर्धमुखवकर्ता

Bal's palsy

486) पेनेट्रेटिंग -- (सि 10/11) (वि 11/13)

Penetrating chest pain.

487) उक्राध्यवकर्ता -- (च सू 20/11) (असि सू 20/13)

Obstructing pain in chest.

488) उक्राध्यवकर्ता -- (सि 9/6) मुखवकर्ता

Bal's palsy.
Vomiting

490) वृमण -

Vomiting

491) वृति - (र. 12/10) छादी।

Vomiting

492) वचों संग - (भ.पि. 13/41) वर्षसोश्रेष्ठ।

Constipation

493) वर्षोपरात - (भ.पि. 13/38) वर्षसोश्रेष्ठ।

Constipation

494) वचों निराघ - (सु. उ. 56/8) पुरीष्टय अप्रवत्तनम।

Constipation

495) वचों अप्रवत्तनम - (सु. उ. 7/8) पुरीष्टय अप्रवत्तनम।

Constipation

496) पल्लवस्था - (सु. उ. 20/11)

Stiffness of eye lids.

(सु. उ. 62/7 द्विस्स) अभिज्ञकमत्स्य वा इत्यथ।

Vertigo, giddiness,

497) वाक्निग्रह - (सु. उ. 13/78) वाक्स्तम।

Interrupted speech, dumbness, aphonia.

498) वाक्निग्रह - (सु. उ. 16/24)/(सु. उ. 12/32)/(सु. उ. 16/11)/(सु. उ. 14/25)
Interrupted speech, dysphonia, aphonia.

Interrupted speech, dumbness, dysphonia.

Pain in ankle joints.

Penumothorax, flatulence

Different types of pains due to *Vataprakop* like breaking pain etc.

Perforating or penetrating pain due to *Vataprakop*.

Pain created by obstruction in the *Pathway of Vata*.

Lag opthalmus.

Cutting pain at anus.
Bubbling sounds, intestinal sounds.

Improper talk, grunting.

Contraction, contractures.

Inflammation, gangrene

Involuntary movements of body parts, seizures.

Glandular, rough

Involuntary movements, trembling

Vertigo, giddiness

Schizophrenic

Abnormal movements, Convulsions of extremities.
Stiffness of body muscles with convexity.

Penetrating pain

A pain like breaking or tearing by nails etc.

Severe generalized burning pain.

Short limiting acute pain like electrical shock.

Bending

Burning pain like expelling fumes.

Bending of body part especially due to severe pain.

Different psychological disorder like vertigo, giddiness, drowsiness, epileptic seizure, Histeria etc. or mental irritation

Churning pain
528) वियात्ताचन - (सू. सू. 33/17) अचरज्ञानीताकासः।

Involuntary movements of eye ball, nystagmus.

529) विलोचन - (सू. उ. 61/9 झलक) वकनेत्रः।

Crooked eye.

530) विवर्तन - (सु. नि. 15/6) वच्चलित वर्तनम्। साधिनुकर्तक्षय सामायन्य लक्षणम्।

Whirling, Dislocation

531) विवर्तन - (सू. नि. 15/7) विवर्तन वर्तितम्।

Everted.

532) विच्युताक्ष - (सू. 3. 61/9) उच्चलिताक्षः। (सू. चित. 7/31) सत्याकासः।

Fixed or motionless eye.

533) विच्युताक्ष - (सू. क. 5/42 झलक) व्यावर्तित नेत्रः।

Involuntary movements of eye ball.

534) विषोजवाचः - (च.चि. 17/47) अस्तुतवचः।

Irrelevant talk, improper speech.

535) विषोजः - (सू. उ. 48/7) विषोजवाचः।

Excessive dryness of mouth.

536) विश्वास - (सू. चि. 3/20) विश्वास (सू. चि. 2/77) स्वास्थ्यानात्व्युतः।

Dislocated, prolaps.

537) विश्लेष वक्ष - (सू. उ. 52/11 झलक) अवसानवक्षः। पिष्टवक्षः।

Chest pain.

538) विश्लेषस्थिः - (अ.सं. सू. 7/47) व्यूहस्थिः।

Dislocated joint.
An abdominal pain due to constipation.

Abdominal pain with flatulence and constipation

Improper sensation

Unconsciousness.

Irrelevant talk.
548) विस्तीर्ण दृष्टि: — (सू. १९. ६)

Dilated pupils

549) विस्फूरित देह: — (सू. शा. ८/८) आर्यमित मध्यस्थिति।

Stiffness of the middle part of the body.

550) किद्धस्य — (सू. सू. १५/२६) स्बंधनत स्थिति।

Proaps

551) विहल — (सू. सू. ४६/४१९) पुनःपिता।

Irritated.

552) विहलमुख — (च. धि. १९/९) विशिष्टसं मुखवस्त्रस।

Loss of test sensation.

553) बुधचिक्षक — (सू. धि. १३/५९)

Scrotal itching

554) वेषिन — (च.नि. १५/२९) बहुवक्ष्यः।

555) वेदना — (च. शा. १/८६) बुध खम(च. शा. ४/१५)सुखदु खोपलाधि (सू. शा. १०/७)शून्या। (अ.स. शा. ३/३०)

आविशेषवेदना।

Sensation, pain, labour pain.

556) देशक — (सू. धि. ३६/४५) कघम. वेदनम।

Tremors, trembling.

557) वेपन्णु — (च. धि. १/२१) (सू. धि. २४/२७) (च. सू. २०/११)

Tremors. trembling.

558) वेपन — (च. धि. २८/१३४) (सू. शा. ६/२४) कघम।
Tremors, trembling.

559) वस्त्र - सु. 5/71) ठुकरा।।

Tremors, trembling.

560) व्यासन - (च.स. 17/31) उसेंद्रनम्। (अ.ह.स. 12/15 अरुण) यथार्थं इव अनग्नयं वनम्।

Muscle cramps, folding or knotting pain

561) वेठी - (च.चि. 3/36) विकृतचित्रतवम्। शुद्धमनविम्।

Mentally Irrited

- (सु.चि. 39/14) उमातदामानसिववः।

Psychological disorders

562) व्याकार्य (च.चि. 7/22)

Tylosis

563) व्याकार्य - (सु.चि. 25/42)

Tylosis

564) वेदन - (च.स. 5/72) विरसता। (च.ई. 2/18) अनिष्टरसता।

Loss or improper sensation of taste.

565) वेदन - (च.स. 5/30) विकृतचित्रतवम्।

Improper talk, dysphonia.

566) व्यापथ - (च.नि. 8/6) वेदनाविदयेष।

A type of pain.

567) व्यापथ - (च.स. 17/29) विन्दनम्। (अ.ह.स. 12/45 हेमद्रो) सुदृढ़विद्याविद्याव्। (हे) तानन्दन इव

वुद्रिद्विनम्।

Penetrating pain or beating pain.
Burning pain in throat, chest etc.

Dislocation of T.M. Joint

Mentally irrritated or disturbed.

Constipation

Penetrating, pain, perforating pain.

Severe breaking pain at forehead & temporal region.

Severe breaking pain at forehead & temporal region.

Intolerance of any noise or voice.

Intolerance of any noise or voice.

Tremours, trembling.
579) सरीरस्वतन् -(च.सू 14/14) अगसादः।

Body ache

582) शरीरभावः -(अ.सू. 3/62) शारीर: भ्रमः।

Physical stress.

583) शिश्यस्य परिपुर्णाक्षम् -(सू. 41/13) शिश्यगौरवः।

Heaviness of head.

584) शिर स्तम् -(च.सिं 2/22)

Grasping pain at head.

585) शिरावर्धन् -(व.सू. 2/6) शिरोपद्योत्सवः, शीरोजाकालम्।

Heaviness of head.

586) शिरांमाहः -(सू. 39/49) शिरस्योप्यमाणत्वबद्वेदना।

Grasping pain at head.

587) शिराधस्य -(च.प्र. 23/229) शिरः पापतं मनोनम।

Lateral bending of head.

588) शिरामेतद् -(सू. 56/6) शिरोविदारण इव वेदना।

Severe pain like breaking the head.

589) शिराध्रमः -(च. धि. 22 / 12) चक्रनितित्तु शिरसि भ्रमः।

Giddiness, vertigo
Giddiness, vertigo

Different types of headache.

Breaking pain at forehead and temporal region.

Hyper-thermia of head, forehead etc

Hypothermia, cold extremities.

Fever with chills, fever with rigors.

Severe toothache aggravated by cold substances.

Having cold extremities and face.
Fever with chills or fever with rigors.

600) शीतकालाकार — (रं 5/185) शीतपूर्व शिख्माकर।

Fever with chills or fever with rigors.

601) शूक्पृणकठाल — (रं 28/15)

Sore throat.

602) शूककालू — (का. सू 25/30)

Dry itching

603) शूककालू — (अ. हं सू 6/65) (चनि 1/21)

Dry cough

604) शूकचढ़ड़ि — (चनि 1/21)

Dry vomiting, nausea.

605) शूकवृण्णमणस्वता — (चनि 18/5)

Sore throat

606) शुरुवात — (चनि 1/31) मशक्ककाल सरकद माना।

Loss of sensation.

607) शून्य — (अ. हं सू 11/16) रिक्षतम।

Emptiness, weightlessness.

608) शूल — (चं सू 14/13) रूजा। (सू.उ. 42/81) शाकुशक्कोटनवत् तीर्था वेदना।

Severe penetrating or perforating pain.

609) शूलाविश्लेषण — (सू.सू 22/11) नानाप्रकारातिसुलापत् गात्रस्येव।

Different types of pains.

610) भ्रम — (चनि 1/21) आत्तिन। कर्मावश्यासिन न क्षमतम।
Fatigue, exhausts, on even little exertion.

611) श्रम स्वास - (सू. 55/35) दूरगमन - बलबदविग्रह - मारोदनायकिनि श्रम समुक्षन्। श्वासः।

Dyspnoea on exertion.

612) अणवण्णारंभ - (सू. 55/16) बाध्यम्।

Deafness

613) अणामी - (सू. 20/11) (अ.स.सू. 20/13) श्रीण्योत्तरतम् श्रीण्योत्तरतं शौर्यः।

Breaking or penetrating pain at lumbar region or waist.

614) अणागृहु - (सू. 34/9) कटिगृहु।

Lumbago

615) स्थपत्य - (अ.स.शा 8/24) शौर्यः।

Looseness

616) अणीश्राह - (च.सि. 9/6) कटिगृहः।

Grasping pain at lumbar region.

617) आस्थासिद्धि - (अ.ह.सू. 11/16) साधिशंकित्वम्।

Looseness of joints

618) विधामण - (अ.ह.सू. 11/8) अवांशिकोंच्या।

Looseness, lazness, lethargy

619) समस्था - (च. सू. 5/30) काँपच्या कम्पनांकोऽपूयांच्या।

Hypersalivation.
Nausea, hyper-salivation.

Hyperapnoea.

Difficulty in expiration

Despond.

Mental irritation, inflammation with redness and pain.

Irritation

Pulsating or tingling sensation

Roots out pain.

Irritation, trembling.

Dryness.
631) सहत - (सू. 35/16) घनम् ।

Hard, tense.

632) सहन् - (सू. 26/10) रोगोद्वा ।

Horrilpilation

633) सहिःरोमन - (सू. 59/10) उद्भूषित रोमा, पुलिकित ।

Horrilpilation, bristling

634) सकण्डुक - (सू. 25/8)(सू. 16/26) कर्णपात्यरोग: कर्णपाल्यकार्यकुसंबोधे ।

Itching of the earlobe.

635) सक्ष्युह - (सू. 40/9) विबध्युह ।

Aamure.

636) सक्लाविद - (सू. 40/130) विबध पुरी ।

Constipation.

637) सक्खसधन - (सू. 3/13) उर्चामनिः ।

Fatigue of the thighs.

638) सकोच - (सू. 28/21) आकुमाणि (सू. 14/24) आकुमाणि (सू. 28/20) आकुमाणि ।

Contraction, contrature.

639) सकोचन - (सू. 5/6) सकोच ।

Contraction, contrature.

640) सकोध - (सू. 17/111) (अ.स.शा. 11/19) पुलीमावः ।

Gangrene, pus formation

641) सक्ष्य - (सू. 3/18) आकुंचनम ।

Contraction, contrature.
Vibration, trembling.

Obstruction, static.

Friction-pain due to friction

Pain due to friction

Hardness, thickness

Severe colicky pain similar to pain of calculus

Sucking pain.

Fatigue, body ache

Physically pyrexia and mentally irritation.
Dislocation of joints.

652) नाभिनाशा – (अ.ः 3.17/16) संधी-सधी वा पीड़ा।

Joint pain

653) साधिमुक्ता – (सु. भ. 15/4)

Dislocation of joint.

654) संभिरज – (सु. ज. 39/36) संधिना वेदना।

Joint pain

655) संभिर मुक्ति – (सु. भ. 15/7)

Deformity in joint.

656) संभिरनक्षम – (सु. भ. 3/50)

Dislocation of joint

657) संधी वेदना – (अ.ः 3.21/18)

Joint pain

658) संधीशब्दगामिन – (च.भ. 8/98) संब्रिक्षन शब्दवान।

Murmur or crashing sound from joint during movement.

659) संधी विश्वेषण – (च.भ. 21/30)

Dislocation of joints.

660) संधीशब्दगामिन – (च.भ. 4/7) संधिगत: सकटनालक शब्दः।

Murmur or crashing sound from joint during movement.

661) संधीशब्दगामिन – (च.भ. 28/33) संधिपु शूलचतु वेदना।

Joint pain.

662) संधीशब्दशूल – (च.भ. 3/39)
Pain in joints and bones.

Lumbago with fatigue and looseness.

Distended abdomen, flatulence.

Hallucinations.

Irrelevant talk.

Drowsiness, giddiness, syncope.

Localized pain

Stomatitis, Glossitis.

Generalised grasping pain

Fatigue, drowsiness, fatigue of thighs, debility weakness.

Fatigue with drowsiness
Mild pain, loss of sensation.

Numbness at feet or lower part of the body.

Numbness of the skin

Senile dryness and numbness of the skin.

Extensive loss of sensation.

Loss of sensation, numbness of body parts

Loss of sensation, numbness of body parts

Porosity.

Abdominal heaviness

Dislocated.
Mastitis with pain, swelling, burning in breast, fibrocystic
disease of breast.

Stiffness of breast.

Pain in breast, mastalgia.

Stiffness of the nipples.

Silent abdomen, loss of peristalsis.

Stiffness of body part, joint etc.

loss of functions.

Stiffness or immobilization of lower extremities

frozen shoulder, loss of function of arm.

Erection of penis (pilot sign of death)

Horrulation breathing.
Stiffness of the thighs.
692. लम्बवनामापिं (सुधि 1/7) अम्बुगर्तापुरकम् ।

Stiffness of the muscles, muscular rigidity.
692. लम्ब [(च सू 28/21) (च सू 13/75) नियोजिकालक्षणम् (सुधि 5/6) दाृढ़त लब्धता]। बतामुः
[(च सू 48) -(अ.ह सू 12/51) नियोजिकालक्षणम् (अर्थ) काढुनाभागदिना साक्ष्यनाथभ्रम] ।

Stiffness heaviness, loss of function, contractures.
697. लम्बन [(सु सू 22/11) साक्ष्यता]।

Stiffness heaviness, loss of function, contractures.
698. स्तम्भत [(सु सू 41/4) लम्बन (सु उ 39/101 डै) आर्दम्, जाडचम्।

Heaviness, stiffness, wet, afunctioning.
699. स्तम्भ (सु उ 1/22) लम्बन।

Heaviness, stiffness, wet, afunctioning
700. स्तम्भतरुव | [(सु उ 10/12) मन्दर्वेदना।

Mild pain
701. स्तम्भ [(च सू 8/96) (सु उ 39/49) स्तम्भ आर्दभावयत्तम्य माव। । आर्दपदाकुणीलक्षणम् (अ.ह सू 12/53) जाडचम वान्धम्, अवधियम्।

Feeling like rapping the body with wet cloth or wet leather, shivering, heaviness, deafness.
702. सिक्षर गावना [(च सू 13/45) गावना स्वलचम्।

Loss of function of body parts.
703. स्वलचमना [(सु उ 42/67) कालचमना।
Hardness of any body part.

Muscular pain or cramps

Muscular rigidity or stiffness

Tremors, trembling

Trembling, tremors, involuntary movements with pain.

Intolerance of touch, tenderness.

A syndrome in which there is penetrating and burning pain at skin with eruption of wheels.

Loss of sensation of touch.

Loss of sensation of touch.

Intolerance of touch.
Intolerance of touch.

715) सिरकज्वल— (चसि 2/16) सिरक्षावश ज्वलः।

Buttock pain.

716) सिरकज्वलम्— (चसि 2/16) सिरक्षावश ज्वलम्।

Stiffness of buttocks.

717) स्फुटन— (च वृ 17/58) स्फुटितवर हेदना। (च वृ 5/92) दरणम्।

Blasting or perforating pain, cracks on skin.

718) स्फुटान— (चनि 3/7) स्फुटनम् कपः (सृषि 1/7) पुल्लुनः बालन्म।

Pulsating, trembling, tremors, involuntary movements

719) स्फुटान— (सृषि 5/24) स्फुटानम्।

Blasting or perforating pain, cracks on skin.

720) स्फुटन— (चू उ 45/6) शत्कलकरणमिव हेदना।

Splitting or blasting or perforating pain.

721) स्फुटन— (च सू 20/12) किंचित स्फुटितवर बालन्म। (अ.ह. स 12/49 ह) शत्कल्पम्। अर्थः।

Looseness, first degree prolaps dislocation.

722) स्फुटन— (चचि 30/111) ब्रज (सू. उ. 41/18) अवसान्य शिष्ठिलम्।

Looseness, prolaps, dislocation.

723) स्फुटानु— (वचि 19/9) शिष्ठिल गुदम्।

First degree anal prolaps, anal incontinence.

724) स्फुटानु— (अ.स. आ 11/16) शिष्ठिल गुदम्।

First degree anal prolaps, anal incontinence

725) स्फुटानु— (वचि 3/103) शिष्ठिलगुदम्।
Looseness, drowsiness, in the body: 726)
Anal prolapse:
727) स्वास्थ्य - (अ.सु. 5/41) निद्रानाश:।
Sleeplessness, insomnia.
728) स्वास्थ्यता - (च.चि. 7/7) निद्रालुतम्।
Drowsiness:
729) स्वस्थय - (च.चि. 1/71)स्वस्थ्य क्षय। (च.सू. 24/15) (अ.स.नि. 3/7) मदभाषितम्।
Feeble sound speech, dysphonia, aponea.
730) स्वराह - (च.चि. 16/84)
Dysphonia:
731) स्वरदीवल्य - (च.सू. 44/14) स्वरमङ्क।
Feeble voice.
732) स्वरनाश - (अ.सं.सू. 36/7) स्वरहनि:।
Aphonia:
733) स्वरभंग - (र.25/44) वैस्वर्यम्, स्वरभेद:।
Hoarseness of the voice:
734) स्वरभंग- (च.सू. 53/1) स्वर वैस्वर्यम्, स्वरभेद:।
Hoarseness of the voice:
735) स्वरव्रंश - (अ.सं.नि. 5/17) वैस्वर्यम्, स्वरभेद:।
Hoarseness of the voice:
736) स्वरवृक्षु - (च.सू.नि.6/27) वैस्वर्यम्, स्वरभेद:।
Hoarseness of the voice.

Aphonea

Numbness loss of sensation of touch

Excessive sweating, perspiration.

Loss of sweating.

Fatigue.
Aphonea.

Loss of sensation, unconsciousness

Trembling of chin.

Lock jaw.

Breaking pain at chin or T.M. joint

Dislocation of T.M. joint

Stiffness of T.M. joint.

Stiffness of T.M. joint, lock jaw.

Stiffness of T.M. joint, lock jaw.

Dislocation of T.M. joint.

Tingling sensation, sprain.

Tingling sensation, sprain.

(Ch. 4/7) Padh Haraye
Tingling sensation of feet.

Horripilation, bristling.

758) खराब - (अं. 27/16) सू. 42/9 समांवेत्तै।

Horripilation, bristling:

759) हेक्का - (सू. 12/5) रोगमुखीवातः कंटकितत्तमः।

Hiccup:

760) हेक्का - (सू. 17/17) (अं. नि. 4/30)

Hiccup:

761) ह्यूर्जन - (च.चि. 28/22) शिरस्य प्रसूतीत्वा अन्तार् प्रसूतीव्यायः।

Deviation, herniation.

762) ह्यूर्जन - (सू. 15/9) हुद्द्यग्य संसाधनम्।

Palpitation.

763) ह्यूर्जन - (सू. 15/9) ह्यूर्जनम्।

Heart pain.

764) ह्यूर्जन - (च.चि. 26/79) हुद्द्यग्य स्त्रद्वेत् ह्य अनुमृति।

Grasping heart pain.

765) ह्यूर्जन - (च.चि. 26/79) हुद्द्यग्य स्त्रद्वेत् ह्य अनुमृति।

Emptiness of heart

766) ह्यूर्जन - (सू. 42/131) हुद्द्यग्य।

Severe heart pain

767) ह्यूर्जन - (च.चि. 7/6) हुद्द्यग्य कंठनवल्ले वेदनाविशेष:।
Grasping heart pain
768) त्र्युदयन्तः (तः त्वः 17/101) त्र्युदयन्त ध्वनिः इव वेदना।

Tightening cardiac pain.
769) त्र्युदयाहः (तः त्वः 17/33) त्र्युदयाहः।

Burning pain at heart
770) त्र्युदयः (तः त्वः 20/11) (तः त्वः 17/64) त्र्युदयः दर्दम् इति धुतामुग्धिति करति।

Palpitation
771) त्र्युद्तुपंगन् (तः सः त्वः 27/20)

Heart pain like obstructing fumes or smoke in heart
772) त्र्युद्भदेपः (तः त्वः 26/79) त्र्युद्भदेपः पेडः।

Breaking or splitting heart pain.
773) त्र्युदप्रजः (तः त्वः 15/45) त्र्युदप्रजः।

Mild cardiac pain.
774) त्र्युद विकारः (तः त्वः 26/84) त्र्युदप्रतिकटः कारः वेदना।

Cutting pain at heart
775) त्र्युदालम् (तः त्वः 43/7) त्र्युदालम्।

Weakness or fatigue of heart
776) त्र्युदामाः (तः त्वः 8/6) (तः त्वः 54/10) त्र्युदामाः कोशीइद आकर्षणकः पैकः।

Tractioning pain at heart
777) त्र्युदयः (तः त्वः 20/24) परिश्रान्तयोऽय इहः इहः।

Cardiac fatigue, palpitation.
778) त्र्युदयः (तः त्वः 21/46) त्र्युदयः मुश्किलतः सिद्धः।
Heaviness at heart.

779) द्रुतवदनकम्य - (च च सू 27/3) द्रुतवदनकम्य |

Trectioning cardiac pain.

780) द्रुतवदनकम्य - (च च सू 4/8) द्रुतवदनकम्य स्वतंत्र | तेजः |

Grasping cardiac pain.

781) द्रुद्वस्पन्त - (च च सू 27/10) द्रुद्वस्पन्त | तेजः |

Severe cardiac pain.

782) द्रुद्वस्पन्त - (च च सू 16/12) द्रुद्वस्पन्त |

Palpitation

783) द्रुद्वक्लेश - (च च सू 20/6 सू 42/1-3) द्रुद्वक्लेश |

Nausea.

784, द्रुद्वाह - (च च सू 20/11) द्रुद्वाह | तेजः |

Bradycardia?

785) द्रुद्वाह - (च च सू 56/26) (च च सू 38/50 भ) |

Nausea. Hyper-salivation

786) द्रुद्वाहसिचा - (च च सू 1/43) द्रुद्वाहसिचा |

Nausea. Hyper-salivation.

787) द्रुद्वाहसिचा - (च च सू 1/9) द्रुद्वाहसिचा |

Pain like coating something from inside the heart.

788) द्रुद्वायसकतित - (च च सू 1/17) द्रुद्वायसकतित |

Cutting cardiac pain.

793) द्रुद्वायसकतित - (च च सू 20)
Severe cardiac pain.

790) द्वारकनत - (सु. १५/१०) द्‌लासः।

Nausea. Hyper-salivation

791) द्वारमंडटन - (सु उ. ३९/११६ व.) द्वारकनत अस्वीकारः।

Squeezing or folding cardiac pain.

792) द्वारवेदन - (च.चि. २३/११४) द्वारवेदनं पीड़ा। (सु उ. ५५/७) द्वारवेदनम्।

Obstructing cardiac pain.

793) द्वारवेदनम् - (अ. हसु. ४/३) ह्यीणः।

Grasping cardiac pain.

794) द्वारवेदन - (सु हसु. २०/१७) द्वारवेदनं प्रलिप्ति।

Grasping cardiac pain, or pain like coating something from inside the heart.

795) द्वारवेदन - (च. हसु. १५/१३वः) (च.चि ६४/३) ह्यद्रहः।

Grasping cardiac pain.

796) द्वार - (च.चि. १५/४३) स्थानः।

Stiffness.

797) द्वारकम - (च.५६/१६)

Horripilation, bristling.

798) द्वारकाण - (च. हसु. ४/४२)

Horripilation, bristling.

799) द्वाराकाण - (च.चि. १०/११)

Horripilation, bristling.
While describing the Shool, Sushruta says that:

It means for all the type of shool i.e. pain. Vat-prakop is main causative factor. In Charak Samhit, We get basic thinking on etiological factors of Shool or vedana (Pain). In the first chapter of Sutrasthan Viz. Katidha Purushiya Shariradhyay, it is there in the form of conversation between Agnivesha and his master Atreyu Maharshi. While answering the question of Agnivesha about etiological factors of vedana i.e. Dukha or pain; Atreyu Maharshi says that:

धी ध्रति स्मृति विभागः कालकर्मा-याह हेतुव ||
असांत्यायां मूलवेदना भावः वृक्ष हेतुव ||

(सु. प. 1. २५)

It means Vibhansh i.e. dysfunction's of Dhee (Intellectual), Dhriti (Potential) and Smriti (Memory). Kala (Ritwadi season), Karma samprapthi and Asatmya-Indriyartha-samyog; these are the basic causative factors of vedana. While for first one i.e. dysfunction's if Dhee, Dhriti, Smriti; Charak termed it as Pradnyaparadha.

धी ध्रति स्मृति विभागः काल यत कुले दुःखाभ्यम् ||
प्रद्यन्तपराद सक्तिविषय सम्बन्धाय भाषणम् || (सु. प. २३. १०२)
Thus creating *Doshaparak Pradnyaparadha* becomes basic cause of all pathological conditions and ultimately all the diseases and for *Shool* also.

In *Harit Samhita* there is mythological story about origin or genesis of *Shool* on this earth.

Once upon a time god *Shiva* became angry on *Kamdeo* and threw a weapon - *Trishul* which after falling on earth created *Shool* disease. The conclusion of this story is Anger is one of the causes of *Shool*, as well as speed of the *Trishul* means *Vat prakop* and *Vat prakop* is a main cause of the *Shool*.

In *Sushrut samhit*, causes of *Shool* are described as follows:

\[\text{तत्तमूषुशोष्पाला विनमरतं आतिमर्जननान्} \]
\[\text{अतीर्र अध्यानात् आयाम सिद्धान्तं उपस्थितनात्} \]
\[\text{पानीयवनानां भूलते निरुद्धारां च संवाहनात्} \]
\[\text{विद्धातान्त्रुषक मासानां तथा ग्यात् तथैव च} \]
\[\text{एवं विधानार्थीणां अन्यथा} \]
\[\text{व उपस्थितनात्} \]

(सू.उ.42/78-79)

In *Madhavnidan*, we get *vishesh hetu* i.e. specified causes of *Shool* according to *Dosha*; as follows:

\[\text{चतुश्चूल- स्वाथन यानात्व अतिमृशुनात्व प्रज्ञागच शैत जलाति पानात्} \]

(सू.उ.42/78-79)
Thinking on all above references togetherly, we can classify all etiological factors of Shool as follows.

1. *Vatprakopak* Causes:

A) *Sannikriṣṭha ṛṣaṇa ṛṣaṇa hetu*: Means dietary causes which create *vatprakop* and compete the pathogenesis in short time. Viz. *Upavas* (Over fasting or starvation), *Ati sheet jala pan* (drinking of ice cold water), *Ati Ruksha* (Excess dry e g toast, *roti*, roasted pea nuts etc.), *Ajeerna* (Indigestion), *Adhyāṣhaṇa* (Eating again and again, eating before digestion of previous food) *Shimbi dhanya* (Beans, peas, black peas, pulses, chick peas etc). *Bhūṣṭra dhanya* — boiled beans (uncooked meat) divided and given to young children for roasted...
pea, drinking water when getting hungry, and at the time of
final stage of digestion (Katu Avastha pak).
B) Viprakrushta Aharaja Hetau: It means dietary causes
which take long time even so many days to compete like
pathogenetics. They are viz:
Always all the time eating substances having tests like Vikta,
Kashaya and katu. Rooksha substances like dried vegetables,
dried meat, roasted grams or peas, roti, Khakra etc.
C) Sannikrushta Viharaja Hetau: The excessive acts like
over exercise or physical stress, weight lifting, travelling,
falling from height. Travelling on rough roads or through
such vehicle which produces more jerks e.g. bull cart, bicycle
etc: laughing, loudly talking.
D) Viprakrushta Viharaja Hetau: Atiyayay (Excessive
intercourse), Vegavarodh (Suppressing natural urges like
defecation, micturaton, flatus, ejaculation etc. Prajagara
(sleeplessness), Sheet seva (Coolers, fan, A.C. room etc).
E) Pradhanik Hetau: It means main or instant causes like
Abhayat (Trauma).
F) Manas Hetau: Excessive mental stress - tension, mental
irritation, anxiety, sorrow, fear, excess desire of sex etc.
G) Kalaja Hetau: Shishir, Varsha, Greeshma Meghodaya
kal. old age, final or last 1/3 part of day and night, final
stage of digestion of food (Katu Avastha pak) etc.
H) Pitta - Prakopak Hetau:
A) Sannikrushta Aharaja Hetau: Excessive eating of Rasa
katu, Amla and Lavan.
Ati Ushna Teekshna - Like chillies, black pepper, mustard,
hot and spicy substances like agra, Bhel, paan etc.
Snigdha - Oily substances like fried papad, pakoda, puri, vada etc. sesame, groundnuts, oils of sesame and groundnuts.

Amla - Like curd, kadhi, pickles, sauce tomato, tamarind.

Kanji - Other substance like liquor, pulse like pigeon pea, fasting, kshar (Alkalis), salts, tea.

B) Viprakrushta Aharaja Hetu: Always all the time eating of sour substances like curd, pickles, tomato, kadhi, fermented foods like idali, dosa, dhokala, bread, jileb etc., fishes and all sea foods, drinking more and more water, habitual eating of Viruddhanna like milk with fish, milk with banana or any fruit, milk shakes, fruit salads etc. irregularities in the timings of meals etc.

C) Sannikrushta Viharaia Hetu: Atap seva, Agniseva, over physical exertion, Swedan etc.

D) Viprakrushta Viharaia Hetu: Excessive intercourse, doing job near fire i.e. near furnaces, boilers, bakeries etc., wondering in solar heat e.g. job of postman, salesman etc.

E) Pradhanik Hetu: Consumption of irritant substances like Bhallatak (Anccardium), Marich (Black paper), Rajka (Mustard), etc. Consumption of hard and strong liquors consumption of irritant poisons like Datura, Gunja, Jayapalbeej. Some allergens producing anaphelactic shock create signs of Pitta prakop.

F) Munay Hetu: Ati krodh (Excess anger) Ati kam (Excess sexual act).

G) Kalaj Hetu: Sharad , Varsha and Greeshma Ritu, middle age, middle 1/3 part of day and night, Amla Avastha Pak i.e. second stage of digestion.
iii) **Kapha - Prakopak Hetu:**

A) **Sannikrushta Aharaja Hetu:** Excessive eating of *Rasa* like *Madhur, Amla, Lavan.*

*Madhur:* *Ikshu Vikrutt* like sugar, jaggery, *phanit* (Molasses), confectionery, sweets, candy.

*Atiguru:* heavy food like *pulas, rabadi* etc.

*Atisnigda:* Like *ghee,* butter, cream, oils, *Maska,* *Vanaspati ghee,* *puri* made in *ghee,* *Malpava.*

*Dugdha vikrut:* like milk, condensed milk, *Paneer,* *Rasala* other substances like *Jalaja mans* (Fishes and sea foods)

*Anoop* and *gramya mans* i.e. meat of animals from coastal area (*Anoop desh*), and pet animals. *Mash* (black gram), *pishtala* (Starchy) substances like potato, sweet potato, sago etc. *Krushara* (*Pulav*)

B) **Vprakrushta Aharaja Hetu:** Always or habitual eating of sweets, milk products, oily substances, *ghee,* cheese, butter. *paneer,* *rabadi,* *shrikhand,* starchy substances like potato, sago, heavy diet like *pulav,* curds, more use of salts etc.

C) **Sannikrushta Viharaja Hetu:** *Sheet seva* i.e. living in A.C. rooms, air coolers; doing job in cold weather or cold water, *Deevaswap* i.e. day dreams, Sleeping immediately after taking food etc.

D) **Vprakrushta Viharaja Hetu:** Sedentary jobs like teacher, clerk, shop keeper, persons not doing any exercise

E) **Pradhanik Hetu:** Excessive eating of heavy food, excessive eating of *Abhishyandi* substances like curd, cucumber with salt, pickles etc, *Viruddhahar* e.g., milk with fish, fruits with milk etc.; excessive cold like ice-cream, ice cold water, or
cold drinks. Fruits like banana, custard apple, jack fruit, water nut, palm etc.

F) **Manas Hetu**: Any tension free, fearless life, laziness.

G) **Kalaja Hetu**: Hemant Shishir and Vasant Ritu early in the morning (Tuhin patan kal), first 1/3 part of day and night; just after the consumption of food; first stage of digestion of food, balya (Child hood).

Other then that there are some disease which become a cause of Shool or while send into Shool Vyadhi e.g. Amlapitta, krimirog, Adhman, Malavktambha etc. According to Madhavnidan they are termed as Nutanarthakar Vyadhi

According to modern science, Shool or pain is not a disease but a symptom- most distressing symptom of so many disease. It is produced due to inflammation or destruction of any body part or organ. Details will be described letter.
**SAMPRAPTI OF SHOOL**

*Samprati* means the pathogenesis of the diseases. The term *Samprati* is defined in *Madhavnidan* as follows:

> वन्ध दूषण दोषण क्षता व अनुमितिसंग्रहित तः
> 
> निहृतां ज्ञानस्वास्ती संप्राप्तिः ज्ञाति अन्वयिः ॥

(सन ४२/८०)

It means right from etiological factors: how *Doshas* become *Dushta* or *Prakapta* under the stages *Chaya, Prakap* and after extending certain limb *Prasav* scatter all over the body and when they get *Viguin* (defected) *Dushta* or organ, just stick up there and change the physiology of that particular organ or system and finally create a group of some signs and symptoms: what we call it as disease. Thus all this pathogenesis comes under *Samprapti*.

In "Sushruta Samhita" samprapti of Shoool is described very shortly as follows:

> धातु वृक्षिता काणेण शोोल संजनयत मृृषम्

(सू ४२/८०)
It means due to Vatprakopak Hetu, Vata become Prakupita: goes to kostha (i.e. G.I. Tract) and immediately creates Shool. First thing is, this Samprapti is quite short and secondly if we consider the meaning of kostha as Udarkostha (G.I. Tract) then it will be applicable only for Udarshool, otherwise it will be applicable for all types of Shool.

In Madhavnidan, Vishesh Samprati of Shool (Samprapti of types of Shool, according to Doshprakop) is described as follows:

- Prakupita: 
- Shool: 
- Prakupita: 
- Shool:

These Samprapties are too short to understand clearly except respective Dosh becomes Prakupit and creates that type of Shool, while in Vataja Shool Samprapti some sites of Shool are described like heart, flanks (lateral sides of the thorax), back, sacrum, bladder etc. while Pittaja Shool is called as “Ashukari” i.e. Acute.

In pathogenesis of Shool, two basic factors are important viz. -
1) Production of Shool
2) Transmission of Shool

First we are going to discuss about transmission of Shool And then after we will be discuss about production of Shool (Pain).
TRANSMISSION OF SOUL

Though any normal or abnormal feeling or stimulation created into “Chikitsadhirikrat Parush” i.e. a living body or a body having soul and mind, it is finally transmitted to the Parush i.e. Atma or soul. This process is called as “Pratyakshanubhuti” i.e. process of accepting the sense or knowledge by that individual i.e. Atma and sense organs play an important role in this process. This process is described as follows:

Thinking about Atma (Soul): Buddhi (Intelligence), Manas (Mind). Atma may be called as Big boss of the living body. Buddhi (Or dheec, dhriti and smriti) are secretaries while “Manas” or mind may be called as Personal assistant of big boss i.e. Atma. Hope or will of sense or knowledge initially creates at the Atma. Then it is transmitted towards mind and then from mind to Dnyanendriya i.e. sense organs and finally from sense organs to sense. By the same rout that sense is transmitted to sense organs, mind and finally to the Atma and when this circuit becomes completed, Atma gets that sense. Here there is great difference between normal and abnormal feelings. Without any willing of Atma these abnormal feelings or pains are
transmitted to the *Atma* through the route i.e. from sense organ to mind and finally from mind to *Atma*.

*Vatadosha* or *Vayu* is responsible for this transmission of feeling or pains from one step to another i.e. from sense organ to *Atma*. That is why in *Vatakala kaliya adhyay* of *sutrasthan* Charak Maharshi while describing the normal functions of *Vayu*, says that :-

......... प्राकृतिक धारणा एवं भाविक धारणा से वात वातस्य कलिक आद्य ईत्यादि आदि आदि मनसा संशयम् लोकसः जीविताः संशया तदात्माः तव एव सिद्धिः ...

(च.सू. 12/8)

This *Vayu* is classified into 5 types: viz *Pran*, *Apan*, *Vyan*, *Udan* and *Saman*; out of which *Pran* is responsible for reception and transmission of any sense or feeling and thus it controls the sense organs, as well as *Buddhi, Manas* and *Dhriti* also.

*Vagbhata* says that :-

प्रणिः प्रदेशिः
उष्ण कण्ठवासः बुद्धिः उदाणेन्द्रिय वितल्प।

(अ. व.सू 12/4)

1) *Sparshanendriya* :- In the case of any normal or abnormal feelings, especially in abnormal feeling like Shool, Bhed, Toda etc. *Sparshanendriya* plays an important role. It is receptor and transmitter of the sensation of pain. It receives and transmits the pain towards *Atma* by the help of
Ayurveda is scientific in its approach. It is not only the skin but it is covering of any organ or part of the body (its mesh of nerve endings of sensory nerves). So this "Twach" is spread all over the body as well as Adhisthana of another four sense organs as well. That is why all the body may become Adhisthanna or site of pain. So that in the first chapter of sharirsthan of Charak Samhita, while answering the question of Agnivesh about site of pain Atrey Maharsi says that -

वेदना अधिष्ठान अथ दह्वो न स्थितम्
केशलाम नामाणि तांकथयम् चिन्तित ।

It means as there is no sensation of pain at hairs, tips of the nails, faeces consumed food and Moootra and Shabdi Guna except these things remaining all the body with mind and sense organs is site of pain.

Thus Shool of any type of pain first received by the Twacha which is an Adhisthana of Sparshanendriya with the help of Pranvayu and then after transmitted towards the Sparshanendriya and then to mind and finally towards the Atma by the help of Pranvayu.

Thus Twacha, Sparshanendriya, Mana and Atma, these are four important steps in the transmission of pain. While Pranvayu is responsible for this transmission. We can
practically prove the importance of these five elements, 
which are responsible for the transmission of pain.

At Twacha Any defect of internal or external Twacha 
prohibits the transmission of pain. In Mahakushtha or 
Hanson's disease due to defect in external Twacha, we can 
see the loss of sensation. While in diabetic neuropathy due 
to defect of internal Twacha, one may see silent i.e. painless 
heart attack. We can infiltrate local anaesthetic drugs like 
yxlocaine in external or internal Twacha and subside the 
sensation of pain. Thus Twacha has an important role in 
transmitting the pain.

By Sparshanendriya : It means sense organ of touch. 
According to Ayurveda, it is very very minute, rather 
invisible and situated in the Mastishka (Brain). Though it is 
quite important in transmission of pain, its defect is quite 
rare and irreversible also. Only in serious condition or last 
stage of any sellite disease we can find the defect of 
Sparshanendriya in the form of “Arishtasuchak lakshana” 
Ie. such sellite signs which indicate that the pt. is going to 
die soon. Some of them are important like loss of 
thermal sensation or touch, pt. feels cold substances hot and 
sweatless; loss of sensation etc. In syncope there is loss of 
sensation of superficial touch: while in coma there is loss of 
sensation of deep touch - pain, strong pains and reflexes also. 
Some drugs having depressant action on C.N.S. like - opiates, 
pethidine, morphine or drugs used for general anaesthesia 
like ether, chloroform, Nitrous oxide, sodium pantathol etc., 
always block the Sparshanendriya and prohibits to transmit
In Ayurveda this Satva is classified into 3 types or there are three types of Manas Prakriti i.e., psychological constitutions viz. Pravarr Satva, Madhyam Satva and Heen Satva.

Patients of Pravarr Satva constitution can easily tolerate strong and severe pains. While patients belonging to Heen Satva constitution, cant tolerate even mild pains. Mostly in last stage of any chronic disease this Satva become Heen. That's why in later stage of any chronic disease we get reduction in pain threshold i.e., pain-bearing capacity.

As mind has an important role in the transmission of pain, the drugs having depression action on mind, can be used as analgesics also. That's why depressant drugs like Ahiphen (Opmam), Khurasani Aywayan as well as Diazepam, morphine, pethidine, fortwin etc. they depress the mind and subside the pain.

By using some another therapies which treat the mind, we can subside the pain. Some of these therapies are as follows:

In Hypnotism therapy by hypnotising the mind, we can eliminate the pain. In occupational therapy by engaging the mind elsewhere, we can eliminate the pain. In Yoga therapy by Chitta Vritti Nirodha i.e., controlling the mind we can eliminate the pain. In Satyavajay Chikitsa by increasing the Satva Guna and decreasing Raja and Tama Guna of
mind, we can subside the pain. In *Adhyatma* therapy, controlling the mind by *Samadhi* we can subside the pain. And even in *Ashawasana Chikitsa* by supporting the mind only, we can subside the pain. By using all these therapies at mind level, we can eliminate the pain. That is why in *Charaka Samhita*, it is said that

\begin{quote}
यो ग्‌मक्षीं वर्षसा बदनामः स्वर्गसारः

\text{साहित्यशा यां वर्षसा स्वर्गसारः} इति
\end{quote}

(D) *Atma* - Means soul. *Atma* is last station of the transmission of pain. Though it is quite important, the role of *Atma* in pain transmission is passive. Though *Atma* feels the pain, he is passive. But though *Atma* is passive, for being united with mind and body and being alive, it creates love or desire for *Anakul Vedana* (normal feelings) and hate for *Pratikul Vedana* i.e., pains. It also creates *Prayatna* i.e., try for destruction of pains. In such a way *Atma* has an important role in feeling and destruction of pain.

(E) *Pran Vayu* - It is very most important *Vayu* as it is responsible for reception of senses, conduction of senses from *Adhisthan* to *Duyanendriyas* and then to brain, transmission of senses from *Duyanendriyas* to mind and finally from mind to *Atma*. It also controls and stimulates the mind and controls and bears all *Indriyan*.

In some diseases or disordered conditions when we get defect in *Pran Vayu* or *Moorshadana* (syncope), *Saniy*
dysfunctions of Pran Vayu. In syncope there is loss of superficial pain while in cough or severe epileptic seizures there is loss of deep pain. In the last stage of any acute febrile disease we may find some Arthita Lakshana due to defect or dysfunction of Pran Vayu. Some of them are improper (false) sensation: to feel and heat (i.e., feels hot things cold and vice versa etc), loss of sensation, hallucinations about senses etc. Thus role of Pran Vayu in the transmission or conduction of pain is quite important.

This is all about the transmission or conduction of Shool. Now we will see a real production of Shool.
II) PRODUCTION OF SHOOL

Shool or any type of pain is abnormal type of sensation. It's Adhishthan (site) is the Twacha. All the body (except hair tips of the nodule) externally or internally as covered by this Twacha. Thus, all the body become Adhishthan (site) of pain. So that Shool or any type of pain is produced at the Twacha (may be external or internal). Many pathological acts like force, friction, spasm, contraction, dryness, irritation, inflammation, erosion, necrosis; produce Shooladi different types of pains at the Twacha - may be external superficial or deep or internal (as the renal colic or biliary colic). Out of these pathological acts - pressure, friction, dryness, erosion etc. are produced by Prakupit (aggravated) Vata, Vata, irritation, inflammation, burning erosion, necrosis etc. are produced by Prakupit Pitta. While over softness, looseness, excess, excessive stickiness etc. are produced by Prakupit Kapha.

The Samprapti or pathogenesis of any disease is defined as:

कु-चितानां हि दोथाणा सर्भिंश्चाभाङ्कताम।

यत्र सम्: खैरायुष्यानि गाधि: तत्र उपजायत।

According to above difference in any disease or diseased condition these three factors are quite important.
I) **Prakupit** (Aggravated) *Dosh*

II) **Vigun** (defective) *Dushya* i.e. *Khavaigunya*

III) *Dosh Dushya Samoorchhana* i.e. pathological fusion of aggravated *Dosh* and defective *Dushya*.

According to this concept of pathogenesis, *Samprapti* of *Shool* can be described as follows:

Aggravated *Dosha* - a) *Vata* (Pradhan) b) *Pitta* c) *Kapha*
ROLE OF VATA DOSH IN PATHOGENESIS OF SHULI.

While describing different signs and symptoms of Prakupit Vata, different types of pains are there e.g.

According to Maharshi Charak, there are two types of pathogenesis of Prakupit Vata.
Vataprakop occurs by two types.

A) Dhatukshayajanya - i.e. due to catabolism or destruction of Dhatu (body elements).

B) Margavarodhajanya - i.e. due to obstruction in the pathway of vayu.

While thinking on pathogenesis of Shool, we get both type of Vataprakop.
It occurs due to following conditions –

1) **Dietary factors**
   
   A) Starvation of *Dhatu* or malnutrition i.e. lack of *Dhatu Saman Gunatmaka Ahar* i.e. (homogenious nutritive part of *Dhatu*) or - fasting, starvation etc.
   
   B) Due to faulty digestion and faulty assimilation of food due to *Jatharagnimandya* and *Dhatwagnimandya* etc.
   
   decreased functions of *Samanvayu* and *Grahani*.
   
   C) Due to specific diet : Dietary substance having following properties are responsible for *Dhatukshayanya Vatprakop*.
   
   **Rasa - Tikta** - like *Karla*, *Methi* etc.
   
   **Katu** - like chilly, black paper etc.
   
   **Kashaya** - like wood apple, dry vegetables etc.
   
   
   Taking inadequate diet, doing fasts etc.

II) **Vihar** (Behaviour)
   
   The acts like over walking, running, swimming, travelling, fighting, excessive physical work, over exercise, falling from height, giving speech loudly, signing loudly, over sex, *Vegavidharan* i.e. suppressing the natural urges like micturation, defecation, hunger etc. All these acts increase *Ruksha, Chala, Laghu Guna* in the body and hence responsible for *Vat Prakopa*.
Air flow of cooled air from fans coolers, or air conditioners directly on body, doing work in cold water etc increases Sheeta Guna and hence responsible for Vat Praprapk.

1) Direct Dhatu Kshya – It occurs due to-
   1) Due to Trauma or blow on Dhatu.
   2) Due to loss of Dhatu e.g. Loss of Rakta Dhatu in injury or Trauma or Raktapradar, Rakta Pittai Raktatisar; loss of Shaukra Dhatu due to Ativyavay etc.
   3) Due to loss of Abdhatu i.e. water loss. It occurs in following diseases or conditions.

   Atisar (diarrhoea) Pravahika (dysentery), Chhardi (vomiting, gastritis), Visuchika (Gastroentertis, cholera) Jwara - Teekshnavegi (High grade fever), Usmaghat (sun stroke), Dagdha Vrana (Burns).

   Ab-dhatukshaya occurs also while aspirating different body, fluids rapidly and completely as in taping of ascetic fluid, pleural effusion, Arthritis, tapping of C.S.F. etc.

   As greater part of Abdhatu in our body occurs in Rasdhatu, we get following signs and symptoms of Ras kshya due to the dehydration.

   रसे रीक्ष्य श्रम शोधे ग्लानि शाब्दासहिष्णुता |

   Fast dehydration creates dryness in the body. In signs and symptoms of dehydration we get dry hypo-elastic skin, dry tongue, dry and shrunken eyes etc. This dryness is due to Vatprakop. Severe dehydration causes severe Vat
4) Due to excessive Shodhan therapy:

Shodhan therapy is used for expelling out the excessively aggravated Dosha from the body. Among these Panchakaramani, Vaman directs these Dosha upwards and expels out by mouth and nose in the form of vomiting. While Virechan directs the Dosha downwards and expels them out by anus in the form of loose motions.

Atiyoga of Vaman & Virechan creates excessive vomiting and loose motions accordingly and thus create Abdhatukshaya i.e., dehydration and finally results Vat Prakop as described previously. In excessive Vaman and Virechan therapy after expelling Dosha, Dhatu like Rasa, Rakta, Mans, Meda etc. also expelled out gradually. Among them Rasa is quite common. As its is Apyadhatu and it contents nutritive parts of other all Dhatu, due to Raskshaya starvation of other Dhatu occurs, which tends to Balakshaya and Vata Prakop. Apart from Rasa, other Dhatu like Rakta, Mans etc. also expelled out of the body. It is clearly mentioned by Charak and Vagbhata. While describing gradual Dhatukshay due to excessive Virechan and Vaman, Vagbhata says that:

विद्यापति कष्ठ्वाणु निःस्त्रवर्धु कष्ठक रूपम् ।
विष्लेष्या विद्यापति उदयं श्रेयं स तोलितम् ॥

सु श्यामदासभाकुल इति धर्म परम ॥
In the act of Vaman and Virechan if the vomits or loose motions are whitish and watery without any part of Kaha or Pitta, it indicates Abdhatukshaya as well as Rasakshaya. If the vomits and loose motions are black, blackish, brownish or red, it indicates expelling of Rakta Dhatu and tends to Rakta Kshaya. Vomits and loose motions like a water of meat wash indicates expelling of Manasadhatu and tends to Manasakshaya. Vomits, and loose motions having small fat globules indicates a expelling of Medadhatu and tends to Medakshaya. While symptoms like giddiness, thrust, sinking in dryness etc indicate Majjakshaya. Thus due to Dhatukshaya, Vatprakop occurs and becomes a cause of different types of pains.

In excessive Nasyakarma, if there is excessive loss of nasal fluid, as it is Apra, it tends to dehydration. Though it is rare, it may occur in few cases, and due to dehydration we get Vat Prakop, which creates severe headache.

In excessive Niruha Basti we get dryness and Vat-Prakop, especially in Pakwashaya. If the Niruha Basti is given cautiously, we get such type of dryness. That is why if Basti therapy is given for long time e.g. For so many days; to avoid this dryness Nirudh an Anuvasan Basti are given alternately as described in Karma Basti, Kat Basti, Yog Basti.
Apart from that signs and symptoms produced by excessive *Basti* therapy (especially for *Niruh Basti*) are same as signs and symptoms of excessive *Virechana* therapy as described above and here also parts of *Dhatu* are expelled out with faeces which creates *Dhatukshaya* and tends to *Vat prakop*.

In excessive *Raktamokshana* direct *Raktadhatu* i.e. blood is aspirated out. That is why there is direct and immediate *Rasa* and *Rakta kshaya* which tends to *Vata Prakop*. In such condition we get following:

**Signs and symptoms of *Raktukshaya***:

- रक्तकुश्य विविधाय विविध विविध रक्तकुश्य च। (अः सू 11)
- प्रकोप लघु रक्तादत्ताय अद्वैत रक्तकुश्य व। (सू 17)
- श्वायत्वः (यथा) प्रकोपात्महाया अद्वैतः प्रकोपात्महाया श्वायत्वः। (सू 15)

act of that, *Sirashaithiyla* i.e. collapse of veins and dryness of skin, we get immediately. Thus excessive *Raktamokshana* —> *Rasa Rakta kshyaya* —> dryness —> *Vatprakop*.

**Due To Nature** - While thanking on metabolism, in old age, catabolism i.e. destructive processes are more than anabolism i.e. constructive processes. That is why there is natural destruction of body elements in old age, which creates *Dhatukshayajanya Vatapraprok*.

*Adankal* (in summer and rainy season) and in *Janaal Dush*, (desert etc.) are predisposing factors of *Dhatu Kshayajanya Vatapraprok*.

Thus all these etiological factor are responsible for destruction of body elements and tend to aggravate the *Vata* i.e. *Dhatukshayajanya Vataprapok* and aggravate some or all properties of *Vata* among *Rooksha*.
Lghu, sheet, Khara, Parush, Sookshma, Chala and thus start the pathogenesis at different levels.

While describing the pathogenesis of Dhatukshayajanya Vataprakop, in very simple and few words, Charak says:

देहे स्वाभाविक रिश्वाली पूर्णवाक फिलांबनी ।
करोति विधिधान व्याधिः सब्जन्मेकां गाण राज्यितान॥ (ब्रह्म 28/16)

i.e. large to minute cavities in the body produced by distraction of body elements or any other cause are filled up with Vata Dosha (as it is Sookshma i.e. minute in nature) and tend to localised or generalised Vata disease:

Actually this process is not so easy and so directly because Vayu is said to be Agamya (unable or difficult to know), some times the pathogenesis occurs, as described above by Charak.

Especially when there is acute emptiness of big cavities or Ashaya, then this Ashaya or cavity will be filled up by Vayu immediately and produce the signs and symptoms of Vataprakop e.g. in ascetis during the tapping of ascetic fluid. If one tries to do it fastly and completely gets the immediate signs and symptoms of Vataprakop in abdominal cavity like flatulence, abdominal pain etc.

In labour, when foetus and placenta come out, uterus becomes empty, then it filled up by Vata - creates Vataprakop and causes P.V. Bleeding. Then to avoid more uterine bleedig and localised Vataprakop, crossly arranged uterine muscles contract naturally and thus avoid over uterine bleeding as well as localised Vataprakop. ( If the uterine contraction is not done naturally, it is induced by using Garbhushaya -
Despite this, the treatment like Snehan, Swedan, hot and oily diet, using of abdominal belt as described in Sootika Paricharya is useful to minimise this Vataprakop.

Thus using abdominal belt after labour or after the tapping of ascetic fluid minimises the emptied cavity and prohibits the Vataprakop. Thus in excessive bleeding (may be internal or external), excessive loose motions and excessive vomiting, we get above described pathogenesis.

Each and every time, it is not necessary that the pathogenesis of Dhatu Kshayaja Vataprakop should be same in all the types e.g. if the diet is Raksha, then according to Samanya - Vishesh Sidhant, after digestion the Aharrasa also becomes abundantly Raksha and thus this abundant Rakshata infiltrates gradually from Rasdhatu to shukradhatu i.e. in all over body. The body elements become dry, loose, rough, hypnotic. The part or organs made up of such body elements also become dry, loose hypnotic and having rough and dry surfaces and finally change their normal movement and physiology and create abnormal, painful movements and thus pathogenesis creates. Laghu property is also responsible for loss of tone and power of body elements and finally creates dryness.

Etiological factors like excessive exercises, physical stress, swimming travelling fighting etc. aggravate the tremulous property (Chata Guna) of Vayu. Thus excessive movements of different body parts and their body elements create friction. The normal lubricating agent or moisturising agent of the body elements is not sufficient to tolerate these excess movements and due to this friction, body element become dry, rough, uneven, hard and harsh. There is loss of softness moisture, tone of the body elements.
at the site of friction and pathogenesis, takes place. Further activity or movements of these affected body parts become painful.

Sookshma Guna helps to reach the pathogenesis of dryness to minute and deep seated elements (Sookshma Srotas) and thus spreads the pathogenesis all over the body.

Sheeta property of Vayu plays an important role in the production of pain. Not only but with the help of Ruksha. As well as Vata, Kapha is also Sheeta. So if the property Sheeta is aggravated with other properties of kapha, like Guru shigdha, Manda etc, then instead of destruction of body elements there will be increase in power and tone of the body elements. But if Sheeta is aggravated with other properties of Vata especially Ruksha, it creates distraction of body elements and produces severe pains. As always we can see that in winter, when weather is cold and dry weather, even a slight trauma produces severe pain. Hence the pain mainly produced by Ruksha and Sheeta property get relieved by Snigdha (oil massage etc.) and Ushna (Hot application like fomentation, poltice, Lepa etc).
B) MARGAVARODHAJANYA VATA PRAKOP

(OSTRUCTIVE TYPE)

It means Vatakop occurs due any obstruction in the pathway of Vayu - mainly Rasavaha Dhamani. The cause of obstruction may be internal or external. According to Ayurveda, Vayu is Amoorta i.e. formless and invisible, so how it is possible that invisible and formless substance has its own pathway? This may be explained as follows. According to Ayurvedic concept, Vayu is not substance but it is motion, force, energy.

Rasadhatu is main Apya Dhatu in our body. It's main function is Preenan i.e. to supply nourishment to all the body parts, elements - cells etc. and for that purpose this Rasadhatu should be reach upto each and every body element or cell. So that this Rasadhatu is circulated all over the body through vessels viz. Dhamani, sira (arteries and veins) and their branches & sub-branches (capillaries) by the force of Vyanavayunu i.e. Vyanavayunu is responsible for the circulation of Rasadhatu all over the body. So pathway of Rasadhatu i.e. arteries, veins, capillaries are main pathways of Vayu. As Rasa is main Apya Dhatu i.e. watery and as water is said to be universal solvent this Rasa Dhatu circulating through different vessels contains other ingredients like other Dosha like Pitta and Kapha. Rakta Dhatu; nutrients of other Dhatu, Apya Oajas, Aam (a poisonous substance pathologically created by impaired digestion), Kleda - a minute excreta produced in the process of Sookshma Pachan, Asthai Mootra (unstable urine), Asthai Dhatu etc.

All these ingredients including Rasadhatu when change their properties in any pathological condition and become Pichchhil, Styan, Guru.
Manda etc. become responsible for obstruction internally. Thus this type of obstruction is known as internal obstruction, which occurs as follows:

a) **Internal obstruction**

1) Due to **Sang** i.e. static action of aggravated Vayu

   संगारमंग साकोच

2) Due to **Sankoch** i.e. contrition action of aggravated Vayu.

   संगारमंग साकोच

There is contrition - narrowing of vessels, pathway, which creates an obstruction. (as in pathogenesis of Tamak Shwash

3) Due to increased **Pichchheela** property of Kapha Dosh, there is coating of sticky Kapha at the internal walls of vessels which create obstruction

   कक- नानाकुण निकाल-क्षमी प्रतिभाः

4) Due to **Sansarga** (pathological union) of Vayu and Kapha, when increased dryness of Vayu joins together with increased stickiness of kapha, then kapha becomes more and more sticky i.e. **Styana** This Styana kapha coats inside the vessels. Other ingredients circulating through these vessels get stuck up to the walls due to the coating of oversticky kapha and become a cause of obstruction.

5) Due to coating of sticky **Aam** - a poisonous substance pathologically produced by impaired digestion (cause may be Jatharagnimandya or Dhatwagnimandya). As properties of Aam are as follows:

   अविन्क असुभूतां दुर्गंध द्वृत्तिः

   स्त्रौताकं बलस्रं गौरवानित मुद्रं
6) Due to dried and calculus formed Pitta and kapha. It’s Drava property get decreased markedly. kapha at Pitta become dried and calculus formed and obstructs the vessels or canals (As described in the pathogenesis of Ruddhapatka Kamala and Pittashmaraa).

7) Due to coating of undigested and Sama Meda Dhatu (as described in the Pathogenesis of Medorog).

8) Due to increased Guru Guna of kapha, Ama etc. Increased heaviness creates dull (Manda) movements and hence makes obstruction in the vessels.

9) Due to presence of Asanyukta (Non assimilable) and / or Pruthu (Non minute / coarse) and for Asatmya (Non acceptable) Ama, predigested, undigested or incomplete digested food particles or Ahar rasa or other substances. Due to their macro size such particles create obstruction in small capillaries. (As properties of Ama, अभिभविष्य विभिन्न दुःख वहुविनिििफर)

10) Due to increased Sheet Guna of Vayu as well as Kapha. There will be contraction i.e. Sankoch of the vessels, canals etc. which will create obstruction.
11) Due to increased *Snigdha Guna* of *Kapha* - consumption of excess oily substances, vegetable ghee etc. causes such type of obstruction.

12) Due to deposition or saturation of *Kleda* - a minute excreta produced by impaired digestion. Properties of *Kleda* and *Ama* are similar. Rather *Kleda* is one of the concepts of *Ama*.

Stickiness of this *Kleda* creates obstruction in the vessels. In pathogenesis of kidney diseases, *Prameh* and *Shotharog*, we see such type of obstruction.

13) Due to calcification (*Asthai, Asthidhatu*) of the vessels or canals from inside. It becomes the cause of obstruction. (as in hypertension or C.H.D. due to arteriosclerosis)

14) Due to saturation of excessive minute excreta like *Khamal Nasa*, *Netramala* etc. in the pathogenesis of some diseases like *Rajayakshma Prameha* etc., there is excess formation of minute excreta which deposits saturate in the body and create obstruction.

15) Due to suppressing the natural urges of expelling out these excreta like micturition, defecation etc. which results the deposition or saturation of these excreta inside the body and become the cause of obstruction.

16) Due to inflammation or swelling of vessels or canals, there is narrowing of pathway, which creates obstruction. As in the pathogenesis of thrombophlebitis (*Shotha*), urethritis, urethral structure (*Mootrakruchhra*).

17) Due to over manipulation or instrumentation there will be stricture which causes obstruction. As in the case of repeated catheterization for anurea, there will be stricture urethra which causes obstruction.

18) Due to some foreign body in the pathway of *Vayu* e.g. Bolous of food
in larynx.

19) Due to Siraгранthi in the vessels e.g. Siragranthi thrombus, clots etc.

20) Due to neoplasms inside the vessels e.g. carcinoma of oesophagus, Ca of stomach etc.

b) External obstruction

Following are some external causes for the process of obstruction viz.

1) Due to outside pressure by inflamed nearest organ; as in the pathogenesis of obstructive jaundice due to hepatitis.

2) Due to outside pressure on the vessels by hypertrophy of the nearest organ.

3) Due to outside pressure on vessels or canals by inflammation and hypertrophy of nearest lymph nodes e.g. Hodgkin's disease, Non Hodgkin's lymphoma, Inguinal bubo etc.

4) Due to outside pressure on vessels or canals by neoplasm in nearest organ. These Neoplasms may be benign or malignant e.g. aneurysm produced by rectal carcinoma.

5) Due to normal or abnormal growth; e.g. normal - Oedema on feet in Pregnancy. Abnormal - Oedema on feet in Ascitis.

6) Due to outside pressure on vessels or canals by herniation or protrusion or prolapse of other placed organs to nearest to these pathways.
Any type of internal obstruction causes the direct obstruction inside the pathway may be in vessels or in canals or ducts, while any type of external cause creates a lot of pressure from outside to the pathway, vessels, ducts etc. Vigorous pressure compresses the walls of pathway and thus produces obstruction. The substances circulating or travelling from that pathway get obstructed i.e. can not pass ahead and start to accumulate before the site of obstruction more and more accumulation of that substances or fluids give rise to more and more pressure to the walls of pathway and that’s of surrounding nearest organs which will create the irritation of nerve ending and produce a pain. This pain is due to pressure Syndrome.

Thus more and more accumulation of fluid gives more and more pressure on the walls of the pathway. If these walls are weak that much they can not tolerate this pressure and may burst outs and the accumulated fluid may spread here and there, as we see in the pathogenesis of cerebral haemorrhages due to severe hypertension which may be the manifestation of arteriosclerosis.

If the walls of the pathway are not so weak that much, then there will be back flow of substance or fluids. So instead if reaching the substances or fluids to their normal place they get regurgitated or thrown away elsewhere. Now if we see the position of these substances, there will be deficiency of these substances at their normal place and at the same time at other places where they are driven away there will be excessive accumulation of these substance. In this pathogenesis one
Point should be taken into consideration that these substances are unwanted there and fusing together with the Dhatus or Dushya at that unwanted place, they create some signs and symptoms like burning pain, itching etc. This type we can see clearly in the pathogenesis of Ruddhapatha Kamala (Obstructive jaundice) as follows:


\[ \text{Shrechana} \text{ siddhanam tatt paat kapharajyate} \]

\[ \text{Kaphasamyuktam vaya siddhanat paat skritvam harli} \]

(P.118, 120, 121)

In the pathogenesis of Ruddhapatha Kamala there is aggravation of Vata and Kapha. Due to dryness of Vata, Kapha becomes very thick and dry and obstructs the duct conducting the Pitta. Due to this obstruction Pitta cannot reach in the G.I. tract and due to the deficiency of Pitta in G.I. tract there will some signs and symptoms like anorexia, dyspepsia, indigestion, clay colored stool etc. This Pitta accumulates at the site of obstruction and then get back-flow or regurgitates to Shakha Marga i.e. all the Dhatus, all over the body, where it is unwanted. This excessive and unwanted Pitta with uniting other Dushya will creates sign and symptom like icterus in eyes, yellowish tincth to nail, buckle mucosa, urine etc; burning sensation at palms and soles etc; pyrexia, giddiness etc.

This wandering of the Doshas substances, fluids from their normal pathway is termed in Ayurveda as V marga Gaman. Which is a main step in the pathogenesis of Shool and obstruction is one of the
major causes of this *Vamarga Gaman* and thus *Vata* takes quite important role in the pathogenesis of *Shool*.

Aggravated *Vata Dosha* may be either from *Dhatuskshaya* or from *Margavarodha*; undergoes following 6 stages viz. *Shat Kriya Kala* and produces different types of pains. These *Shat Kriya Kala* are described by *Acharya Sushruta* viz.

1. *Chaya*
2. *Prakop*
3. *Prasara*
4. *Sthan sanshraya*
5. *Vyakti*
6. *Bhed*

Pathogenesis of any disease or diseased condition undergoes these 6 stages and produces a group of pathological or abnormal signs and symptom which we call as a disease. Out of these 6 stages first three are *Dosha Sapeksha* i.e. related with *Dosha* only. While last three are termed as *Vyadhi Sapekshya* i.e. related with *Vyadhi* or disease.

Here we will see the signs an symptoms produced by *Dosha Sapekshya* stages of *Vata* i.e. *Chaya Prakop* and *Prasara*; as well as sign and symptom of *Vata Vruddhi* and *Sama - Nirama Vaya*. They are as follows:

**Vata Chaya**

This is primary *Dosha Sapekshya* stage, in which there is small aggravation of *Vata Dosha* in it's own place. This stage is indicated by *स्तनशक्ति* i.e. silent abdomen and *पूर्णकोश्ठा* i.e. fullness or heaviness of the abdomen. Apart from that there will be hatred to
dietary substances having properties similar to the properties of causative factors and desire to the dietary substances having properties opposite to that of causative factors.

**Vata Prakop:**

![Vata Prakop](image)

*Prakop* is second stage of pathogenesis related to *Dosha*, in which there is more and more aggravation and accumulation of *Dosha* in its own place, in such a manner that these *Dosha* are so much increased that any time they may thrown away or expelled out of its own place. This stage of *Vata Dosha* is indicated by flatulence and *Toda* i.e. penetrating pain in abdomen.

**Vata Prasara:**

![Vata Prasara](image)

*Prasara* is third stage of pathogenesis or final stage of pathogenesis related to *Dosha* only. In this stage *dosha* is so much increased that it expels out or thrown away from its own place and circulated all over the body through the medium or vehicle of *Rasa Dhautu*, as described by *Charak* as follows:

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![Vata Prasara](image)
Through the normal *Dosha* are also circulated all over the body through the vehicle of *Rasadhutu*, to conduct the normal physiological activities; there is great difference in between these normal *Dosha* and the *Dosha* from *Prasaravastha* that, the first one is qualitatively and quantitatively normal and has to perform normal physiological activities while later one increased qualitatively and quantitatively and has only rambling i.e. aimless wandering all over the body. If there is any defective organ part (*Vigun Dushta*) anywhere in the body then these more aggravated and rambling *Dosha* unite together at that site of defective part and hence complete the pathogenesis and create the disease. If these rambled *Dosha* don't get any defective organ then they just ramble and rumble all over the body. These *Dosha* are termed as *Leena Dosha*, i.e. concealed *Dosha* and become a *Vyabhichari Hetu* of many other diseases. *Vayu* in this stage produces the signs and symptom like *Vimargagaman* i.e. changing the pathway of *Vayu* from normal to abnormal way and *Atopa* i.e. bloating or abdominal irritation with abdominal pain (As per *Daithana*).

This stage is limited only with the rambling of the *Dosha*. As they stick up to the defected organ this stage ends and next one i.e. *Sthan-sansraya* starts. First three stages of *Shat Kriya Kala* are belonging to *Dosha Vikruti* only but later three there is not only *Doshavikruti* but *Dushya Vikruti* is also necessary with that. So we will see the description of later three stages after some times.

Apart from *Shat Kriya Kala* there are some pathological conditions which are produced by *Dosh Vikruti* only. They are -
1) *Vata Kshaya* :

Though *Ksheena* i.e. decreased *Dosha* can’t produce any disease (as they are too weak, they are unable to produce any defect in other *Dushya*) they fail to do their normal functions. Thus in *Vata Kshaya* we can see the loss of normal function of *Vayu* in which *Angasad* i.e. Fatigue or emaciation of the body is one of the symptoms.

2) *Avrut Vata* (Conversion of Vayu)

Sometimes *Vayu* is covered all over by other type of *Vayu* or by other *Dosha* or sometime by other *Dhatu* or *Mala*; then it is called as *Avrutta Vata* and one who is covering is called as *Avaraka*. So all the time *Avrutta* is *Vata*, while *Avaraka* may be other type of *Vata* or other *Dosha* or *Dhatu* or *Mala*. In the pathogenesis of *Avarana*, most of the time we see the lack of function of *Avrutta Vayu*. Among *Avrutta* and *Avaraka* one who is dominating or strong transplants their properties to the other one and produces such signs and symptoms.

There are 5 types of *Avarna* pathologies which produce many types of pains viz.
- *Vayu* is covered by other type of *Vayu*.
- *Vayu* is covered by other *Dosha*.
- Type of *Vayu* covered by other *Dosha*. 
Vayu is covered by **Datu**.

Vayu is covered by **Mala**.

1) **Vayu** is covered by other type of **Vayu** e.g.,

a) **Samanavruta Apan**:

    समानवरुत्ता पाने प्रहणीयांच्यावैहहट्यातः ||

    नृत्ते च आमाशये || (च्वि. 28/206)

If **Apan** is covered by **Saman**, then there will be pain at flanks, heart and stomach and pain at the site of **Grahani** i.e. umbilical region.

b) **Panavruta Udan**:

    शरीरायहे प्रतिस्थायं नि:व्यासकृताः संग्रहः ||

    इर्दिग्धं मुहरांगं धाति स्वत्वोऽपशुद्धे ||

    (च्वि. 28/206)

If **Udan** is covered by **Pran**, then there will be grasping type headache, dyspnoea cardiac pain etc.

c) **Vyanavruta Apan**:

    व्यानवरुत्ता उदात्तं नुक्षाति परिकर्तीकः ||

    लग्न यानवरुत्ता पाने............ || (च्वि. 28/212)
If *Apan* is covered by *Vyan*, then there will be flatulence, pain in abdomen and cutting pain around the anus and vomiting.

d) *Samanavruta Vyan*:

If the *Vyan* is covered by *Samana* then there will be syncope, giddiness, body ache, fatigue, irrelevant talk, loss of power etc.

e) *Vyanavrut Prana*:

If *Prana* is covered by *Vyan*, creates bristling or horripilation, numbness or loss of sensation of touch, perspiration, skin disorders etc.

f) *Udanavruta Apan*:

If *Apan* is covered by *Udan* creates dyspnoea, hiccough, vomiting etc.

g) *Udanavruta Vyan*:
Vayu is covered by Udān, creates stiffness of the different body parts etc.

II) Vayu is covered by other Doshas:

a) Pittavrata Vayu:

A pathological condition, in which Vayu is covered by Pitta creates burning sensation all over the body, hyperthermia (may be localized or generalized), syncope, giddiness, excess thirst, Shool i.e. pain (may be localized or generalized) etc.

b) Kaphavrata Vayu:

A pathological condition in which Vayu is covered by Kapha, creates chills, heaviness and pains at the different parts of the body etc.

III) Types of Vayu covered by other Doshas:

a) Pittavrata Prān:

A pathological condition in which Vayu is covered by Pitta creates burning sensation all over the body, hyperthermia (may be localized or generalized), syncope, giddiness, excess thirst, Shool i.e. pain (may be localized or generalized) etc.

b) Kaphavrata Vayu:

A pathological condition in which Vayu is covered by Kapha, creates chills, heaviness and pains at the different parts of the body etc.
A pathological condition in which *Pran* is covered by *Pitta* creates burning sensation, giddiness, syncope, *Shool*, vomiting etc.

b) *Kaphavruta Pran* :

अँडका जलयुक्त योग्य *शूल* नहीं; 

प्राण कफ़हँसुक्ते तकास्थस्य आरोग्यमयः 

(अधि 28/222)

A pathological condition in which *Pran* is covered by *Kapha* creates dyspnoea, blenching, sneezing, vomiting, bodyache, drowsiness etc.

c) *Pttavrut Udan* :

मुख्यांगसनि च सिंहके यवसंस्कृतां भक्तमः 

ओजों मंहगृह साद्रक्ष अधि उदाने पित्तसंवृते 

उदाने पिन्नसंवृको मुख्यांगयां भन्म करमः 

(सू. नि 1/95)

A pathological condition in which *Udan* is covered by *Pitta* creates burning sensation at chest and abdomen, *Shool*, giddiness, syncope, vomiting, fatigue, bodyache, uneasy feeling at chest.

d) *Kaphavrut Udan* :

आवृते श्लेष्माणीस्य यवस्तः वायुक्ष वर्जितः 

दीर्घकेन हृदयात्म असंवेदन्तः उपजायते 

असंवेदह्वः यन्त्रः शायतिस्य न कमङ्कः 

(सू. नि 1/35)
A pathological condition in which Udān is covered by Kapha, creates dyspnoea, aphonia, general debility, heaviness of the body etc.

c) Pittavruta Saman :

अष्टेदों वर्धितपाल शास्त्रम तत्वेय च।

पितावृतसामान स्थाद उत्पादत तत्साध्यान। ॥ (च.चि. 28/225)

सामान सिद्धान्तम वेद विश्वास्या मुद्देय-म ॥ (सूति 136)

A pathological condition in which Saman is covered by Pitta, creates burning pain, syncope excess thrusts, perspiration etc.

d) Kaphavrut Saman :

अस्थिदों वर्धितमाल शास्त्रम तत्वेय च।

कफावृतसामान स्थापित गत्रिणाय अतिशीतला। ॥ (च.चि. 28/226)

कफाविक च विस्मृतभौमन, ककावृत ॥ (सूति 1/36)

A pathological condition in which Saman is covered by Kapha, creates bristling or horripillation and cold extremities etc.

e) Pittavruta Vīyan :

व्यापनंपितावृतत शाश्व वक्ष्य पिकायण कलम ॥ (सूति 1/38)

व्यापनंपितावृतत तु स्थाय दाह सर्वांग कलम ॥

गात्रविक्षेपसंग्रह संताप संवेदन ॥ (च.चि. 28/228)
A pathological condition in which *Vyan* is covered by *Pitta* creates burring pain, fatigue, stiffness of different part of the body and convulsions at different body part and fever with different types of pains.

h) *Kaphavrata Vyan* :

\[ \text{मुळणि वृग्द्धाया ग्रहणं च अस्थियांत्रिकम्।} \\
\text{सिम कफाृते ध्रुवन वेदास्त्वं कर्त्त्वं च।} \ \text{(सू.नि. 1/39)} \\
\text{मुळणि ग्रहणं हस्ते अर्धस्वर्गवधै रुपम्।} \\
\text{व्यत्य कफावरुपे सिंधुपक्षनकपति।} \ \text{(सू.नि. 28/230)} \]

A pathological condition in which *Vyan* is covered by *Kapha* creates heaviness all over the body, pain and stiffness in joints and bones with restricted movements.

1) *Pittavrat Apan* :-

\[ \text{हारिकवृद्धाया तापस्य गुद्रस्य।} \\
\text{सिम विपाकुपेयान्य सकराक्षसितनिन्तं।} \ \text{(च.नि. 28/229)} \\
\text{अपने विपाकुपेयान्य धात्वन स्वायं ज्ञापितं।} \ \text{(सू.नि. 1/37)} \]

A pathological condition in which *Apan* is covered by *Pitta* creates burning micturation, burring defecation and burring pain at anus and *Pradar* i.e. metrorrhagia etc.
1) **Kaphavruta Apan** :

A pathological condition in which *Apan* is covered by *Kapha*, creates heaviness of lower part of the body.

Reaming 2 groups of *Avaran* pathology i.e. coersion of *Vayu* by *Dhatu* and *Mala*; as they are also concern with *Dhausya Vikrut* will be discussed later.

3) **Sam - Niram Vata** :

*Ama* has an important role in the pathogenesis of *Shool* aggravated *Vayu* saturated with *Ama* then it is termed as *Sam Vayu* while if it is without or with little *Ama*, then it is termed as *Nirama Vayu*.

*Sam Vayu* is related with the pathogenesis of *Vata Prakop* due to obstruction and also termed as *Upastambhit Vayu* while *Niram Vayu* is termed as *Nirupa- stambhit Vayu* and related with the pathogenesis of *Vata Prakop* due to destruction of body elements. The sign and symptom of both the types are as follows:

a) **Sam Vayu** :

\[ \text{गायु} अमान ाम गायुने आमाक शामा। (अी.ः 13/ ) \]

\[ \text{सर्व च मार्क्त साम तद्ना सोमिनी शोभे।} \]

\[ \text{सिन्धुल असरोङक आत्माय श्याम शोभ अनिश्चिन्निः।} \]

\[ \text{कदु रूक्षा अभिज्ञाण तद विद्य उपायण च।} \]

\[ \text{मृदु विशिष्टा } 11 \quad ( \text{अंक 50} ) \]

\[ \text{गायु शामा लिया अनिश्चिन्न स्वयं शामाने।} \]
A pathological condition in which aggravated Vayu is saturated with *Ama* creates flatulence, anorexia, dyspepsia, hyperperistalsis, bloating, heaviness, drowsiness, shivering or a feeling like raping all the body with wet cloths, desire to dry and pungent things, laziness or lethargy, chills swelling and different types of pains especially penetrating pain, perforating pain, cutting pain etc.

Specialties of these pains are they are quite severe than that of *Niram Vayu*.

*Samavayu* affects the body parts one by one serially i.e. shifting pain and creates different types of pains there or in later stage all the body parts may affect and create pains simultaneously. These pains are aggravated after the internal and external use of oils, early in the morning at the time of sunrise and in dump and cloudy weather. These pain get relieved with Medicines and diet having properties like *Katu* and *Rooksha* etc. Pains may be any where in the body like forehead region.
chest etc. and may be of any type like cutting pain, penetrating pain etc. but mostly they are shifting in nature.

**B) Niram Vayu :**

A pathological condition in which aggravated Vayu is without or with very little Ama. Niram Vayu creates pains which are less severe than that of Sama Vayu. Instead of drawlessness and heaviness there will be insomnia and emptiness. There may not be any flatulence and shifting pain but dryness will be there. The pains are less severe and aggravated with over exercise, over physical or mental stress, medicines and diet having properties like Katu, Tikta and Kashaya test and Sheet, Rooksha etc. and fasting and starvation etc. While these pains get relived with rest. Medicines and diet having properties like Madhur, Amla and Lavan test and Guru, Ushna, etc. Especially these pain of Niram Vayu get relived with internal and external use of oils (may be pure or medicated oils).

4) Vata Vruddhi :-

While thinking on pathogenesis of Shool produced by Vayu only we get some references in Samhitas under the heading of signs and symptoms of Vata Vruddhi. That we should consider here. There are as follows :
We have discussed almost all of them in the chapter **Vedanakosh.** Now we are classifying them according to **Rugnasamvedya Lingani** (Symptoms) and **Vaidyasamvedya Lingani** (Sings) as follows.

a) **Rugnasamvedya Lingani** (Symptoms) of **Vatavruddhi** - Giddiness, drowsiness, vertigo, insomnia, dysfunctional or non-functioning of sense organs, numbness, futility, fatigue, tingling sensation, excess thirst, some psychological symptoms like fear, sorrow, depression, irritation, desire of
hot things etc., sore throat, astringent or abnormal taste in mouth, falling down during walking etc., exhaustion, abnormal pulsation of different body parts, trembling, general debility, fatigue of body and mind, dysfunction of different body parts, emaciation of different body parts, flatulence, bloating, anorexia, irritation of different body parts, different types of pains may be localized or generalized pains like penetrating pain, perforating pain, cutting pain, churning pain, grasping pain, irritating pain, breaking pain, holding or knotting pain, trembling pain, roots out pain, whirling pain, spasmodic pain, colicky pain, muscular cramps, pressing pain, pulling pain. Pain in abdomen (may be due to flatulence or constipation), body ache, back ache, lumbago, pain in bones and joints, headache or general body ache etc.

a) Vadyasamvedya Lingani (signs) of Patavridthi - Discoloration of skin like blackish, black blackish red etc., dryness of the skin, roughness of the skin, muscle wasting, stiffness of different body parts, contraction of different body parts, tremors, in-voluntary contractions or abnormal pulsation of different parts of body, sponginess or porosity of different body parts, osteoporosity, bruising, or hortipulation, convulsions, dislocation of joints etc; prolaps or herniation of different body parts, dilatation of different hollow organs like heart stomach etc; Scoliosis, kyphosis or ankylosis, stiffness of the body, emaciation of the body; loss of power of the body parts, insomnia, hard stool, dysfunction of one or both the lower extremities, flatulence, irrelevant or excess talk, interphalangeal swelling stiffness and contraction, destruction of fetus, semen and menses; stiffness of neck, hoarseness of voice, deviation of different body parts like nose etc, swelling, distention, grieve, excess yawning, hardness, harshness of different body parts, atrophies of different body parts, muscular atrophy, enuresis and scoliosis on the
nails and teeth dryness, of tongue mouth lips, eyes, hair etc improper digestion of food, constipation. Vaira - bolus formation of dry and hard feces.

5) Vata Nanatmaja Vikar :-

The word Nanatmaja means produced only by the same Dosh - by changing in the properties of that same Dosh. Thus Vata Dosh itself produces 80 diseased conditions as follows:

1) नखबद्ध - Breaking or scratching of nails.

2) विदारीकित्रिक - Fissures or cracks on palms and soles.

3) पादशूल - Pain or cramps in legs.

4) पादव्रत - Improper gait.

5) वादसुपत्रता - Numbness of feet or legs.

6) वातखुंडता - Dysfunctions of ankle and knee joint.

7) मुखुप्रभुट्ट - Inflammation and dysfunctions of ankle joint.

8) विशिकास्पटन - Cramps in legs or calf muscles

9) गृहस्वी - Sciatic pain, sciatica.

10) जानुब्रद - Breaking pain in knee joint.

11) जानुब्रिक्षेत्र - Dislocation or looseness of knee joint.

12) उस्तान - Stiffness of thighs.

13) उस्ताध - Fatigue of thighs.
14) अनुप्रकाशीय - Anal prolapse.
15) अनुस्लोत्स्वारियो - Dysfunction of both the lower extremities.
16) प्रौढ़ - Pain in anus.
17) पूज्ज्यायमात्र - Lifting or tossing up the scrotum.
18) ज्ञातायमात्र - Stiffness of the penis.
19) अक्षमायमात्र - Distention of lower abdomen.
20) अक्षरित - Breaking pain in sacral or pelvic region.
21) वासुर्द्ध - Loose motions.
22) अंडापन्न - Flatulence, Upward direction of abdominal gases.
23) अंजीर - Dysfunction of one lower extremity.
24) कुश्चल - Hamp on the back, kyphosis.
25) नानासमन्तर - Dwarfism.
26) विक्रम - Grasping pain at sacral or lumbar region.
27) पूक्ष्यायमात्र - Grasping pain in back.
28) पायामात्र - Compressing pain in back.
29) उत्तरान्त - Twisting pain in abdomen.
30) ह्रेवाचा - Dysfunction of heart, bradycardia.
31) हद्द्वाचः - Dilation of heart, palpitation.
32) वश्निः - Spasmodic feeling in chest.
33) वश्राचा - Feeling like heavy weight on ribs, irritation in chest.
34) वांछना - Wasting of the muscles of arm
35) श्रीवास्तव - Anterior stiffness of neck.
36) नावास्तव - Posterior stiffness of neck.
37) कंठोंकस - Sore throat.
38) हुनुमान - Breaking pain at chin.
39) आषण्ड - Stomatitis, cracks on lips, cleft lip.
40) अविनो - Breaking pain in eye.
41) दांतन्त्र - Breaking of teeth with severe pain.
42) दांतनेक - Looseness of teeth.
43) धुंधला - Dumbness, aphonia.
44) वेंसन- Dysphonia, hoarseness of voice.
45) कंयुक्तितत्ता - Astringent rengaling taste in mouth.
46) मुखशाळ - Dryness of mouth.
47) अवसंहात - Loss of sensation of taste.
48) घाणनाश - Loss of sensation of smell.
49) कलशूल - Ear-ache, ottalgia.
50) अरायक्षण - False sensation of hearing.
51) उद्धिन्ति - Partial deafness.
52) कानला - Complete deafness.
53) कंठरत्ता - Stiffness of eye lids.
54) िनमूनोपकाँ - Contraction of eye lids.

55) धीमाई - Blindness.

56) अंशिशूल - Pain in eye.

57) अक्षियुद्धास - Immobilization or stiffness of eyes.

58) दूर भुदास - Upward deviated eye brows.

59) शामन्द - Breaking pain at temporal region.

60) लतातम्द - Breaking pain at forehead.

61) शिरोरुक्क - Head ache.

62) कसमूमि स्फुटन - Dandruff?

63) आदेत - Facial palsy.

64) एकाग्य गम - Unilateral Vatavyadhi.

65) सर्वांग गम - Bilateral or generalized Vatavyadhi.

66) अक्षपक - Convulsions.

67) दगडक - Stick like rigidity or stiffness of body.

68) तम - Feeling like sinking in darkness.

69) बंधु - Trembling on tremors.

70) भोम - Giddiness, vertigo.

71) नम - Yawning.

72) हिंक्का - Hic-cough.

73) हिंक्क - Sorrow, grieve.
74) अविहो त्र्यांक - Excess talking

75) ग्वमाक - Excess dryness

76) पालिव - Roughness of the skin.

77) श्वयावावण्णावु - Black, blackish on blackish-red discoloration of skin.

78) अस्वास्त्रता - Insomnia, sleeplessness.

79) अन्तवसीत कितेस्त - Lack of concentration or unsteadiness of mind.

80) प्रक्ष्यांक - Paresis, paralysis, paraplegia
ROLE OF PITTA DOSH IN PRODUCTION OF SHOOL

Though lesser than Vata Dosha, Pitta Dosha has also an important role in the production of Shoool. Pitta Dosha bears following properties:

1. **Teekshna** (A typical smelling like fish on meat), **Drava and Sara** are responsible in the production of Shoool. These properties take part in the pathogenesis of Shoool as follows:

2. **Ushna** :- Create erythema (i.e., local redness of the skin, local temp. Also rise which is called as hypertherma (Ushna). If general body temp is raised, is called as pyrexia (Jwara). Due to raised hot property there will be burning pain or burning sensation at different parts of body like burning eyes, burning sensation in chest or abdomen, palms and soles etc. Burning sensation inside the body organs like stomach, intestines, which is termed as Antradhaha Burning Micturation, burning defecation.
generalized burning sensation which is termed as Dhana or Jwaramabhuto. Due to excess Ushna Guna of Pitta, there will be inflammation of related body parts in which there will be swelling with different types of pain and destruction of the body elements and occurrence of different pus or purulent discharge. When Ushna Guna aggravated together with Drava and Abhisyandi, creates more purulent discharge. When such excess pus get accumulated, produces severe pain. This pain subsides when the accumulated pus comes out or drained out. Increased Ushna gun with the help of Teekshna, Drava and Klinna creates more pus formation and impaired healing process which tends to Koth i.e. gangrene.

When this Ushna property aggravated together with Teekshna, creates destruction of body element and ulceration of different body parts; as in peptic ulcers, duodenal ulcers, ulcerative colitis, glossitis, stomatitis etc. in such condition we get severe irritating or penetrating pain which is termed as Tulan. Yet these properties are not controlled there may be breaking or bursting of ulcers resulting severe pain with lot of discharge with hemorrhages. Ushna and Teekshna together create giddiness, vertigo, syncope, semi or unconsciousness. There may be dysfunction or non-function of various sense organs and fatigue of sense organs, mind and body.

Ushna and Teekshna together create over sweating i.e. perspiration. Due to Ushna Guna, openings of sweat glands become dilated and lot of water evaporates through the skin in the form of sweat. Due to this over sweating skin become Klinna (wet) and such skin becomes prone to various skin infections may be fungal, viral or bacterial and creates lot of itching.
Ushna and Teeksha together create excess thirst. As we have seen above most of water part is evaporated through skin in the form of sweat. There are some signs and symptoms of dehydration and sodium imbalance. Ushna and Teeksha together are responsible for scratches on the skin and produce cutting and burning pains as in Parikartika (fissures in ano) and Pada-dari. Ushna and Teeksha together create Nirdahan i.e. severe burning pain at different body parts and Dhoomayana i.e. feeling like expelling out the fumes or smoke at throat, nose etc.

Ushna and Rooksha both the properties are supplementary to each other and together create the pains like Osha (Burning sensation) and Chosha (Sucking pain).

Increased Dravaguna of Pitta is responsible for excess discharge from affected parts with excess kleda, pus formation and Vistra Gandha i.e. foul smelling. Agnimanadvya (dyspepsia), Hrtilas (nausea), Prasek (hyper-salivation), Chhardi (vomiting-sour). Due to impaired digestion there is production of Ama which further creates obstruction in the pathway of Vayn and become a cause for Vataprakopa Margavarodhajanya).

Peculiarity of the Putaj Shool is, it gets aggravated when the stomach is empty for long time and in second stage of digestion i.e. Amla-avastha - pak.

According to Shat - kriya - Kal aggravated Pitta predeceases following signs and symptoms.

**Pitta Chaya :**

कीतेन युक्ता: तीक्षाख्या: च वितरसयुक्ते |
Increased *Sheeta Guna* together with *Teekshna* etc is responsible for *Pitta Chaya*. In rainy season there is natural *Chaya* of *Pitta*.

This is primary stage *Dosha Sapekshya* pathogenesis in which there is little aggravation of *Pitta Dosha* in it’s own place. This stage is indicated as follows:

- तत्र सावित्रान खलु दोषानां अन्द्रायनम्
- मदोषानां च यथानां तत्र  करण विशेषः च इति

*Yellowish tint to the body parts like sclera dorsal surface of tongue, nails, mucous membranes, palm etc and mild hyper-thermia to different body parts like palms, soles, abdomen etc. or there may be mild fever* apart from that there will be hatred to the dietary substances which are similar in properties to that of causative factors and desire to the opposite of that.

*Pitta Prakop* :-

This is second stage of pathogenesis related to *Dosha*, in which there is more and more aggravation and so much accumulation of *Pitta* in it’s own place that it becomes ready to thrown away from it’s own place. Increased *Ushna* is responsible for the *Pitta Prakop*
Following signs and symptoms indicates this stage:

देवि प्रकाशन (अतिशय विपासा परिपक्वं... आयत 21, 27)

स्वर्य दहलणमयकल्लि।

वद्य, क्षति, स्तुति: कोश सदन मुख्यन गंध।

कटुकामः रसी वर्णः पान्धु अर्लन वर्जित।

(अधिकृत 12, 49)

Signs:

Erythema, hyperthermia, inflammation, perspiration, discharges, gangrenes, syncope different colorations to the different body parts except black, blackish red and pallor (colorations like yellow, green blue, red etc.)

Symptoms:

Excess thirst, burning; pain at different body parts, sour salivaion or vomits, body ache, fatigue of the body and mind, giddiness pungent or sour taste in mouth & throat.

Pitta Prasar:

Third and last stage of pathogenesis related to Dosha in which there is so much aggravation of Dosha; that it expels out or thrown away from it’s own place and circulated all over the body through the medium or vehicle of Rasa Dhatu.

This stage is described:
Symptoms produced in this stage are burning pain peripheral burning sensation, sucking pain and feeling like expelling out the fumes or smoke from different body parts like throat nose etc.

Next stages of pathogenesis viz. *Sthan Sansraya, Vyakti* and *Bhedas* as they are not related to *Doshas* only but *Vigun* i.e. defects, *Dushya* also, they will describe later.

A part from *Shat - Kriya - Kala*, there are some pathological conditions which are produced by *Doshas* only. They are *Pittakshaya, Pittavruddhi, Pittavrit Vata, Ishayaaparkshita Pitta, Sama-pitta* and *Niram-Pitta."

1) *Pitta Kshaya* :

Though *Ksheer* (decreased) *Pitta* can't produce any disease (as it is too weak to produce any defect in other *Dushyas*) but fail to do it's normal functions and produces following signs and symptoms.
Ksheena Pitta produces symptoms like intermittent penetrating pain, tremors, heaviness of the different body parts and mainly there is Agnimandya i.e. impaired function of Agni which may become indirect cause of production of Shool as follows.

\[ \text{Agnimandya} \rightarrow \text{Ajeerna} \rightarrow \text{production of Ama} \rightarrow \text{Margavarodha (obstruction)} \rightarrow \text{Vataprakop} \rightarrow \text{Production of Shool} \]

2) Pitta Vruddhi - Inspite of Shatkriyakalu we get some references of Pitta Vruddhi or Pitta Prakop from different Samhita as follows:

(सूर्य अं 15/17)

पितावृद्धि च भावमसताः संतापः शोककामित्तरत्स्य निविद्यः

(अं १६, ११)

पितात् विष्मुद्धेन भ्रूद अत्यन्तिनिविद्यः

(अं सूर्य १९)

पितात् विष्मुद्धेन भ्रूद अत्यन्तिनिविद्यः

शीताभिनिविद्यः शोकात्मकास्तवानिन्दित्वः
All these Lagnam may be classified according to signs and symptoms as follows :-

Symptoms :-

Desire of cold, insomnia, debility of sense organs, burning sensation or burning pain at different body parts, excess hunger and excess thirst, giddiness, pungent taste in mouth and throat, excess anger, general debility.

Signs :

Yellowish tint to the skin, icterus, yellow colored urine and stool, hyper thermia or fever, syncope, loss of power.

3) Pittavrut Vata :

Under the topic of coevation we have already seen the role of Pitta. Vayu itself or its types are covered by Pitta. The pathological conditions are :

a) Pittavrut Vayu.
b) Pittavrut Pran.
c) Pittavrut Udan
d) Pittavrut Saman
e) Pittavrut Vyan
f) Pittavrut Apan.

The signs and symptom of these pathological condition are discussed previously.

4) Ashayapkarshit Pitta :

This is another pathological condition created by aggravated Vayu, in which though there are localized sign of Pittavruddhi actually there is no real Pittavruddhi but Vayu is increased by it Chala Guna and Pitta which is normal qualitatively and quantitatively is driven or thrown away by this increased Vayu, so there will be deficiency of Pitta in it normal place and excessive accumulation where it is driven by Vayu. In short there will be imbalance due to displacement of Pitta. Thus excess accumulation of unwanted Pitta is denoted by burning, erythema, local hyperthermia, inflammation etc. We can get such type of pathogenesis in Pada Dah and Rudhahapatha Kamala; which we have discussed previously.

5) Sama Pitta :

A pathological condition in which aggravated Pitta saturates with Ama is denoted by

\[ \text{दुर्गम्य अरितिय धरिय लक्ष बहल पुलिस} \]

(अध.सू.73)

\[ \text{दुर्गम्य हरिय स्वाय धरिय पाने दित्युर गुलिस} \]

असिका केढ हत्याबार साम निदिष्टि ||
Symptoms: *Amlika* (sour vomiting or sour salivation), burning sensation at throat and chest.

Signs: Pitta expelled through vomits is green, greenish blackish or yellow in color and having foul smell like fish and sour in test. *Bahal* means excess in quantity.

6) *Niram Pitta* :

A pathological condition in which aggravated *Pitta* without or with little *Ama* is termed as *Niram Pitta* and denoted by –

\[
\begin{align*}
\text{अताम पीत अत्युष्ण रसो कटुक अस्थिरम्} & \\
\text{पञ्चविंश रिह्यं शरे वफक्कवतिप्रसं} & \\
\text{विष्णवे यु पक्कवतिष्वात्ताम संविधकल} & \\
\text{पीतविं पितां अच्छा} & \\
\end{align*}
\]

(अ.स.सू. 21)

*Niram Pitta* is yellow colored, pungent in test and having no specific smell and very hot in property. It is *Achchha* i.e. pure means *Nirdrava* i.e. without any water part and that’s why it is very hot and useful in proper digestion. Thus it creates hunger at proper time and becomes responsible for strength of the body.

Due to excess hot it may create burning pain and hyperthermia, inflammation etc. in any part of the body.
These are 10 diseases or rather diseased conditions produced by *Pitta* itself. They are as follows:

1) ओष्ण - Slightly burning pain like fomentation.
2) चङ्ग - burning sensation like burned by flame.
3) दात - burning sensation.
4) दर्शु - burning pain like boiling.
5) बूढङ्ग - feeling like expelling out fumes or smoke from nose and throat etc.
6) अल्सक - sour salivation or vomiting
7) चित्त - burning sensation in chest, throat, etc.
8) अजङ्ग - Burning pain inside the body i.e. in abdomen, bladder etc.
9) अगुदङ्ग - generalized burning sensation.
10) दम्भ अलंक - hyperthermia,
11) अतस्वद - perspiration, excess sweating.
12) अगुव्याद - excess sweating at different body parts.
13) अगुण्ड - bad smelling to different body parts.
14) अघदिरण - scratches at skin of different body parts.
15) शोपितकंद - thinness to the blood.
16) मासकंद - looseness of the muscles.
17) शंकयाह - burning sensation at skin.
18) दक्कनाप्तत्वमयित्व - deep fissures on the skin.
19) भिक्षुङ्ग - burning sensation (deep).
20) स्नेतर - superficial fissures or cracks of skin. (Irregular)
21) रक्तक्रोट - Erythematous wheels on the skin.
22) रक्तपिल - bleeding tendency from different sites.
23) रक्तमंहल - Erythematous circular wheels on the skin.
24) गृहितय - Greenish discoloration at different body parts like sclera, urine, etc.
25) गृहित्रत्व - Yellowish discoloration at different body parts like sclera, tongue, urine, icterus.
26) नीतिका - Bluish black discoloration of the skin.
27) कठ्ठा - deep fissures at axillary folds or herpes infection.
28) कामला - Jaundice.
29) तिकास्थता - rengaling bitter taste in the mouth.
30) लाहीत्यथस्य - bad breath like blood or rusted iron.
31) मुखद्वीरायम् - bad breath.
32) तृष्णाविक्य - excess thirst.
33) अतृप्त - feeling like emptiness of the stomach even after consumption of food.
34) श्वार्धर्तक - stomatitis, glossitis.

35) गत्सपक - pharyngitis.

36) अंतिपक - conjunctivitis.

37) गुदपाक - inflammation of anus and surrounding.

38) मंद्रपाक - inflammation of the glance of penis.

39) जीवादान - excess bleeding.

40) तम: प्रशेष - feeling like sinking in darkness.
ROLE OF KAPHA-DOSH - PRODUCTION OF SHOOL

Though lesser than Vatadosh; Kaphadosh has also an important role in the production of Shool.

Kapha-Dosh bears following properties: viz.

- गुरुशीत मुद्ररिनध भुवुर सिधर पित्तलाल: ।

  (च.सू. 1/61)

- श्लेष्मो श्लेषों मुरु: सिद्धिच पित्तल शीत एव ।
- मधुर: तु अविदाय: स्वातु विदायो लवण: स्त्रूत: ॥

  (पु.सू. 21 इ.)

- श्लेष्मो श्लेषम् मुरु मद्द्रवम् मुद्रम् सिधिर कन्य ।

  (भो.सू. 1 इ.)

Out of these properties Sheet, Pichchhil, Guru, Sthir.

Manda take an important role in the pathogenesis of Shool: may be directly or indirectly.

Sheet: - Vata & Kapha: both the Dosha have this Sheeta property.

The difference is Sheeta Guna of Vata is supplemented by Ruksha while that of Kapha is supplemented by Shigdha. While thinking on pathogenesis of Shool, Sheeta Guna of Vata which is supplemented by Ruksha is more and directly responsible for production of Shool.
Sheet Guna of Kapha; or it is supplemented by Snigdha is not directly but indirectly responsible for production of Shool as follows:

Kapha Prakop (Sheet ↑) ➔ Agnimandya ➔ Ajeerna (dyspepsia) ➔
Production of Ama (Pichchhil ↑) ➔ Margavarodha (Obstruction) ➔
Vata Prakop ➔ Shool

Sheeta Guna of Kapha along with Pichchhil, Drava and Kliuna creates kanda i.e. itching.

Guru Guna of Kapha creates heaviness of different body parts.

Guru along with Manda creates diminished movements and dysfunction of joints, extremities, and internal body fluids like Dosha, Rasa etc. Thus accumulation or stagnation the body fluids produces a swelling or oedema (pitting).

Due to Guru, Sthir and Sanhat, there will be hardness or rigidity as we can see in the pathogenesis of Dhamani Praucidya. Pichchhil, Guru, Manda and Sthir together create obstruction in the pathway of Vayu and that is responsible for Margavarodhajanya Vataprakop and produce different types of pains.

\[
\text{Guru} + \text{Manda} + \text{Pichchhil} + \text{Sthir} \rightarrow \text{Obstruction in the pathway of Vayu} \rightarrow \text{Vataprakop} \rightarrow \text{Shool}
\]

Due to increased Manda Guna the process of pathogenesis becomes very slow which is termed as Chirakari i.e. Chronic. Due to this Manda Guna healing process and response to the drugs is also slow. Pains are also mild in nature and termed as Prtha.

Sheeta Guna of Kapha along with Drava Guna creates...
chills and Staimitya i.e. feeling like taping the body with wet clothes. Sheeta Guna of Kapha along with Guru, Madhir, Snigdha and Drava produces Agnimandya and hampers the process of digestion which is termed as Apakti.

Trupti - An abnormal feeling like fullness of stomach without taking any food, is produced by increased Guru, Manda and Snigdha Guna. Due to increased Guru Guna there will be Alasya i.e. laziness or lethargy of body and mind with sense organs Nidradhikya i.e. excess sleep, Tanda i.e. drowsiness.

Increased Guru, Sthir, Snigdha and Samhat are responsible for obesity and hypertrophy of different body parts. Increased Mruda Guna is responsible for Shlathangatva i.e. looseness or pumpiness of different body parts. Increased Guru and Manda are responsible for Angasada i.e. body ache or fatigue.

Increased Pichchhil, Manda and Sandra together are responsible for Upalep i.e. coating inside the vessels on ducts as described by Dalhana. While writing the commentary on Dhamani Pratichaya.

And it may result into obstruction, then Vata Prakop and finally production of Shool.

When Pichchhil Guna of Kapha aggravates together with Ruksha of Vayu; there will be excess stickiness which is called as Styan, which get stuck up in the pathway of Vayu and creates obstruction. Thus Styan Avalambak Kapha obstructed in minute branches of bronchioles (i.e. in pathway of Vayu) creates Shwas (Dyspnoea) and Kasa (cough).
Due to *Ushna Guna*, *Sanhat Kapha* starts to dissolve or liquefied. *Drava guna* increases and results in quantitative increase of *Kapha* or *Kapha Prakop*. As in *Hemant Ritu* due to increased *Sheeta* and *Snigdha Guna*, *Kapha* becomes *Sanchit* i.e. dense one while in *Vasant Ritu* i.e. spring due to increased heat of climate this dense *Kapah* becomes liquefied, and thus *Kapha Prakop* occurs.

Thus increased *Drava Guna* of *Kapha* produces *Agnimandya* and *Prasek* i.e. hyper salivation with nausea. As *Dhatvagni* are depend upon *Jatharagni*, after *Jatharagnimandya* there is *Dhatvagnimandya* also. Impaired *Rasa Dhatvagni* results into increased *Mala* of *Rasa Dhatu* i.e. *Kapha*. Thus there will be more and more *Kapha Prakop*. Impaired *Mans Dhatvagni* results into increased *Mans* *Mala* i.e. *Kha Mala* and *Nasamala* and tends to *Pratishyaya* (rhinorrhoea).

Thus according to *Charak*, normal *Kapha* (qualitatively and quantitatively) is said to be strength of the body while if it becomes abnormal may be qualitatively or quantitatively, it becomes a *Mala* and creates many signs and symptoms as described above.
In **Kapha Prakop** we get increased quality of all the **Mala** in body. As we can see this in the pathogenesis of **Anuloma Rajayakshma** and **Prameha**.

**Increased Kapha (Guru, Sheeta, Manda)**

- Impaired *Jatharagni* → *Ahur Rasa* → *Excreta* → *(Purish, Mootra)*
- Impaired *Datwagni* → *Dhatu* → *Excreta* → *(Kapha, Pitta, Kha-mala, Kleda)*

In short **Ruja** (mild pain), itching, heaviness of different body parts, body ache, dysfunctions. Dyspnoea, fullness of abdomen without any consumption of food, laziness, lethargy, fatigue, over sleep, drowsiness, chills, **Staimitya** (feeling like rapping the body with wet clothes), hyper salivation, nausea, swelling, mild pains. These are the abnormal feelings produced by abnormal **Kapha Dosha**. Peculiarities of these *kaphaja* pains are, they are mild in nature and chronic, they are aggravated just after intake of food i.e. is first stage of digestion i.e. **Madhur Avastha pakavya** and in **Tushinpatan kal** i.e. early in the morning and in **Vasant Ritu** i.e. spring season.

According to **Shatkriyakula** pathogenesis due to **Kaphadosha** occurs as follows:

1) **Kapha Chaya**

    शैलेन युक्ता, हिन्मधादा, कुर्वत लेभमणः, चयः।

    (अहम्सः 12/21)
Increased *Sneeta Guna* together with *Ushna* and *
Sandra* etc is responsible for *Kapha Chaya*. In *Hemant Rtu* there is
natural *Chaya* of *Kapha Dosha*. This is primary stage of pathogenesis
related to *Dosha* in which there is little aggravation of *Kapha* in its own
place. This stage is denoted by

\[ \text{तत्र संधितानां दोषाणां अंगानां गीर्वं आलस्यं} \\
\text{व्यक्तिर विद्वेष्ट: न विद्वेष्टि लिपि भवति} \]

\[ (\text{दृष्ट २१/२३}) \]

This stage is denoted by symptoms like heaviness the
different body parts and laziness on lethargy. There will be hatred to the
dietary substances which are similar in properties to that of causative
factors and desire to the opposites to that.

2) *Kapha Prakop* : This is second stage of pathogenesis related to *Dosha*, in which there is more and more aggravation and so much
accumulation of *Kapha Dosha* in its own place that it become ready to
thrown away from there

\[ \text{साप्तेन कों} \]

\[ (\text{अ.ह. १२ २°}) \]

According to this *Sootra, Ushnaguna* is responsible for this
stage. This we have discussed before, as
This stage is denoted by the symptoms like, Anorexia or hatred to the consumption of food and nausea.

3) Kapha Prasar : In this third stage of Shat Kriya Kala and (last stage of pathogenesis related to Dosh), there is so much aggravation of Kapha that, it expels out and thrown away from its own place and circulated all over the body through the medium or vehicle of Rasa Dhatu. This stage is described as follows:

**Symptoms :-** Improper taste sensation or hatred to consumption of food, body ache or fatigue.

**Signs.** - Impaired digestion, Vomiting.

Next stages of pathogenesis according to Shatakriya Kala viz Sthan sansraya, Vyakti and Bheda, will be described letter As they are not only relater to Dosha but Dushya Vaigunya is also there.
Apart from those Kapha Kshaya and there are some pathological conditions which are produced by Dosha only. They are Kapha Kshaya, Kapha Vriddhi, Kaphavrut Vat, obstruction due to Kapha (Margavarodha), Sama Kapha and Niram Kapha.

4) Kaphakshaya :

Qualitative or quantitative decrease of Kapha is denoted by piddness, dryness, burning sensation to internal organs, dilution of heart. Looseness of joints, excess thirst, general debility. (As described elsewhere - प्रकृतिस्तु वल रक्षणा विकृति मल उचिते (च जू 17/117)), insomnia and lastly.- आमाशयतर रक्षणाशय शून्यता... i.e. emptiness at the places of Kapha Dosha, like heart, joints, head etc. but except stomach, which is mentioned by Sushruta as Because consumpted food is stored there. These signs and symptoms occur accordingly due to decrease of Guru Sthir, Snigdha, Sheeta, Sanhtat, Sanhet, Sheeta and Snidha, Sanhet, Guru and Snigdha and Guru and Pathiv Guna.
Kapha Vruddhi — Impair of Shat Kriya Kala — we get some reference of Kapha Vruddhi or Kapha Prakop from different Samhitas as follows.

श्लोकांकन: अविनाशित परमाट्य मोक्षम ।

शैत्यष शैत्य शलथागच्छ श्वास का संति निद्रिता। ।

(अ.सू. 17/68)

श्लेष्म कृत्वा शैत्य शैत्य गोरवं अवसादः

tद्रा निद्रा संध्यारम्भ निश्चलः ।

(अ.सू. 15/15)

शैत्य शैत्य शैत्य आलस्य गोरव अगसादः

स्नोतिष्कम्य मूख्या।

तद्रा निद्रा श्वास कासः

प्रसेकं हल्लासं अग्रिमाद् सांविशेषलपादिभिष: श्लोकम ।

(अ.सू. 19)

श्लोकम: समेत कांतिष्कम् कः शोत्तल्य गोरवम् ।

वर उपवयुत्तीक्ष्मार्क एवका कविप्रकरणेंद्रस्ता ।

वगग भवन तस्य स्वादुः लक्षणो विशिष्टिता।

(अ.सू. 12/52)

तृष्णा तद्रा गुरुता स्निःस्य अविनाशित कांतिष्कम्

समेत अपवशंस्कव स्निःस्य कः कः प्रसेकर्षयां।

विरक्तिक्षा शोषो निद्रा ष्ट्रियायस्व न्यासी पदु स्वार्थः।
Those Kaphavruddhi Vingani may be classified as follows:

**Signs**
- Impaired *Agni*, hyper salivation, looseness of the different body parts like joints, etc. dyspnoea cough, excess sleep, drowsiness, steadiness, looseness or dislocation of the joints, obesity. Signs of obstruction in *Srotas*, syncope, oiliness of the skin, hardness of different body parts, swellings, dyspepsia, faint or hypo-pigmented coloration to the skin. chronicity in diseased conditions, increase in excreta, coated tongue etc.

**Symptoms**
- Heaviness, laziness, drowsiness, chills, body ache, fatigue, nausea, itching, feeling like rapping body with wet cloths, feeling like fullness of abdomen even with out any food consumption, sweat on salty taste in the mouth and throat.

6) *Sama Kapha* : Aggravation of *Kapha*, which is saturated with *Ama* produces following signs and symptoms:

(अ श्रूषा ॥)
आविष्कारः कुटुंबः संयात् पत्तों विलिवल्क दक्षिण ॥
(सत सुरु ॥)
आविष्कारः ततुलः संयात् कठोरदेशः विलिवल्कः
सामी बलासो दुर्गमः शुल्त उदगार विघातकूलः ॥
(अ श्रूषा मानि ॥)
Samakapha: Due to excess stickiness this Samakapha creates obstruction in the pathway of Vayu and results into Margavarodhajanya Vataprakop which produces different types of Shool. Due to excess stickiness this Sama Kapha can not be expelled out completely while coughing on spitting and hence creates coating inside the mouth and throat. It produces salty taste in mouth and throat and it is Avil i.e. non-transparent.

7) Niram kapha:

Niram Kapha is transparent white, bolus form, having no smell, with foarth, non sticky in nature and that is why expelled out completely while coughing on spitting and becomes non residual. It produces sweet taste mouth and throat.
**Kaphavrut Vata**: under the topic of coaction we have already seen the role of *kapha* in it. *Vata* itself or its sub types are covered by *Kapha*.

The pathological conditions are:

- *a*) Kaphavrut Vata.
- *b*) Kaphavrut Pran.
- *c*) Kaphavrut Udan.
- *d*) Kaphavrut Saman.
- *e*) Kaphavrut Vyan.
- *f*) Kaphavrut Apan.

The signs and symptoms of these six pathological conditions are discussed previously.

8) **Kapha Navatmaja Vikar**: These are 20 diseases or rather diseases conditions produced by kapha itself. They are as follows:

- **01** तृसा – Feeling of fullness of stomach without any food consumption.
- **02** नद्रा – Drowsiness.
- **03** नित्राधिक – Excess sleepiness.
- **04** सतातिम्य – feeling like rapping the body with wet clothes.
- **05** वुधगातिम्य – heaviness of the different body parts.
- **06** अत्सहज – laziness.
- **07** मुखाप्पृत्य – regaling sweet taste in the mouth.
- **08** मुखस्त्राव – hyper salivation.
10) वस्त्रधारण - Increased in the quantity of excreta.
11) बलासक - Sticky spit or general debility.
12) इलायोत्रेय - Feeling like coating inside the heart.
13) क्षयवर्ज - feeling like coating something inside the pharynx and larynx.
14) अमृगादिक - Arterio-sclerosis.
15) गोटर - Goiter.
16) अतिशीतल्य - Excess obesity.
17) शीतानामिता - impaired Agni i.e. digestive power.
18) इलट् - Erythematous, irregular wheals with itching.
19) यहतावभास्त य - Hyto-pigmentation of skin.
20) श्वेत मृत्र - नक्त्र - गुरुपपत - Whitish urine, stool and sclera.
This is all about the role of Dosha in the pathogenesis of Shool or pain. According to an Ayurvedic hypothesis for pathogenesis of any disease on diseased condition, 3 basic things are very important viz. 
1) Aggravated Dosha 2) Vigun i.e. defective Dushya and 3) Sammurchhana i.e. pathological fusion or union of aggregated Dosha with defective Dushya. The same is described in following Sootra as:

(सु.-का 24/10)

While writing commentary on it Acharya Dalhan says that:

ख वेग्यानाऽि रसोणेः वेग्यानाः

So Vigun i.e. defected Srotas or Dushya has also an important role in the pathogenesis.

The term Dushya is defined as All the body parts which can be defected by aggravated Doshas. It contains Srotas, Dhatu, Upadhathu, mala (excreta), different organs etc. The term Srotas is defined as follows:-

ROLE OF DUSHYA VIKRUTI IN PRODUCTION OF SHOOL
According to these definitions, the meaning of *Srotas* as space is quite incomplete. *Acharya Charak* defined it as follows:

The meaning of which is something different to that of space only. The space in the body which is limited by something i.e. some *Dhatus* and secrets something is known as *Srotas*. Though this definition is good, but not sufficiently clear to get an exact idea of functions of *Srotas* which is very important. So in *Viman Sthan*, Charak defined it again as follows:

This definition lights and defines the word *Srotas* of the previous definition i.e. secretion of Under-processed body.
elements. So finally, Srotas may be defined as, any body, which is limited by something or some Dhatu which creates, secrets and conducts Under-processed body elements and completes the processing of Sookshma Pachan (metabolism), with the help of Dhatwagni. This Dhatwagni is a representative of Jatharagni and takes very important role in physiology as well as pathology of that Srotas as follows:

संस्थानस्य कायायनं दात्रकुं अवतिष्ठति

तेषा सातातिदिशिक्यं भातुल्क्यं क्षयाद्वितयः

Thus according to intensity of Dhatawagni we get 6 shades of Dhatawagni as follows:

<table>
<thead>
<tr>
<th>Normal Agani</th>
<th>Abnormal Agani</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Teekshna</strong></td>
<td><strong>Ati-Teekshna</strong></td>
</tr>
<tr>
<td>(Normal in Pitta Prakruti)</td>
<td>(Dhatukshaya)</td>
</tr>
<tr>
<td><strong>Sama</strong></td>
<td><strong>Vishama</strong></td>
</tr>
<tr>
<td>(Very normal and ideal)</td>
<td>(Sadatura due to imbalance)</td>
</tr>
<tr>
<td><strong>Manda</strong></td>
<td><strong>Ati Manda</strong></td>
</tr>
<tr>
<td>(Normal in Kapha Prakruti)</td>
<td>(Dhatuvruddhi {Abnormal})</td>
</tr>
</tbody>
</table>

Thus Ati Teekshna and Ati Manda Agani are responsible accordingly to Dhatu Kshaya and Dhatuvruddhi which results into Dhatukshaya Janya Vataparakop and Margavrodhajanya Vataparakop accordingly and produce different types of pains.
The processing of under processed body elements is done by Dhautwagni of that Srotas and Vayu (Saman) and it is controlled by Mool Sthan of that Srotas. The processing creates Dhatu Upadhatu, Mala (Feces) etc. that is why while thinking on pathogenesis of Dushya this processing and it is causative factors like Dhautwagni, Saman Vayu and Mool Sthan of that Srotas are very very important. Because defect in these factors creates improper on defective Dhatu, Upadhatu and Mala and results into Dushya Vaigunya. Thus the defect of these factors with presence of Ama, obstruction in the pathway ends the physiology of that Srotas and pathology or Dushti starts:

आहारस्थिविहारस्थिरोधादापुर्णे समस्ता ।
धातुमिहिजुनेन च अधिसन्धिरस्य स प्रदक्षिणी।
(चि 5/31)

The guideline of aetiological factors of the defect of Srotas is the diet and behaviour of such properties which are similar to the properties of Dosha and opposite to the properties of Dhatu related to that Srotas. While thinking on general on common signs of the Srotodushti:

अतिप्रभृतिसंगो वा सिराणां विध्योदितिः वा ।
विभागं गमनं वापि स्त्रोतस्य दुश्तिकृतत्वम् ।
(चि 5/24)
If any Srotas get defected, there are dysfunctions of that Srotas and they are:

1) *Atipravrutti* :- Means excess production or conduction of under processed body elements of that Srotas. (As in Medorog, there is *Atipravrutti* of Med Dhatu)

2) *Sanga* :- Means lack of production or conduction i.e. accumulation of under processed body elements of that Srotas. (As in Pandu, there is Raktaalpata)

3) *Siragranthi* :- Obstruction in the pathway or tract of under processed body elements by the formation of neoplasm, thrombosis etc. (As in Ruddhapatru Kamala due to Pittushmari)

4) *Vimargagaman* : Due to each pathological conditions discussed above, there will be accumulation of body elements in that Srotas. Thus body elements while be accumulated there up to certain limit and after that, they will be thrown or driven away elsewhere or back flow. This condition is called as *Vimargagaman*.

While thinking on the aetiological factors of Srotodushti they may be classified as follows:

a) *Adibala- Pravrutta* b) *Janmabala Pravrutta* c) *Doshabala Pravrutta.*

a) *Adibala Pravrutta* : Means Kulaja on hereditary. *Dushya Vaigunya* due to *Beejadushti* Beeja means sperm and ovum. The defected part of which is responsible for this type of defect. In genetic disorders or hereditary diseases like *Hridrog* (Heart disease) *Tamak Shwas* (Asthma) *Grahani, Arsha* (Piles), *Shwitra* (Vitiligo), Haemophilia etc. We get defected *Dushya* of this type.

b) *Janmabala Pravrutta* : In this type, defect of *Dushya* is congenital, i.e. congenital. In adequate or improper diet and behavior of mothers.
during pregnancy or *Rasadushti* of mother in pregnancy are some causes behind that A.S.D. V.S.D. imperforated anus, undescended testes, cleft lip on cleft palate are some examples of this type of defected *Dushya*

C) *Doshabala Prayutta* : It means required. After the birth due to inadequate on improper diet; improper behavior; impact of season i.e. *Kala*. This is again sub divided into 2 groups viz.

1) *Nija* 2) *Agantu*

1) *Nija* : Means *Dushya Vaigunya* due to aggravation of *Dosha*. The term *Dosha* may be defined as a Basic functional unit. *Dosha* first reacts to the outer causative factors. These *Dosha* get increased qualitatively and quantitatively due to such diet and behavior which is similar in properties to that of those *Dosha*. Thus *Dosha* increase gradually and undergo the stages viz. *Chaya, Prakop* and *Prasar* or *Shat Kriya Kala*. In the stage of *Prasar*, so much increased *Dosha* escape from there own place and gate circulated all over the body by *Rasadudhata* and when they get defective *Dushya*, they fuse there and start pathology. If such *Dosha* don’t get any defective *Dushya* then they may undergo one of the following phases viz.

i) If they are in *Koshtha Marga*, they expelled out of the body by nearest root, either by vomiting on by loose motions.

ii) They may get subsided by *Viparit Gunechchha* i.e. desire of diet or behavior which having opposite properties or by the impact of season i.e. *Kala*.

iii) If those *Dosha* are in *Shakhamarga* or in *Madhyam Marga* then they may hide or stick up in the *Srotas* and termed as *Leena Dosha* and do wait for proper time and proper condition for strengthening themselves. Such *Leena Dosha* become *Upabhaemia Thauma* or other diseases.
iv) Those *Dosha* may attack again and again on non-defective *Dushya* till it get defected. We get such type of pathogenesis in *Urdhvaga Annapitita* when there is formation of peptic on duodenal ulcers or in Typhoid fever when there is ulcerative colitis. Thus defect of Dushya occurs due to increased *Dosha*.

2) *Agantu* : Means external causes which directly affect the *Dushya* or *Dhatu* instead of *Dosha*. These are *Aghat* or *Abhighat* like burning, dashing, falling, pressing, pulling etc. Burns due to electricity, Heat, chemicals like acids and alkalis, poisons like metallic poison, Organophosphates, etc. bites of poisonous animals like snake, scorpion, bee sting etc. These external causes directly affect the *Dhatu* on *Srotas* first and then create *Dosh Dushita* later.

Signs and symptoms of defect of different *Srotas* are described as follows:

1) *Pranavaha Srotas*:

अतिलृष्टि अतिव्हाद्य कृपित अल्यात्य अभीक्षण वा संशयादृश्यों उच्चबलसत

दृश्या प्रणववहात्यस्य स्नातांति प्रदुष्टार्थे इति विद्यते।

(अ वि 3)

The defect of *Pranavaha Srotas* is related to respiration and the signs are like hyper-apnoea, dyspnoea, shallow breathing, stertorous breathing, chine-stroke breathing, bronchial breathing, change in the ratio of inspiration and expiration.
2) **Annavaha Srotas**: 

The defect of *Annavaha Srotas* is related to digestion of food and denoted by anorexia i.e. loss of desire of food, loss of taste sensation, dyspepsia, nausea and vomiting etc.

3) **Udakavaha Srotas**: 

The defect of *Udakavaha Srotas* is related to thirst and denoted by dryness at tongue, palate, lips, throat, and *Kloma* (*K") and there is excessive thirst i.e. desire of water.

4) **Rasavaha Srotas**: 

The defect of *Rasavaha Srotas* is related to dryness and denoted by dryness at mouth, lips, and dryness of voice.
Signs: - Pyrexia, drowsiness, pallor, impotency, thinness, early hypo-pigmented hairs (White hairs), early baldness, early wrinkles on the skin, obstruction in the pathway of Rasa which is indicated by edema, hypertension and Margavrodha - ataprapak Janya pain. Heart diseases (As per Sushruta).

Symptoms: - Loss of desire - especially of food, anorexia, loss of sensation of taste, feeling of impotence, e.g., unable to feel the heaviness of the different body parts, body ache, fatigue, feeling like sinking in darkness, fatigue after sexual intercourse, described digestion power and dyspepsia.

Thus Rasudushti is a main cause of Dhatukshaya as well as Margavrodha and produces both the types of pains i.e. Dhatukshaya - Janya and Margavrodha - janya.

5) Raktavaha Srotas:

कुष्ठ विषय-धितका रक्तभित्ति अभिप्रेतः ।
गुद मेदध्रश्य पाक च पलीहा गुलमद्ध विद्राधिः ।
नीतिका कामता गंग पित्तव, तिलकालका: ।
सदुप दुर्लोकत्व प्रकाण्डः ।
The defect of *Raktavaha Srotas* is denoted by following signs- skin diseases like *Kushtha, Veesarpa, Pidaka* (bolts), *Situmtra* (Vitiligo), *Dadru* (Ring warm patches), *Kotha* and *Asra Mandar* (erythematous wheels on skin), discoloration of skin like *Kamal* (leukus), *Teel, Mashak, Neelika, Piplava, Kalak, Vyanga* (black, blackish or blue colored regular and irregular shaped discoloration on skin), abscesses, *Gurma, spleenomegaly, iiuflamation of different parts like anus, glance pens, glossitis, stomatitis, appendicitis, etc and bleeding disorders like *Rakta pitta* and *Asrugdar i.e. D U B* etc.

6) *Mansvaha Srotas*:

7) *Medovaha Srotas*:
Among the Ashtoninedha the signs and symptoms of Atishool and Poorva Roopani of Prameha are same to that of Vredervada Srotodushti. These are - over weight, obesity, dyspnoea on exertion, perspiration, bad body smell, excess thirst, excess hunger, general debility, reduced life span, difficulty in sexual intercourse, early senility are the signs of Atishool. Increased quantity of all the body excreta, burning sensation at palms and soles, Chikkanata, excess thirst and regained sweat taste in mouth are the Purvaroopani of Prameha. We can see both together in the defect of Medovaha Srotas. According to Sushruta - glands, generalised lymphadenopathy, hypertrophies, goiter, neoplasm, Medoja Oshthuprakop - a type of stomatitis. Madhunuma. Atisthaulya i.e. obesity and perspiration these are the signs of the defect of Medovaha Srotas.

Hypertrophies, neoplasm and lymph adenopathies create obstruction in the pathway of Vayu and thus aggravated Margavarodhajanya Vayu produces many types of pains.
8) Asthivata Srotas:

The defect of Asthivata Srotas is denoted by overgrowth of bones or excess bones, new formation of bones like sesamoid bones, tennis elbow, etc.; excess number of teeth or gum; scratching of teeth, repeated fractures of bones (even due to slight trauma) or breaking pains at bones; severe pains at bones and teeth; discoloration (of hairs, nails, etc.); structure of hairs, falling of hairs and mustaches, etc.

9) Majjavaha Srotas:

The defect of Majjavaha Srotas is denoted by following signs and symptom.

**Signs**: Syncope, Painful and tender boils or ulcers on inter-phalangeal joint.
Symptoms: Pain and tenderness at the inter-phalangeal joints, weakness and feeling like sinking in darkness.

10) Shukravaha Srotas:

The defect of Shukra Vaha Srotas is denoted by:
- Impotency, non-erection of penis during sexual intercourse;
- Loss of desire of sexual intercourse, there is sterility or if not, the child may be weak, impotent, having short life and unhealthy.
- The sexual partner is also suffers and if it is female her Shukravaha Srotas becomes defective and there may be sterility or repeated abortions on miscarriage.

11) Mootravaha Srotas:

- Persistent and excessive pain in the pelvis;
- Loss of fertility due to inability to conceive.
The defect of *Moolavaha Srotas* is related with micturition and denoted by the signs and symptoms like Polyuria, dysurea, anurea, nocturne, frequency in micturation, burning micturation, changes in colour, odour and appearance of urine.

12) *Purishavaha Srotas* :-

The defect of *Purishavaha Srotas* is related with feaces and the act of defeaction and denoted by following signs and symptoms.

**Defecation** - Irregular, delayed, forceful, painfull, burning, with gas and sound etc.

**Feaces** - Hard, bolus, losses, watery, excess in quantity or less in quantity, with mucous or blood, change in colour like blackish and clay colored, and smell like foul smell etc.
Shool in Dhatu Vruddhi

1) Rasa Vruddhi: .......................... प्रसोकल्प्य गौरवम्।

शैल्य शैल्यम् प्रदहिर्मण्यं प्रमुन्यमर्नि विभीमः।

(च. सू. १६)

(सू. सू. १५/२६)

In Rasa Vruddhi there are symptoms like Gaurav, Shlathangarva & Hridayotkled.

ii) Majja Vruddhi

.......................... नेत्राण्य गौरवम्।

परंतु मुत्तमूल्यानि नृत्यं कृत्यमि अरुणि व।।

In Majja Vruddhi there are symptoms like Netra Gaurav Anga Gaurav and Painful boiles on Parvasandhi.

Shool in Mala Vruddhi

1) Parish Vruddhi

कुशाबामानं आदोंपं गौरवं वेदनं शक्रृतं।

(अ. ह. सू. २२)

In Parish vruddhi there are symptoms like Akkan । Top Heaviness & Pain in abdomen
ii) \textit{Mootra Vruddhi}

मूत्र तु बसितिनिस्तोंद्र कुलार्क्षित अकृतसंज्ञ्जताम्।

(अ. र. सू. २२)

In \textit{Mootra Vruddhi} there are symptoms like \textit{Basti Nistod} etc.

\textbf{Shool in Dhatu Kshaya}

i) \textit{Rasa Kshaya}

सालते हलारों कंडा शोषो शृंगारा तथा च।

(सू. सू. २५)

In \textit{Rasakshaya} there are symptoms like pain and emptiness at heart.

ii) \textit{Mansa Kshaya}

मांसे जस्ताहीति श्रघर्नं कृत्यं कालं।

In \textit{Mansa Kshaya} we get \textit{sāṃdhīvedana} i.e. joint pain.

iii) \textit{Meda Kshaya}

मेदसं स्वपनं कल्पं: . . . . . । (अ. र. सू. २१)

संधियां स्फूटं: . . . . . . . । (च. सू. १७)

मेदसं जस्ताहीति श्रघर्नं: . . . . . ।

In \textit{Meda Kshaya} there are symptoms like numbness at lumber region, pain and emptiness at joints.

iv) \textit{Ashtikshaya}

(च. सू. २२)

{...} बाजेकोच रत्न सं...।

(अ. र. सू. २२)
In **Ashtikshaya** there are symptoms like **Asthitod, Sandhisatithiya** (looseness of Joints)

In signs and symptoms produced by **kshaya** of all the **Dhatu** there is a common sign - **Rukshata** which is indirect cause of **shool**

**Shool in Malakshaya**

i) **Purish Kshaya**

*……………..ह्रत्पाषेऽ पीडयन्त् भृशा ||

(अ. ह. स. २९)

In **Purish Kshaya** there are pains at heart and thumps

ii) **Mootrakshaya**:

*मुृत्रस्य भृशा कृच्छादुः …… || (अ. ह. स. २९)

In **Mootrakshaya** there is dysuria
MODERN ASPECT OF PAIN

Pain is one of the most distressing features of disease. Yet it is useful, pain in often the warning or alarm that alerts us to danger. Pain is protective mechanism for the body. It occurs whenever any tissues are being damaged, & it causes the individual to react to remove the pain stimulus. The person who has lost or diminished the pain sensation, suffers repeated & mutilating injuries e.g. non healing ulcers as in Hanson's disease & diabetes mellitus, silent heart attack in diabetes mellitus, bedsores in paralysis & spinal cord injuries etc.

Although the nature, location & etiology of pain differ in each case; approximately half of all patients have primary complaints of pain. For most, the correct treatment of self evident, limited disease process (such as a fracture of bone) alleviates pain. However in some patients uncontrolled pain continues to be a major problem. In such cases, the symptom of pain requires careful assessment and evaluation to interpret
its significance & to establish an approach for its effective treatment.

The evaluation of the patient with pain is frequently complex, partially because pain is a perception rather than a sensation. A person’s physical state, past experience & anticipation all influence the way pain is interpreted. Thus patient’s interpretation of a sensation, emotional response & associated behavior are equally important in the management of pain.

Pain has been classified into two different major types i.e. fast pain & slow pain.

1] **Fast Pain** - Occurs within about 0.1 seconds when pain stimulus is applied; where as slow pain being only after a second or more and then increases slowly over many seconds and sometimes even minutes. Fast pain is also described by many alternate names such as sharp pain (*Chhedan*), pricking pain (*Todan*), acute pain (*Shool*), electric pain (*Vidyutavat Vedana*) & others, this type of pain is felt when a needle is
stuck into the skin (Tudan) or when the skin is cut with a Knife (Chhedan) & when the skin is subjected to electric shock (Virdyuta tulyavat Vedena - विद्युत तुलया वेदना). Fast, sharp pain is not felt in most of the deeper tissues of the body. This fast pain is transmitted through type A-δ pain fibers.

2] **Slow Pain**: It also denoted by synonyms like burning pain (Dahan), aching pain (Ruja), throbbing pain (Pida), nauseous pain (Rhullas) & chronic pain (Anubaddha Shool, Chirkari Shool). This type of pain is usually associated with tissue destruction (Dhatukshaya). It can become excruciating and can lead to prolonged, unbearable suffering. It can occur both in the skin & in almost any deep tissue or organ. It results from stimulation of the more primitive type ‘C’ fibers.

As we have discussed previously the concept of Ayurvedic pathogenesis of pain, modern concept is quite similar to that & can be described into the same format i.e. production of pain stimulus & transmission of pain stimulus.
As we have seen previously, pain occurs whenever any tissues are being damaged. Thus all the causes, those cause tissue damage are the causes of pain. These causes are divided into 3 groups as:—

1. Mechanical
2. Thermal
3. Chemical

1] Mechanical Causes: The sharp pain as a knife cuts through the skin or as fractured bone ends grate together is caused by injuries to the nerve endings as in blow, trauma, burns etc. Any tissue that is under tension or stretched is likely to be painful because of the mechanical stimulation of its nerve endings. The relief that comes when an abscess is opened is caused by the release of the tension of pus within it.

Tissue Ischemia is one of the causes of this type. When blood flow to a tissue is blocked, the tissue becomes very painful within a few minutes. Any greater the rate of metabolism of tissue, more the pain appears. Muscle spasm is also one of the
causes & it is the basis of many pain syndromes. This pain probably results partially from the direct effect of muscle spasm in stimulating mechano-sensitive pain receptors. However it possibly results also from the indirect effect of muscle spasm to compress the blood vessels & cause ischemia. Also spasm increases the rate of metabolism in the muscle tissue at the same time; thus making the relative ischemia even greater, creating ideal condition for release of chemical pain inducing substances like lactic acid, bradykinin etc. Bacterial infections & tissue contusion are some other causes.

2] Thermal Causes: Thermal gradations are discriminated by at least three different types of sensory receptors - the cold receptors. The warmth receptors & pain receptors. The pain receptors are stimulated only by extreme degree of heat and cold & therefore are responsible along with the cold & warmth receptors for "freezing cold' & burning hot' sensation. The average person first being to perceive pain when the skin is heated above 45°C. This is also the temperature at which the tissues being to be damaged by heat. The tissues are even
fully completely destroyed if the temp. Remains above this level indefinitely.

3] Chemical Causes:
Bradykinin, serotonin, histamine, potassium ions, acids, acetylcholine, proteolytic enzymes, prostaglandin, prostaglandin E-2, lactic acid; these are some chemical substances which are responsible for this type of pain. Out of which, Bradykinin is most painful chemical substance & responsible for causing the tissue damage type of pain. Also the intensity of the pain felt correlates with the local increase in potassium ion concentration is well. The injection of potassium chloride is particularly very painful.

In inflammation, chemical mediators cause pain. Histamine causes intense itching, serotonin & Bradykinin cause a burning pain. Prostaglandin's, especially prostaglandin E-2, both cause pain & potentate the ability of histamines & kinins to cause pain. Hypertonic & hypotonic solutions given parenterally cause pain. Proteolytic enzymes can directly
attack the nerve endings & excite pain by making their membrane more permeable to ions (As in peptic ulcers).

In ischemia of tissue, accumulation of large amount of lactic acid in that tissue formed as a consequence of the anaerobic metabolism; causes pain. However it is also possible that after chemical agents, such as bradykinin, proteolytic enzymes, & so form are formed in the tissue because of cell damage.

Thus pain produced by tissue damaging as described above is receipted by sensory receptors. There are basically five different types of sensory receptors as follows:-

I] **Mechano receptors**: Which detect mechanical deformation of the receptors or of the cells adjacent to these receptors.

II] **Thermo receptors**: Which detect changes in temp. Some receptors detecting cold & other warmth.

III] **Nociceptors (pain receptors)**: Which detect damage in the tissue whether physical damage or chemical damage.

IV] **Electromagnetic receptors**: Which detect light on the retina of the eye.
V) **Chemo receptors**: Which detect test in the mouth, smell in the nose, Oxygen level in the arterial blood, Osmolality of the blood fluids, CO₂ concentration & perhaps other factors that make up the chemistry of the body.

Thus pain receptors in the skin are almost nerve stimulated by usual touch or pressure stimuli but do become highly active the moment tactile stimuli become severe enough to damage the tissue.

These pain receptors are wide spread in the superficial layer of the skin & also in certain internal tissue, such as the periosteum, the arterial walls, the joint surfaces & the flax & the tentorium of the cranial vault. Most of the other deep tissues are not extensively supplied with nerve endings but are weakly supplied. Any widespread tissue damage can still summate to cause the slow – chronic - aching type of pain in deep area.

Generally fast pain is elicited by the mechanical & thermal type of receptors whereas slow pain can be elicited by all 3 types.
The free nerve endings who transmit the pain signals utilize two separate pathways for transmitting pain signals into the central nervous system. These two pathways correspond to the two different types of pains. A fast sharp pain pathway & a slow chronic pain pathway. The fast sharp pain signals are transmitted in the peripheral nerves to the spinal cord by small type A\(\delta\) fibers at velocities of in between 6 & 30 m/sec. While slow chronic type of pain signals are transmitted by type C fibers of velocities in between 0.5 to 2m/sec. If type A\(\delta\) fibers are blocked without blocking the C fibers by moderate compression of the nerve trunk; the fast sharp pain disappears. Voiceovers if type C fibers are blocked without blocking the A\(\delta\) fibers by low concentration of local anesthetic, the slow chronic aching type of pain disappears.

Due to this double system of pain innervation, a sudden onset of painful stimulus gives double pain sensation; a first sharp pain followed a second or later by a slow burning pain. The sharp pain apprises the person very rapidly of damaging
influence & therefore plays an important role in making the individual to react immediately to remove away from that stimulus; while slow-burning sensation tends to become more & more painful over a period of time. This sensation eventually gives one the intolerable suffering of long continued pain.

On entering the spinal cord from the dorsal spinal roots, the pain fibers ascend as descend one to three segments in the tract of Lissauer. That lies immediately posterior to the dorsal horn of the cord gray matter. Then they terminate into neurons in the dorsal horns. Here also there are two systems for proceeding pain signals on their way to the brain. On entering the spinal cord, the pain signals take two different path ways to the brain.

1] Neospinothalamic tract &
2] Paleospinothalamic tract.

i) The Neospinothalamic Tract (for fast pain)

The fast type Aδ pain fibers transmit mainly mechanical & thermal pains. They terminate mainly in lamina marginalis of
the dorsal horns & there excite second order neurons of the Neospinothalamic tract. These give rise to long fibers that cross immediately to the opposite side of the cord through the anterior commisure & the pass upward to the brain in the anteriolateral columns.

A few fibers of Neospinothalamic tract terminate in the reticular areas of the brain stem; but most pass all the way to the thalamus, terminating in the ventrobasal complex. Few fibers also terminate in the posteriors nuclear group of the thalamus. From these areas the signals are transmitted to other basal areas of the brain & to the somatic sensory cortex. The fast-sharp type of pain can be localized much more exactly in the different parts of the body than slow chronic pain. Yet when tactile receptors are also stimulated; the localization can be very exact.

2] *The Paleospinothalamic Pathway*:

(for slow chronic pain)

It is much older system & transmits pain mainly carried in the peripheral slow suffering type C pain fibers, though it
does also transmit some transmit signals from type Aδ fibers as well. In this pathway, the peripheral fibers terminate almost entirely in lamina of the second and third of the dorsal horns, which together are called as the substantia gelatinosa. Most of the signals are then pass through one or more additional short fiber neurons within the dorsal horns themselves before entering mainly lamina fifth, also in the dorsal horn. Here the last neuron in the series gives rise to long axon, that mostly join the fibers from the fast pathway & passing through the anterior commissar to the opposite side of cord, then upward to the brain in the same anterolateral pathway. When the type ‘C’ fibers synapse in the dorsal horns of the spinal cord, they are believed to release “Substance – P” as the synaptic transmitter. Substance – P is a neuropeptide. It is slow to build up at the synapse & also slow to be destroyed. Therefore, it’s concentration at the synapse is believed to be increase for at least several seconds & perhaps much longer, after pain stimulation begins. After the pain is over, the substance- P probably persists for many more
seconds or perhaps minutes. So that there is progressive increase in the intensity of slow chronic pain & there might be persistence of this type of pain even after the painful stimulus has been removed.

The Paleospinothalamic pathway terminates very widely in the brain stem. Only 1/10 to 1/4 of the fibers pass all the way to the thalamus instead they terminate principally in one of three different areas.

The reticular nuclei of the medulla, pons, mesencephalon.
2] The ‘rectal area’ of the mesencephelon deep to the superior & inferior colliculi
3] The periaqueductal gray region surrounding the aqueduct of sylvius.

These lower regions of the brain appear to be very important in the appreciation of the suffering types of pain. From the reticular area of the brain stem, multiple short fiber neurons relay the pain signal upward into the intralaminar nuclei of the thalamus & also into certain portions of the Hypothalamus & other adjacent regions of the basal brain. Localization of pain
transmitted in the Paleospinothalamic pathway is very poor. Pain impulses entering the reticular formation, thalamus & other lowers centers can cause conscious perception of pain. Cerebral cortex plays an important role in interpreting the quality of pain, even though pain perception might be the a function of lower centers.

**Referred Pain:**

When pain is initiated in one of the visceral organs & referred to an area on the body surface or rarely to the another deep area of the body, not exactly coincident with location of the viscous producing the pain; is known as referred pain. A knowledge of these different types of referred pains is extremely important in clinical diagnosis because many visceral ailments cause no other signs except referred pain.

As shown in figure, branches of visceral pain fibers synapse in the spinal cord with some of the same second order neurons, that receive pain fibers from the skin. When, the visceral pain fibers are stimulated, pain signals from the viscera are then conducted through at least some of the same
neurons that conduct pain signals from the skin & the person has the feeling that the sensation actually originate in the skin itself.

**Visceral Pain:**

For diagnosing visceral inflammation, disease & other ailments; pain from the different viscera of the abdomen & chest is one of the few & important criteria highly localized types of damage to the viscera rarely cause severe pain. Any stimulus that causes diffuse stimulation of pain nerve endings throughout a viscous causes pain that can be extremely severe. Ischemia caused by occluding the blood supply to a large area of gut stimulates many diffuse pain fibers at the same time & can result in extreme pain.

**Etiology:**

Any stimulus that excites pain nerve endings in diffuse areas of the viscera causes visceral pain. Such stimuli include ischemia of the visceral tissue; Chemical damage to the surface of the viscera spasm of the smooth muscles in a hollow
viscous, distension of a hollow viscous or stretching of the ligaments.

Essentially all the true visceral pains originating in the thoracic & abdominal cavities are transmitted through sensory nerve fibers, that in the sympathetic nerves. These fibers are small type "C" fibers & therefore can transmit only chronic aching suffering type of pain:-

**Ischemia**: Causes visceral pain. Same pathology occurs as discussed previously. i.e. formation of acidic metabolic end products like lactic acid or tissue degenerative products such as bradykinin, proteolytic enzymes or others that stimulate the pain nerve endings as substance ‘P’.

**Chemical Stimuli** – Sometimes, damaging substances leak from G.I. tract into the peritoneal cavity. As in ruptures of gastric or duodenal ulcers or rarely from ulcerative colitis (as a complication of typhoid fever); proteolytic acidic juice or other substances often leak. These substances cause widespread digestion & damage of the visceral peritoneum.
thus stimulating extremely broad areas of pain fibers; the pain is usually extremely severe.

**Spasm of the Hollow viscous:**

Spasm of the gut, the gall bladder, a bile duct, the ureter or any other hollow viscous can cause pain possibly by mechanical stimulation of the pain endings. Or pain may be due to diminished blood flow to the muscle combined with increased metabolic needs to that muscle for nutrients. Thus relative ischemia could develop which causes severe pain. Often, pain from a spastic viscous occurs in the form of cramps. (*Udveshtana*). The pain increasing to a high degree of severity & then subsiding. This process continuing rhythmically once every few minutes. The rhythmic cycles result from any rhythmic contraction of smooth muscles. For instance, each time a peristaltic wave travels along an overly excitable spastic gut, a cramp occurs [*Vichchhina Shool*]. This type of pain frequently occurs in gastroenteritis, constipation, menstruation, parturition, gall bladder diseases or urethral obstruction.
**Over distension of Hollow Viscus:**

Extreme over-filling of a hollow viscus results in pain, presumably because of over stretch of the tissue themselves. However over distension can also collapse the blood vessels that encircle the viscus or that pass into the walls, thus perhaps promoting ischemic pain.

A few visceral areas are almost entirely insensitive to pain of any type. These include the parenchyma of the liver and the alveoli of the lungs. Yet the liver capsule is extremely sensitive to both direct trauma & stretch. The bile ducts are also sensitive to pain. In the lungs, though the alveoli are insensitive; the bronchi & the parietal pleura-both are very sensitive to pain.

Pain sensations are also transmitted from the viscera, through non-visceral nerve fibers, that innervate the parietal peritoneum, pleura or pericardium. When any disease affects a viscus, it often spreads to the parietal wall of the visceral cavity. As a skin, this wall is supplied with extensive innervation from the spinal nerve, not from the sympathetic.
nerve. Therefore, pain from the parietal wall overlying the
viscus is frequently very sharp. The brain does not know from
first hand experience that the diff. organs exist & therefore any
pain that originates internally can be localized only generally.
Secondly as described above in referred pain; sensations from
visceral organs are transmitted through 2 separate pathways to
the C.N.S.- true visceral pathway & parietal pathway. The true
visceral pain is transmitted via sensory fibers of the autonomic
nervous system (both sympathetic & parasympathetic) & the
sensations are referred to surface area of the body often far
from the painful organ. But for the parietal peritoneum, pleura
& pericardium, parietal sensations are conducted directly into
the local spinal nerve & that is why they are usually localized
directly over the painful area.

When visceral pain is referred to the surface of the body
the person generally localizes it in the dermatomal segments
from which the visceral organ originated in the embryo e.g.
heart is originated in the neck & upper thorax. So that visceral
pain fibers of the heart pass into the cord between segments.
C-3 & C-5 & hence pain from heart is referred to the sides of the neck, over the shoulder, over the pectoral muscles, down the arm & into the substernal area of the chest. As left side of the heart is much more frequently involved in coronary diseases, this pain is left sided. Thus the site of the referred pain from different visceral organs are shown in the figure. Pain from the viscera is frequently localized, to two surface areas of the body at the same time because of the dual transmission of pain through the referred visceral pathway & the direct parietal pathway.

Headache (Intracranial) :- The brain & greater part of the meanings have no pain receptors & can not cause pain. Only at the base of the skull are the dura & the cranial nerves sensitive to pain. Headache is most often due to dilatation or stretching of the Intracranial arteries & veins, tugging of the venous sinuses, damaging the tentorium or stretching the dura at the base of the brain. A very sensitive structure is the middle meningeal artery. Inflammation of the extracranial arteries cause headache in giant cell arteries. Headache of
meningitis is most severe in which there is inflammation of all meanings, including the sensitive area of the dura & around the venous sinus.

Brain is floated in CSF. If CSF is withdrawn more that of 20ml, changes the floatation & weight of the brain stretches & distorts the various dural surface and causes intense Intracranial headache.

Migraine is a special type of headache, which might be a result from abnormal vascular phenomena, which is not known exactly. It is mostly associated with prodromal sensations like nausea, hallucinations, visual aura, loss of vision etc. Prolonged emotion or tension may cause reflex vasospasm of some arteries of head / brain & results ischemia & results migraine.

As alcohol is toxic to tissue; directly irritates the meninges & causes Intracranial alcoholic pain.

In constipation, absorbed toxic products may cause Intracranial headache.
**Extracranial Type of Headache:**

Persistent spasm of the muscles of the neck caused by physical or emotional stress causes a tension headache. Infection or other irritative processes in widespread area of the nasal structures as frontal sinusitis, causes headache that is referred behind the eyes or to the frontal surface.

Refractive errors may cause extensive contractions of the ciliary muscles in an attempt to gain clear vision & results into retro-orbital headache.

Sometimes headache seems to be psychogenic without physical cause.
It means pain control system in the brain & spinal cord. It is capability of the brain itself to control the degree of input of pain signals to the nervous system. It varies person to person (It may be correlated with type of Satvapraakruti in Ayurveda). It consists of 3 major components as follows:

1] The periaqueductal gray area: -

Of the mesencephalon & upper pons surrounding the aqueduct of the sylvius. Neurons from this area send their signals to the 'raphe magnus nucleus'.

11] The raphe magnus nucleus: -

Thick midline nucleus located in the lower pons and upper medulla. From here, the signals are transmitted down the dorsolateral columns, in the spinal cord to a pain inhibitory complex.
Pain inhibitory complex:

It is located in the dorsal horns of the spinal cord. At this point the analgesia signals can block the pain before it is relayed on to the brain.

Electrical stimulation either in the periaqueductal gray area or in the raphe of magnus nucleus can almost completely suppress many very strong pain signals entering by the way of the dorsal spinal roots. Also stimulation's of areas at still higher level of the brain that in turn excite the periaqueductal gray, especially the periventricular nuclei in the hypothalamus laying adjacent to the third ventricle can suppress pain. Medial forebrain bundle can suppress pain upto some extent.

The transmitter substances like enkephalin & serotonin are involved in analgesia system. Many nerve fibers endings, derived from periventricular nuclei & the periaqueductal gray areas and in the raphe magnus nucleus secrete enkephalin. The fibers originating in the raphe magnus nucleus but terminating in the dorsal horns of the spinal cord, secrete serotonin at their endings. Serotonin also acts on local cord
The Brain's Opiate System

For analgesia, morphine acts at many points in the analgesia system, including the dorsal horns of the spinal cord. Morphine receptors of the analgesia system are receptors for some morphine like neurotransmitters that is naturally secreted in the brain. About a dozen such opiate like substances have been found in different points of the nervous system; but all are break down products of 3 large protein molecules:

'Proopiomelanocortin', 'Proenkephalin' and 'Prodynorphin.' More important opiate substances are - β-endorphin, met-enkephalin, leu-enkephalin & dynorphin. Out of those met-enkephalin in and leu-enkephalin are found in the proteins of analgesia system. β-endorphin is present in hypothalamus & pituitary gland. While dynorphin is present in nervous tissue. Though it is in minute quantity; it is very
important because it is an extremely powerful opiate as it has 200 times as much pain killing effect than morphine.

Thus activation of the analgesia system either by nervous signals entering the periaqueductal gray area or by many opiate like substances secreted by nervous system; can totally or almost totally suppress many pain signals entering through the peripheral nerves.

**Inhibition of Pain Transmission By Tactile Sensory Signals:**

Stimulation of large sensory fibers from the peripheral tactile receptors depresses the transmission of pain signals either from the same area of the body or even from areas sometimes located many segments away.

This results from a type of local lateral inhibition. Due to this phenomena rubbing the skin i.e. massage use of different liniments or ointments & even acupressure - acupuncture like therapies are often useful in the relief of pain.
CLASSIFICATION AND DIFFERENTIAL DIAGNOSIS OF SHOOL

Shool as a symptom in other Diseases

We may find a Shool as a symptom in various diseases or pathological conditions. These are as follows:-

Pathological Condition – Vat-Vridhi, Vat-Prakop, Vat-Prasar,
Sam-Vayu Amashayagat-Vat, Pakwashayagat-Vat, Koshthagat-Vat, Gudasthit-Vat, Samanavrita-Apan, Vyanavrita Apan,
Pittavrita-Vat, Kaphavrita-Vat, Annavrita-Vat, Malavrita-Vat,
Pittavrita-Pran. Twakgat-Vat, Mansgat-Vat, Rakatagat-Vat, Medogat-Vat, Asthigat-Vat, Majjagat-Vat, Siragat-Vat, Snayugat-Vat.

Diseases – Vataja Jwara, Sannipatik Jwara, Pittaja Jwar, Shwasanak Jwar, Vat Kaphaja jwar.


Pratishvay, Pinas, Shirahshool, Sooryavart.

Ardhavbhedak, Anantvat, Shankhak, Karnashool.

Sandhigata Vat, Amavat, Vatarkta, Vat-kantak, Kroshthuk

Shirsha, Abhyantar Firanga, Akhu-vish, Grudhrasi, Vishvach.

Avabahuk, Ansa-shijsh, Khania, Kala-khania, Pangulva.

Urustumbha, Kampavat, Pada-harsha, Manya-stamsha, Hanu-graha, Pakshghat, Dhanustambha, Apatanak, Apatantrak,

Insepak.

Paramada, Panavibhrama, Moorchha- Poorvaroop, Vataj

Moorchha, Kaphaj Moorchha, Bhrama, Vataj Prameh, Vataj

Slipad, Raktapitta- Poorvaroorp etc.

Differential Diagnosis of Shool

Udar Shool: - When patient comes with pain in abdomen i.e. Shool, it is quite difficult to decide whether it is a ‘Shool-vyadhi’ or it is a symptom belonging to any other disease or pathological condition. That’s why Charak & Vagbhata might haven’t mentioned the “Shool” as a separate disease i.e. ‘Swatantra-vyadhi’.
According to Ayurvedic point of view, 'Shool' may be differentiated as follows:

If the Shool is acute, i.e. Ashukari, then it may be Vataja, Pittaja or sannipatik. In Atisar, though the Shool is acute, the stool is watery. While in Pravahika, we find acute Shool with sticky stool with lot of mucus and defecation is painful (spasmodic-abdominal pain) and after applying lot of force (i.e. Pravahana). Pittaja Shool aggravates when stomach is empty and get relieved after eating food while Vataja Shool is Visham in nature and most of the time it is spasmodic or shifting type and starts or aggravates at any time and anywhere. Ashmarija Shool is also acute in nature but it is spasmodic and 'Tooni' type Shool. In chhardi there is Acute Shool associate of with nausea and vomiting. Shool from Chhidrodar. Baddhagudodar, Amlapitta-Upadrava – Vrana are also acute in natures and quite severe. In first two disease there is hard board like rigidity of abdominal wall. While in last one along with hard board like rigidity of abdomen, there is vomiting, even haematemesis also occur.
Some Shool are Chirakari i.e. chronic in nature. Kaphaj and Amaja Shool are chronic and associated with Udar Gaurav (heaviness in Abdomen) and Ajeerana or Chiratjeerna. Malavshtambhajanya Shool, is also chronic and associated with constipation. In Grahani or Sangrahani there is chronic Shool with irregular bowel habits i.e. sometimes there is watery or loose stool with mucus and sometimes stool is hard (eqgqcZ/na eqgqnzZoa & eyizo'Rrh) karimijanya Shool is also chronic but we may find worms or ova in the stool & associated signs & symptoms of worm infestation are there (while patches on nails, hypopigmented patches on face etc.) In Urdhvaga Amlapitta chronic Shool at Amashaya & Grahani associated with hyperacidity syndrome(Shool get relieved after vomiting). While in Adhoga Amiapitta, chronic Shool associated with burning sensation in abdomen and loose motions and speciality of this type of Shool is it get relieved after loose motions. In Parinam Shool it is chronic type & commences after 2-3 hrs of food consumption (i.e. during Ahar Parinamkal) While in Annadrava Shool all the time (i.e. before & after meal) there is Shool.
In *Udar* the *Shool* is chronic, mostly mild & associated with enlargement of abdomen with accumulation of ascetic fluid in peritoneal cavity. In *Adhman*, *Shool* is mild and associated with flatulence.
**Classification of Shool**

Though *Shool* is abnormal perception, it varies from patient to patient, from disease to disease. To get exact character of this subjective perception, it is classified into following way.

A) **Severity** : According to severity, *Shool* is classified into 3 types.
   i) *Teevra Shool* (Severe)
   ii) *Madhyam Shool* (Moderate)
   iii) *Manda Shool* (Mild)

   The criteria of severity is given in chapter VI

   Severity of *Shool* depends upon many factors. *Satva* is one of the important factors. *Prekruti, Rugna-bala, Vyadhibala, Kala, Desh, Satmya* etc. are some other factors which affect the severity of *Shool*. Generally *Shool* produced by *Pittadosh* is *Teevra* in nature while by *Kaphadosh* is *Mand* in nature.

B) **Locality** : According to locality, *Shool* is classified into 2 types
   i) *Ekanga* (Localized) ii) *Sarvanga* (Generalized)

i) *Ekanga Shool* : Means *Shool* related to one part of the body, which can be pointed out accurately or grossly. e.g. Cardiac pain, single joint pain, headache, toothache, chest pain, pain in abdomen, traumatic pain, *Kroshthukshirsh* etc.

ii) *Sarvanga Shool* : Means generalized pain or pain all over the body which may not be pointed out exactly e.g. *Angamarda, Angabharga, Angagraha, Anga sada*, Multiple joint pain, *Pindikodveshtan*, body ache in *Jwara, Vatakaphaja Jwar, Pandu, Sama Vayu* etc.
c) Onset: According to onset, Shool is classified into 2 types.
   i) Ashukari (Acute)
   ii) Chirakari (Chronic)

i) Ashukari: Means complete the Samprapti in short time. Pittaja, Vataja & Sannipatik Shool are Ashukari. Other examples of Ashukari shool are - Atisar, Pravahika, Chhardi, Amashaya Vran, Antra Vran (Upadrava of Amlapitta), Renal Colic, Billiary Colic, Unduk Puchha Shoth, Udaravaran Shoth etc.

ii) Chirekari: Means takes long time to complete the samprapti. Kaphaja & Amaja shool, Anah, Ajeerna, Malavashtambha, Grahani Urakshata, Amavata, Sandhigata vata peenas, jeerna, Pratishyay etc.

D) Continuity: According to continuity Shool is classified into 2 types.
   i) Satat Shool (continuous)
   ii) Vichchhinna Shool (intermittent)

i) Satat Shool: It means non interrupted - continuous Shool. We find it in many diseases like Ajeerna, Sandhigata Vat, Angamarda, Angasada, Peenas, Jeerna Pratishyay, Rajayakshma etc.

ii) Vichchhinna Shool: Means interrupted or intermittent type of Shool. Spasmodic type of Shool is of this type. It happens due to Visham Guna of Vata Dosh. Tooni, Ashmarij Shool, billiary colic, flatulence, Ardhababhedak, Pindikodveshtan, these are some examples of Vichchhinna Shool.

E) Site: As we have already seen that whole body (except hairs, tips of nails etc.) is the site i.e. Adhishthan of Vedana or Shool. For the study purpose of this research project five main sites of the Shool are taken into consideration viz. Udar, Urah, Shirah, Sandhi &
**Sarvanga.** And *Shool* from those sites; irrespective of diseases concerned, was classified as

1) *Udar Shool*
2) *Urah Shool*
3) *Shirah Shool*
4) *Sandhi Shool*
5) *Sarvanga Shool*

accordingly. Concerned diseases and diseased conditions will be discussed later.
MODERN ASPECT OF DIFFERENTIAL DIAGNOSIS OF SHool (Pain)

As we have seen already Pain is the most distressing features of most of the diseases. According to the site commonly pain may be classified into five sub-groups as follows:-

i) Abdominal Pain (*Udar Shool*)

ii) Chest Pain (*Urah Shool*)

iii) Headache (*Shirah Shool*)

iv) Muscular pain (*Sarvang Shool*)

v) Joint pain (*Sandhi Shool*)

Now we are going to discuss the Differential diagnosis of each type of Pain.
## Pain in abdomen

### Acute abdominal pain

<table>
<thead>
<tr>
<th>Colicky</th>
<th>Non colicky</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Renal colic</td>
<td>1. Acute pancreatitis</td>
</tr>
<tr>
<td>2. Billiary colic</td>
<td>2. Leaking peptic ulcer</td>
</tr>
<tr>
<td>3. Acute appendicitis</td>
<td>3. Ectopic pregnancy</td>
</tr>
<tr>
<td>4. Acute diverticulitis</td>
<td>4. Peritonitis</td>
</tr>
<tr>
<td>5. Acute intestinal obstruction</td>
<td></td>
</tr>
</tbody>
</table>

### Chronic abdominal pain

<table>
<thead>
<tr>
<th>1) Peptic ulcer</th>
</tr>
</thead>
<tbody>
<tr>
<td>2) Hiatus hernia &amp; reflux oesophagitis</td>
</tr>
<tr>
<td>3) Worms</td>
</tr>
<tr>
<td>4) Chr. Amoebiasis</td>
</tr>
<tr>
<td>5) Chr. Cholecystitis</td>
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<tr>
<td>6) Amoebic hepatitis with abscess</td>
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<tr>
<td>7) Tubercular abdomen</td>
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<tr>
<td>8) Subacute or chr. Intestinal obstruction</td>
</tr>
<tr>
<td>9) Crohn’s disease</td>
</tr>
<tr>
<td>10) Chr. Diverticulitis</td>
</tr>
</tbody>
</table>
PAIN IN ABDOMEN

I) Acute Abdominal Pain:

A) Acute Colicky Pain:

1) Renal (Ureteric) Colic: If the pain is located in the lateral abdomen & back, carefully ask for urinary symptoms of frequency, difficulty of micturation & haematuria; look for renal angle tenderness, palpate the kidney and see if it is palpably enlarged. Examine urine for any microscopic haematuria & other changes.

2) Biliary Colic: If the pain is located in the right hypochondrium, palpate the liver & gall bladder region & try to elicit Murphy's sign i.e. acute tenderness & arresting of the breath on deep inspiration, while the palpating finger is below the gall bladder & touches the liver during inspiration. Look also jaundice caused by obstruction to the flow of bile by a biliary stone.

3) Acute appendicitis: Pain starts actually with vomiting & is first located in the umbilical region. There are general signs of inflammation later the pain localized itself in the right iliac fossa. There is tenderness at the Mc. Burney's point, rebound tenderness muscular rigidity, local hypeaesthesia & any tender mass. Colicky pain is felt around the umbilicus, wait for further signs to develop & do not be in a hurry to administer purgatives. Enema is safer to expel any hard faecal masses.
(which could also cause intesinal colic) & this incidentally will also test to absolute constipation.

4) Acute diverticulitis :- Pain, local tenderness, muscular rigidity etc. signs like those of appendicitis but in the left iliac fossa.

5) Acute Intestinal Obstruction: - Severe colicky pain vaguely in the center of the abdomen along with vomiting. Absolute constipation, even flatus may not be passed though intestine. Proximal to the obstruction are full of gas, enema may produce no result.

Visible peristalsis of the gut, if the abdominal wall is not too thick with fat. In plain –X-ray of abdomen in standing position, we find multiple fluid levels.

The pain may become localized anywhere in the abdomen becomes more constant & non-colicky & local tenderness with muscle rigidity appears; these sign, signify that peritoneum has become involved.

Obstruction may be due to strangulated hernia, that's why examination of Hernial site is necessary.

If there is H/O previous abdominal operations, examine the scar. It may be the cause of obstructing of adhesions.

In children if there is blood in stool associated with other signs & symptoms of intestinal obstruction, there may be sausage shaped mass of intussusception.
B) Acute Non-Colicky Pain:

1. Acute Pancreatitis: - Severe pain in the epigastric region, the pain tends to radiate to the left side & the back. The patient is severely ill and vomiting & some fever may be present. History of a similar episode in the past may be obtained. Physical examination may reveal only local tenderness in the epigastrium, serum amylase may be raised.

2. Ectopic Pregnancy - A pregnancy outside the uterus, usually in fallopian tube, bursts when it cannot be contained in the occurring in a woman of reproductive age who has missed few periods & who has signs of internal hemorrhage (rapidly developing anemia & pallor increasing pulse rate & falling blood pressure with signs of shock) is likely to be a case of Ectopic pregnancy & needs immediate surgical intervention.

3. Leaking peptic ulcer - May also cause sudden severe pain in the Epigastrium, local tenderness and a muscle rigidity due to localized peritonitis may be present which may become generalized.

4. Peritonitis - Generalized severe pain & tenderness all over the abdomen with fever & board like rigidity of the abdominal muscles is due to the very serious condition of peritonitis. The patient is very toxemic. Some history suggestive of the causative conditions e.g. appendicitis, intestinal obstruction traumatic rupture of the intestine, rupture of typhoid ulcer etc. must be sought.
11) **Chronic Abdominal Pain**

1. **Peptic Ulcer**

   Epigastric pain typically related to food. It occurs when the stomach is empty & is relieved by eating food; especially milk. The patient can point exactly to a spot in the epigastrium, where he feels the pain (pointing test).

2. **Hiatus Hernia & Reflux Oesophagitis**

   Pain comes on meals. If the patient stoops forward or lies flat, so that appears at mid-night. It is relieved if the pt. sleeps in recumbent position. In reflux-Oesophagitis epithelial lining of the esophagus cannot withstand the presence of acid gastric juice. In same patients gastro esophageal reflux occurs while stooping of lying down in bed; causing peptic Oesophagitis. There is sub-sternal pain may be burning or even similar to angina pectoris, related to stooping on lying flat, but not to usual exertion E.C.G, normal both, at rest & after exercise.

   While hiatus hernia lead to reflux Oesophagitis (which can also occur independently). Symptoms are same as above. E.C.G. normal. Differential diagnosis is done by barium meal radiological studies of stomach in Trendelenburg position.

3. **Worms**

   Chronic type of pain anywhere in the abdomen, especially in Epigastric region, is associated with hypo pigmented patches on skin, especially on face & whitish dots on nails. Itching around the anal region may be there (in hook worm infestation). The diagnosis should be confirmed by microscopic stool examination.
4) **Chronic Amoebiasis**

Much vague discomfort at times even colicky pain & flatulence associated with loose motion with lot of mucus & pain in abdomen, conform the diagnosis by microscopic stool examination for amoebic cyst.

5) **Chronic Cholecystitis**

Flatulence & chronic pain in the hypo-chondrium with H/O acute attack of pain. Murphy’s sign is positive.

6) **Amoebic Hepatitis & Abscess**

Pain in the right hypo-chondrium along with fever, at first low grade & later hectic, liver palpably enlarged & very tender in palpation & so are the right lower intercostal spaces. These may be the signs of complications at the base of the right lung, i.e. sings of fluids or some crepitations. Thus H/O chronic Amoebiasis. Amoebic hepatitis & abscess is an important cause of prolonged pyrexia in India. When it is fully developed the diagnosis is not difficult, as the enlarged tender liver is an indication with much tenderness in the right lower intercostal spaces. However early on the disease or when the liver is enlarged only upwards, there may be difficulties of diagnosis especially if the cause is not thought of past H/O amoebiasis or dysentery, right lower intercostal tenderness along with some sub-costal tenderness on the same side may provide a clue. In every suspected case screening of the chest to see raising & restriction of movement of the right diaphragm should be done along with repeated stool examination to find amoeba or its
cysts. Leucocytosis may be present, especially if secondary
infection has supervened.

Quick response to emotive is used as a therapeutic test in
doubtful cases.

Low grade fever becomes high if septic infection
supervenes. In this case mild diarrhoea alternating with
constipation & flatulent dyspepsia, the symptoms may be present
for years before the liver becomes involved.

The abscess may burst into the right plural cavity or the
right lung, then pt. brings up large quantity of chocolate colored
anchovy sauce sputum, plural rub (sign of pleurasy) & later
signs of fluid i.e. stony dullness, absence of breath sounds and
trachea & apex beat shifted to the opposite side, coarse
crepitations at the lung base may also be audible.

7) **Tubercular Abdomen**

Chronic generalized abdominal pain or pain more or less
confined to the right iliac fossa with fever. On palpation, there
is doughy feel of the abdomen. Masses of enlarged the
mesenteric glands or a mass in the right iliac fossa due to matted
loops of the gut. If there is tubercular peritonitis, there may be
shifting dullness of fluid in the peritoneal cavity. There may be
tubercular lesion in other organs, especially the lungs.

8) **Subacute or Chronic Intestinal Obstruction.**

Usually caused by tuberculosis. There are recurrent
episodes of pain, vomiting & constipation. On palpation
abdominal mass of matted intestines may be palpable in the right
iliac fossa.
9) **Crohn’s Disease** :-

Features are quite similar with tuberculosis of abdomen & signs of the obstruction may also appear. Clinically it is quite difficult to differentiate from each other.

10) **Chronic Diverticulitis** :-

There may be chronic pain in the left iliac fossa. It is best diagnosed by a barium enema. In acute exacerbation the pain may be sever.
CHEST PAIN  DIFFERENTIAL DIAGNOSIS.

Any chest pain may be classified into 2 groups. - i.e.
i) Non- pericardial & ii) Pre-cordial i.e. related to heart.

1) **Non-pericardial chest pain**

It is not related to heart. As the lungs are not supplied with sensory nerve endings; a disease of lungs is painless. While pleurae & chest wall are highly supplied with sensory nerve endings, abnormalities of them produce chest pain. Especially when pleura gets involved in inflammatory conditions the pain is severe; as the two inflamed surfaces rub against each other with each act of inspiration.

Following are the conditions to be considered during chest pain (non-pericardial)

A) **Related to chest wall** - 1) Rib fracture 2) Deposits in the rib 3) Pain refered from the vertebral column 4) Myalgia of chest muscles.

B) **Related to pleura** : 1) Pleurisy 2) Pneumophorax 3) Pleural complication of amoebic liver abscess.

A) **Chest Pain Related To Chest Wall**:

1) **Rib Fracture** - Most commonly due to external trauma, rarely in old age due to severe coughing. Chest pain with painful breathing. Local tenderness with crepitation sound during slight pressure on fractured rib. Pressing the thoracic cage at a distance on the opposite side produces pain at the site of
fracture. X-ray chest P/A is useful to confirm the diagnosis.
Broken edges other rib may cause Pneumothorax.

2) **Deposits In The Rib.** — The causative factor is myelomatosi
go secondary metastasis is of carcinoma. There is local
tenderness over the affected ribs. Other symptom & emaciation is
due to primary disease the diagnosis is confirmed by plain X-ray
chest. In which we may the punched out areas in myelomatosis.
While in cancer deposits there are irregularly eaten up areas.

3) **Pain Refered From The Vertebral Column.**

T.B. of the spine is the commonest cause in India while
other causes are osteo-arthritis, carcinoma deposits with chest pain, local tenderness of the spine is there. Signs of paraplegia may occur due to pressure on the spinal cord.

4) **Myalgia Of Chest Muscles.**

In which there is local tenderness with severe pain, even though there is minor inflammation of chest muscles. Severe pain during movement when affected muscle takes part. Movements of the trunk from side to side or bending are painful. If inter-costal muscles are involved, then coughing & deep breathing are also painful. But there are no signs of pleural rub, fluid or any abnormality in the lungs.

**C) Chest Pain Related To Pleure:**

1) **Pleurisy:** When septic focus & inflammation reaches the visceral
pleura from underlying lung; pleurisy occurs. The common causes are pulmonary Koch's, pneumonitis, bronchiectasis, lung abscess, Ca.-Lungs etc. Initial stage is dry pleurisy i.e. without
fluid, in which include there is rubbing of roughened surfaces of two layers of the pleura; produces excruciating pain with each of inspiration, along with pleural rub. There is no or slight local tenderness. While in later stage, when there is formation of fluid in pleural cavity; chest pain becomes less or disappears.

2) **Pneumothorax:** Presence of air in the pleural cavity, due to tear in the visceral pleura. Commonest cause is trauma, by penetrating any pointed of object or by sharp margins of a fractured rib tearing the visceral pleura. Pulmonary Koch’s is another commonest cause, in which tubercular infection enters the pleural cavity. It is usually accompanied by an effusion (hydropneumothorax). Rupture of emphysematous bulla & congenitally weak spot in the lungs & intermittently positive pressure ventilation are some other causes.

The signs & symptoms are as follows: Sudden onset of dyspnoea, shifting of apex beat & trachea towards opposite side; affected side not moving with respiration, percussion note tympanic, breath sounds markedly distant or absent, sudden & severe chest pain.

3) **Pleural Complications Of Amoebic Liver Abscess:** Past H/O amoebic dysentery. Liver enlarged & very tender. Tenderness in right lower intercostal spaces; low grade fever, becomes high if septic infection supervens. In chronic cases mild diarrhoea alternating with constipation, flatulence, dyspepsia. These symptoms may be present for the years before the liver becomes involved. The abscess may burst into the right
pleural cavity or the right lung & produces large quantity of chocolate colored sputum. With signs of pleurisy like pleural rub & later signs of fluid, i.e. stony dullness, absent breath sounds & trachea & apex beat shifted to the opposite side. Coarse crepitations at the right base may be there. 

Apart from the points discussed above; pain pericardium i.e. in the sub- sternal region, always has special significance; even though it may be mild. It may be frequently related to the heart & less commonly to the oesophagus or hiatus hernia. Though the left sided chest pain is usually not related to the heart; it should never be dismissed lightly, & serious diseases of the heart & lungs excluded before it is labeled as simple myalgia. The causes of such type of pain may be classified into following there groups.

A) Non- pericardial pain  B) Cordial pain C) Neurotic pains.

A) Non-pericardial Pain: 

1) Reflux oesophagitis : In which there is sub-ternal pain, may be burning or even similar to angina pectoris; related to stooping or lying flat, but not to usual exertion, E.C.G. is normal, both at rest & after exercise. The cause of this type of pain is, in some persons gastro-oesophageal reflux occurs while stooping or lying down in bed causing peptic Oesophagitis. Because epithelial lining of the oesophagus cannot with stand the presence of acid gastric juice & produces Oesophagitis.

2) Hiatus Hermia: Leads to reflux Oesophagitis & produces
same symptoms as described above. E.C.G. is normal; both at rest & after exercise. Diagnosis confirmed by barium meal X-ray studies of the stomach in Trendelenburg position.

3) Myalgia: As elsewhere in the chest; it can occur in this region also. Pain in the left side of the chest is far more often myalgic than that of cardiac origin. E.C.G. is normal.

4) All conditions discussed previously can occur in the left side of the chest also with possible exception of complications of amoebic liver abscess. The amoebic liver abscess usually occurs in the right lobe of the liver & rarely in the left lobe; hence left pleural or pericardial complications are extremely rare.

B) Cordial Pains:

1) Ischemic heart disease (I.H.D.) Caused by an atheromatous plaque in a coronary artery, blocking the flow of blood to the cardiac muscles.

a) Angina Pectoris: It is a cry of the heart muscle for more oxygen due to partial block in a coronary artery. With a partial block the blood supply to the heart muscle may be sufficient at rest but not on exertion, constricting or oppressing type of pain in the pericardium. Pain may radiate to the left arm, both arms, to the neck, back or at epigastrium. Pain lasts not more than 10-15 minutes. Apprehension Transient rise of blood pressure. Bed rest or sublingual use of nitroglycerine (sorbitrate) relieves the
pain within few minutes. If pain is not relieved, think for a more serious cause like myocardial infarction.

b) **Myocardial Infarction**: If the block in the coronary artery becomes complete as in thrombosis occurring on the atheromatous plaque; myocardial infarction (death of the cardiac muscle) results. Character & distribution of pain is similar to angina pectoris but it is much more prolonged & usually more severe. Pain may lasts for hours & recure for days. After a transient rise B.P. falls due to myocardial injury; if fall is precipitate, condition of shock supervenes. Other symptoms are cold sweating, apprehension, restlessness, tachycardia. Arrhythmia's may occur, supra-ventricular & ventricular extrasystol make the pulse irregular; ventricular extrasystoles may herd. Ventricular tachycardia & fibrillation & death. While atrial fibrillation is not common after myocardial infarction. If conduction tissue is involved in the infarct; conduction defects like bundle branch block, partial or complete heart block may occur causing depression in heart beats or slow heart rate of about 40 per minute. Clinical examination of the heart may reveal no abnormality except rather soft heart sound, or there
may be triple rhythm. If papillary muscles are involved in infarction, then there may be mitral systolic murmur of regurgitation. Patient may go into left-sided heart failure: pulmonary edema with severe dyspnoea. Diagnosis should be confirmed by E.C.G. & S.G.O.T. values.

2) **Pericarditis**: Common causes are tuberculosis, rheumatic fever, myocardial infarction uremia & virus infections. There may be dull pain or no pain at all or only a sense of oppression, fever, pericardial rub are other sign. If the fluid is there the signs of fluid like dullness, shifting dullness & muffled cardiac sound appear.

3) **Pulmonary Embolism**: It causes pulmonary infarction & produces symptoms similar to myocardial infarction i.e. sudden pericardial pain, dyspnoea, restlessness, fall in B.P., tachycardia, raised. J.V.P. Later that haemoptysis & pleural rub is there. E.C.G. may show of P-pulmonale, but no infarction pattern.

4) **Dissecting Aneurysm Of The Aorta**: Rarely occur. Through a damaged portion of the aortic wall (atheroma, cystic necrosis) blood enters & splits the aortic wall producing a double barreled
Sudden agonizing pericardial pain shooting to the back. Unequal or absent radial or femoral pulse. Prognosis bad as there may be rapid death, due to rupture of the aorta.

c) **Neurotic Pain**: After careful examining with the use of E.C.G. & x-ray etc. & excluding all the serious causes of chest pain—especially left sided; still there are some cases—especially young people complaining left sided chest pain. In such cases many times pain has no organic basis but has its origin in the mind. The pain is simply psychological & fear of the heart disease & ultimately of the death is a main cause behind that pain. Reassurance & attention to the psychological faction is essential in such cases.
**Differential Diagnosis Of Muscle & Joint Pains**

These pains occur in the following conditions:

1) **Muscle Pains**:
   
   a) **Fevers**
   
   b) **Muscular rheumatism, myalgia & fibrosis**
   
   c) **Electrolyte disturbances**
   
   d) **Vitamin deficiencies**
   
   e) **Thyrotoxicosis**
   
   f) **Peripheral neuritis**
   
   g) **Subacute combined degeneration of the cord.**
   
   h) **Dermatomyositis**

a) **Fevers**: Commonest cause of bodyache. In viral fever, there is severe back ache. Severe pain in calf muscles (*Pindikodveshtan*) is common in U.T.I.; in which fever may be mild. Severe pain with deep tenderness & swelling are the signs of deep venous thrombosis.

b) **Muscular Rheumatism**: Aches & pains in the muscles are common, while all the investigations for collagen disease are normal. Myalgias & fibrositis belong to the same category. It is
tenderness & movements involving the affected muscles are painful. On the other hand there is no pleural rub and unless myalgia of intercostal muscle is present there is no relationship of pain with respiratory movements. The pain is not related to physical effort; with which I.H.D. pain (angina pectoris) is associated, exercise tolerance is good & E.C.G. is normal.

C) **Electrolyte Disturbance**: It may cause general weakness and pain. Excessive oral diuretics may lead to much potassium loss & creates muscular pains. In summer or in hot and crowded surrounding perspiration causes much loss of Na & Cl through sweat which results severe cramps in legs & get relieved by administration of common salt or O.R.S.

d) **Vitamin Deficiencies**: In vit. B.- Complex deficiency, there are cramps in legs with other signs like glossitis, stomatitis, angular stomatitis etc. Especially, Pyridoxine deficiency may produce severe cramps in legs.

e) **Thyrotoxicosis**: Increased catabolic processes cause muscle
wasting & pains, in which B.M.R. & P.B.I. are high & serum cholesterol low, radio-active iodine uptake is high. Goiter may or may not be present. Wt. loss is there. Other associated signs & symptoms are insomnia, tachycardia, palpitation & fine trimmers in hands.

f) **Peripheral Neuritis**: Generally occurs in diabetes mellitus. It causes deep muscle tenderness & pains. There is loss of deep reflexes with peripheral sensory loss & paraesthesias. Romberg’s sigh positive.

g) **Subacute Combined Degeneration Of The Cord.**: Signs and symptoms are similar to peripheral neuritis. Positive Bobninski response at pyramidal region. Severe pernicious anaemia is there with histamine-fast achlorhydria.

h) **Dermatomyositis**: It is rare condition occurs mostly in children, in which there is erythematos skin eruptions with swelling, weakness & pains in the proximal muscles of the limbs. It almost tends to contractures & deformities of limbs. Muscle biopsy may help in diagnosis.
Joint Pains

These pains occur in following conditions as:

1. Rheumatic fever
2. Rheumatoid arthritis
3. Psoriatic arthritis
4. Gonococcal arthritis
5. Ankylosing spondylitis
6. Acute septic arthritis
7. Tubercular arthritis
8. Gout
9. Osteo arthritis
10. Lumbago – sciatica syndrome

1) Rheumatic Fever: Usually low grade fever with shifting pains from joint to joint (Sanchari Vedana). Heart involvement, usually with tachycardia (out of proportion of fever). Sometimes pericardial rub is there or shifting dullness, cardiac murmurs at the apex due to valvular lesion (mitral stenosis) especially in later stage.
2) **Rheumatoid Arthritis**: it is chronic disease involving peripheral joints. Signs & symptoms are swelling, heat, pain, restricted movements at first due to pain & later to ankylosis of the joints. If wrist joint it in involved there is ulnar deviation with swelling. In sever cases almost all the joints of the extremities may be involved & there is muscle wasting around the affected joints. Laboratory tests for collagen diseases e.g. R.A. factor positive & high E.S.R. (especially in active disease).

3) **Psoriatic Arthritis**: Signs & symptoms are same as in rheumatoid arthritis, Polly arthritis with typical skin lesions - a red patches with thick layers of silvery scales, which can be scraped off, leaving a bleeding surface. These lesions occur anywhere on the body but especially on the knees & elbows.

4) **Gonococcal Arthritis**: Acute arthritis with fever. H/O acute gonococcal urethritis 2-3 weeks before arthritis. V.D.R.L. - positive. Since there are effective antibiotics against the primary stage i.e. gonococcal urethritis; this has become rare.

5) **Ankylosing Spondylitis**: Involvement of vertebral column. At first there is pain along the back & neck. Then there is gradually increasing stiffness of the back & neck with restricted
movements. In later stage when there is complete ankylosis of the vertebral joints there is immobilized spine which is called as bamboo spine. It is similar to Katigat Vat & Manyagata Vat.

6) **Acute Septic Arthritis**: In which there is acute inflammation of single big joint – usually knee joint with high fever & leucocytosis. It resembles to Kroshthukshirsh.

7) **Tuberculous Arthritis**: As in acute septic arthritis, here also inflammation of single big joint but the onset is slow. There is low grade & evening rise fever with raised E.S.R., Mantoux test positive. There is tubercular focus elsewhere here in the body like lungs, abdomen, bones or glands & family H/O tuberculosis.

8) **Gout**: Acute inflammation of single small joint – generally inter phalangeal joint with redness & tenderness. Tophi are there especially on the ear lobes. Serum uric acid raised above 6 mg%.

9) **Osteoarthritis**: Occurs in old age. Usually weight bearing joint like knees, hip or ankle are involved. There is pain & crepitus on movements of the joints. There are no signs of active inflammation like heat, redness or swelling. It is similar to Sandhigat Vat.
10) **Lumbago - Sciatica Syndrome**: It occurs due to degenerative changes in intervertebral disc in osteoartritic process in the lumber region which is also called as slip-disc. There is stiffness or lumber muscles with sudden severe backache, induced while bending forward. Pain may radiate along with one or both sciatic nerves. If the pressure is applied on that nerve there is tenderness. There is pain along the sciatic nerve if it is stretched by raising the limb straight up & there may be loss of ankle jerk on affected side.
Differential Diagnosis of Headache

Headache is one of the commonest symptoms that pt. complains of. In vast majority of cases the cause is either trivial or at any rate unrelated to intracranial structures; but in few cases it may be intra-cranial.

Headache occurs in following conditions:

A] **Extra Cranial Causes:**

1] Tension headache
2] Hunger & Hypoglycemia.
3] Eye strain
5] Fisrositis of scalp muscles
6] Migraine
7] Hypertension
8] Fevers
9] Water & electrolyte disturbances
B) Intracranial Causes:

1] Trauma

2] Meningitis

3] Sub-archnoid hemorrhage.

4] Intracranial space occupying lesions.

a) External Causes-

1] Tension Headache- Psychological causes, stress & strain of modern life, hurrying against time, worries & anxieties account for most of the cases of headache & the accompanying insomnia & probably the essential hypertension too. The cause, though simple & apparent, may be intractable because it may need change in the life style of the person, an objective not always possible to achieve. However common-sense psychiatry may help.

2] Hunger- May sometimes induce headaches. Some people habitually keep long intervals between meals, while others are irregular about meal timing. Fall in blood sugar levels causes headache.
4) Paranasal Sinusitis - Especially frontal, may cause severe headache with vomiting. It may simply be caused by blockage of the opening of sinus, absorption of the sinus air, & consequent large difference in the pressure of air inside & outside the sinus. Finger pressure on the region of the frontal sinus elicits tenderness.

4) Eye Strain - Can cause headache which sometimes can be quite severe. Headache after strain on eye like reading, watching TV, etc. Relief after use of proper spectacles.

5) Fibrositis & Myalgia of scalp Muscles - May occur with consequent pain & headache with local tenderness.

6) Migraine - Can cause severe unilateral or bilateral headaches with vomiting; H/O repeated episodes present.

7) Hypertension - Not always, but may be there; mostly at occipital area. Nervous tension may cause the headache as well as hypertension.

8) Fevers - Headache is one of the symptoms in most of the fevers. Especially in typhoid fevers it may be severe.

9) Water & Electrolyte Disturbance - Headache may occur due to water excess caused by incorrect administration of intravenous
b) Intracranial Causes:

1) Trauma – After sustaining a head injury headache appears, which gradually disappears, while in sub-dural haematoma, headache persists or increases.

2) Meningitis - In all types of meningitis there is severe headache with fever, neck rigidity, & vomiting.

3) Subarachnoid Hemorrhage - Caused by leaking congenital malformation of a blood vessel, usually an aneurysm, at the base of the brain. There is sudden severe headache, which radiating down the back of neck. Neck rigidity is there. Blood in C.S.F. in lumber puncture.

4) Intracranial Space Occupying Lesions - i.e. tumors or sub-dural haematoma. Severe headache with typically projectile vomiting; progressive as Intracranial tension rises. May be malignant or not, they are dangerous as they rise the Intracranial tension with consequent papileoema. Various neurological abnormalities, depending upon the site of the tumor.
1) *Samanya Chikitsa Vivechan* (General line of treatment / management)

In the pathogenesis of the *Shool* we have already seen that *Vata Dosh* plays an important role. Especially properties of *Vata* like *Ruksha Sheet* and *Dathu Peedan* due to force of *Margavarodha-janya Vata* create *Shool* at different sites. That's why treating any type of *Shool*, treatment of *Vata-dosh* like *Vata-shaman* and *Vatanuloman* as well as *Basti* play an important role.

As *Vata* is *Ashukari* (acute) in nature; the nature of *Shool* is also *Ashukari* and *Darun*. So that while starting to describe the management of *Shool*, *Acharya Sushruta* says that

आशुकारी हि पननः तत्सङ्ग्कं त्वरिष्यं जयेत्। (म.० ४१/६०)

It means considering the *Ashukaritva* of *Vata* one should treat the *Shool* immediately and for that one should confirm the type of *Vataprakop*. If the *Vataprakop* is *Dhatukshayajanya* or *nirupastambhit* having increased properties like 'Ruksha and Sheet' we should use medicine, diet and behavior having abundant 'Snigdha and *Ushna* properties.

If the *Vataprakop* behind that *Shool* is *Margavarodhajanya* or *Upastambhit*; then we should remove the obstruction first from that particular 'Srotas' and for that purpose we should give 'Shroto Vishodhan' medicines having properties like *Ushna, Teekshna* and action like *Lekhan*. After that, *Vatanuloman* treatment should be given.

In the case of *Shool* due to other *Dosha* like *Pitta* and *Kapha* or in *Sansarga* and *Sannipata*. We should find out the properties increased and administer the drugs, diet etc. Which is against these properties.

If the *Shool* is due to *Avrita vata*, first *Avrua* of *Vata* should be destroyed by eliminating the *Aarak-dosh* and then *Vatanuloman* treatment should be used.
In Agnimandyaja and Amaja Shool; one should use Deepan and Pachan drugs accordingly which are again Ushna and Teekshna in property.

If the Malavashtambha i.e. constipation is the cause behind the Shool; It should be treated with Mrudii and Snigdha Virechan drugs i.e. laxative like castor oil, Draksha etc. with Anupan like Hot water, hot milk, Ghee, hot milk with Caster oil etc. Ruksha and Teekshna Virechan should be avoided because it creates Vataprapak.

In Krimijanya Shool, first Krimi - patan treatment like palash beej, kitmari yawani should be given and followed by Krimi Vighatak treatment like Vidagasava etc along with Agneedeepak treatment like Sanjeevani Guti, Hingwashtak chourna etc.

Describing the General line of treatment of Shool, Sushruta says that

```
ष वचनो लघुत्व िेंद्र; पापण किलककाः ॥
शरणांकुष गृहांका: सत्यमें शुद्धासात्वे ॥
(सू.३०/३५९)
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While describing the treatment of Gulmaja Shool, Sushruta says that

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तैयं सिद्धार्मां देहं अभ्यं मोजमस् ॥
सिद्धांतोपक पूर्णां मात्रानांज धरणमः ॥
सतःनन्तरमें लघुत्व िेंद्रं हरणा किया ॥
मेघानिर्बुध्रा: सयं विशेषेन उष्मात्मे ॥
(सू.३१/३५५)
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It may also considered as a general line of treatment of Shool.

SHOOL - EKAL DRAVYA CHIKITSA (Single Drug Therapy)

Thinking on single drug therapy in general treatment of Shool,
that drug should have following properties - Rasa-katu, Veerya - Ushna, properties - Teekshna, Laghu and specific action - Shoolaghna. In old texts we can find some of them as described in details in next chapter.

OTHER SINGLE DRUGS USEFUL AS 'SHOOLAGHNA'

Pudina (Mentha arvensis), Mishreya (foeniculum capillecum), Yawani (carum copticum), Kitmari yawani (Artemisia maritima), Karaskar (strychnos nuxvomica), Narikel (Cocus nucifera), Suchi (Atropa acuminata), Ahiphen (papaver Sommifera), Kapoor (cinnamum camphora), Bhallataka (Semecarpus anacardiam), Eranda (Ricinus communis), Rason (Allium sativum), Vatsanabha (Anonitum ferox), Kasturi (Moschus), Dattur (Datura alba), Soma (Ephedra gerardiana), Jeerak (cuminum cuminum), Krishna Jeerak (carum carvi), Nimbuk (citrus acida), Latakaranj (Caesalpinia Crista), Naga - Keshar (messua ferrea), Apamarga (Achyranthes aspera), Shatapushpa (peucedanum graveolens), Matulunga (citrus medica), Saindhav (Sodii Chloridum), Sauvarchala (Unaqua Soudium Chloride), Saji-kshar (Barilla)

SHOOLVISHESH CHIKITSA

Vishesh Chikitsa i.e. specific treatment of Shool as described in different book is as follows

A) Abhyantara Shaman Chikitsa:-

1) Vataja - Shool :- different medicines useful in Vataja Shool are as follows :-


dose -2 to 5 gms after meal with hot water

Kwatha - Asavarishta

Nagaradi kwatha, Baladi kwatha, Panchakolasav, Abhayarishta
Dose: 10-20 ml after meals with equal quantity of water.

**Siddha Kalpa**: Suvarechadaliguti, Agnimukha ras, Shankhavati, Lashunadi Vati.

dose:- 250 to 500 mg before meals with hot water or Moodga Yoosha, Kulattha Yoosha or Peya prepared with Vataghna drugs.

**Yavagoo, Yoosha, Kshir-pak, Ghruta** prepared with Vataghna drugs are also very useful and those may be given with or instead of diet.

2) **Pittaaja Shool**:

Drugs having properties like Madhur Rasa, Sheet Sara as well as having action like Deepan, Pachan, Grahi are quite useful in Pittaja Shool.

**Ekal Dravya** (single drugs): Shatavari, Amalaki, Drakshya, Goraksha chicha, Guduchi, Haritaki, Gulab, Mishreya, Esabgol, Ardrak.

**Choornani** (compound Powder):

Dhatri Choorna, Haritakyadi, Guduchyadi, Shatavari Kajjali, Avipattikar Choorna, Mishreyadi Choorna, etc.

Dose: 2-5 gms.

**Asavarishta and kwatha**: Bhoonimbadi, Guduchyadi, Triphaladi, Trayamanadi, Brihatyadi kwath, Drakhasava, Draksharishta, Abhayarishta, Phalatrikadi kwatha.

Dose: 10-20 ml after meals with equal quantity of water.

**Siddha Kalpa**: Praval panchamrut, Sootashekhari, Laghu sootashekhari, Suvarna Sootashekhari, Kamudha ras, Kapardik Bhasma, Mukta Shukti Bhasma, Mauktik Bhasm or Pishti, Praval Bhasma/ Pishti, Jaharmohara Khatai Pishti/Bhasma.

Dose: for tablets - 125 to 500 mg and for Bhasma - 60 to 250 mg with Anupan like Ghee, Ardrak juice, lemon juice, Moravala, sweet milk or simple water.

3) **Kaphaj Shool / Amaj Shool**:

Treatment of Kaphaj Shool and Amaj Shool is more or less same and that’s why described in same para.

अमचूके त्विरया वाह्यं कषायेऽविनाशिति।
शेषे वाहायं नरे बद्व यदर्नार्थ विच्छेदनम्॥

(यो.५)
The drug having properties like Katu Rasa, Tikta Rasa, Ushna, Tikshna, Ruksha and actions like Deepan and Pachan is useful in this type of Shool.

Ekal Dravyani (single drugs):
Bhallatak, Maricha, Pippali, Chitrak, Aparmarga, Ajamoda, Latakaranj, Vidang, Patha, Kat-phal.

Choornani (compound powder): Trikatu, Panchakol, Kat-phaladi, Pathyadi, Hingwashtaka, Lavatranyadi.

Dose: 2-5 gm with hot water or Honey or Ardraka Juice.

Kwatha - Asavarishta: Eranda mool kwath, Chitrakadi, Panchkol kwath, Pippalyasava, Bhallatakasava, Chyavikasava, Panchakolasava, Vidangarishta.
Dose: 10-20 ml after meal with equal quantity of hot or simple water.

Dose: 250 - 500 mg after meals with hot water. Castor oil 10-40 ml with Shunthi Kwatha in the morning.

4) Dwandwaja shool:

In Pittavataj Shool - Kantakaryadi Kwath in Pittakaphaja Shool - Patoladi kwath or Drakshadi Kwath with honey as Anupan while in Vatakaphaja Shool, Apamarg kshar, Sajjikshar or Shivakashar Pachan Choorna, Kshar-gutika, Pippali choorna or Pippalimool Choorna are quite useful.

5) Sannipataja Shool: Should be treated according to prominence of particular dose in that Samprapti.

6) Parinam Shool:

While treating Parinam Shool one should give Langhan i.e. fasting treatment first. According to Prakruti, Agni and prominent Dosh - Langhan should be Laghwashana or Anashana type. After that according to Dosh, Vaman, Virechan and Basti for prominence of Kapha, Pitta and Vata ac-
Accordingly. Then after, treatment of Amlapitta is useful here. Mainly Bhoomimbadi kwath, Kantakaryadi kwath, Abhayarishta Panchkol ghrir, Pippali ghrir, Sootashekhara ras Praval panchamrit, Shankha bhasma, Kapardik bhasma, Shatavari Kajjali, Shatavari Mandoor, Pittashamak Vati (Ayu. Rasashala) are useful drugs in Parinam Shool. For Anupan, Adrak Juice, Ghee, Ardrakavaleha, Goraksha chincha avaleh, Moravala, lime juice water, Kushmandavaleh, Gulkand are more useful.

7) Annadrava Shool: It is Kashtasadhya i.e. quite difficult to treat. While in the primary stage if Vaman Chikitsa is given and then after a treatment of Parinam Shool gives positive result with some extent.

B) BAHYA SHAMAN CHIKITSA (External treatment)

Vataja Shool - Ghatta Pattabandhan (tight bandage) is quite useful (except when there is Margavarodhaja Vataprakop), Snehan (Massage with oils) and Swedan (Fomentation) are quite useful. A Pindaswed - Made up of rice boiled in Dashamaool kwatha and Ghee, Mutton soup or mutton or Tilakalka is very useful in Vataja Shool, as it is Snigdha Sweda. Abdominal massage with hot caster oil is also very useful. Application of Hingu - Lepa, Rajika-Lepa or Shigrutwak Lepa is beneficial in Vataja type of Shool.

Pittaja Shool: - Avagah and Parishek of cold water or milk. Application of Gopichandhan or Black Mruttika on site of Shool.

Kaphaja/Amaja Shool: - Upanaha (Pollice) is very useful, fomantation with hot water bag or hot yawani pottali is beneficial.

C) SHOOL - SHODHAN CHIKITSA

If there are signs of Ama then that Ama should be digested by proper
Lung Chikitsa and Amapachak medicines. Then after only Shodhan Chikitsa should be done. In Vataj Shool Anuvasan Basti with sesame oil and Niruha Basti with Dashamool kwath alternately, is quite useful. In Pittaja Shool first give Vaman Chikitsa with the help of sugarcane juice. Yashtimadhu kwath or Tikta patol kwath. Then after Virechan Chikitsa with Draksha, Amalaki, Haritaki or Markandica kwath, This Virechan shold be mild type.

In kaphaja or Amaja shool first digest the Ama with Pachan drugs like Amapachak vati. Then after Teekshna Vaman with Madan phal kwath and then after Teekshna Virechan with Aragwadh or snuhikshir etc.

In Sannipataja Shool after Pachan Chikitsa give Vaman, Virechan and Basti treatment accordingly.

In parinah shool if Vata Dosha is prominent, then use Basti chikitsa-Anuvasan and Niruha Basti alternately. For that purpose use of sesame oil, Narayan Tail, Bala Tail or Dashamooladi Tail is quite beneficial. If pittadosha is prominent then give Virechan Chikitsa, mild type with the help of the Kwatha of Draksha, Nishottara, Markandika, Amalaki or Aragwadh, If the Kapha Dosh is prominent then give Vaman Chikitsa with the help of sugarcane juice, Madanphal kwath or Saindhavjala.

In Parinam Shool and Annadra Shool, before giving Shodhan Chikitsa first do Abhyantar Snehan with Matulunga Ghrit, Dadimak Ghrit or Changeri Ghrit.
REVIEW OF THE GROUPS OF PAIN CONTROLLING DRUGS FROM SAMHITAS

A) Charak-Samhita: In 4th Adhyay of Sootsrthan, Charak had described 3 groups - Mahakashay - which are useful for controlling the pain. They are:

1) Shool-prashaman Mahakashay
2) Angamard-Prashaman Mahakashay
3) Vedanasthapan Mahakashay.

1) Shool Prashaman Mahakashay: पिपली चिल्लीचुआण चव्यचिक्र शृङ्खेद वर्गानुसार अज्ञाताचार्याणी स्वाभाविक वास्तुमाळे शूलप्रशांती मृत्युप्राचणालिन्य काशित (च.सू.४/१७) अज्ञाताचार्य-वीकाराची/ (चक्र )

2) Angamard - Prashaman Mahakasha :- विद्याबिना विशिष्टता बृहत्ती कंट्याकाचे गण धातुआंतर ज्ञानकोली चंदनोशोधित मधुकान्ती वस्तुमाले अंगमार्ग प्रशांती मृत्यु (च.सू.४/१७)

3)Vedanasthapan Mahakashay : शा० ढा० फळक देवधि पचक तुंक माध्यस विश्रीय विनुर्मिनि-काशी काशी के शूलारघाणालिन्य काशित (च.सू.४/१८) दंजुळी - वेतस: (चक्र)

Properties & actions of each ingredient of above given groups are mentioned in following table -

1) Shool-Prashaman Mahakashay (Analgesics):

<table>
<thead>
<tr>
<th>S. No</th>
<th>Sanskrit Name</th>
<th>Botanical Name</th>
<th>Rasa</th>
<th>Vipak</th>
<th>Veerya</th>
<th>Guna</th>
<th>Karma</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>पिपली</td>
<td>Piper longum Linn</td>
<td>कटु</td>
<td>मधुर</td>
<td>अनुपानशील</td>
<td>रसुः</td>
<td>धीपञ्च, पाचन, स्वात्म, तीक्ष्ण</td>
</tr>
</tbody>
</table>

\[272\]
<table>
<thead>
<tr>
<th>नं.</th>
<th>वन्य तत्त्व</th>
<th>नाम</th>
<th>धान्या</th>
<th>उपाय</th>
<th>लघु</th>
<th>रक्षा</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Piper longum Linn</td>
<td>कड़ु</td>
<td>मधुर</td>
<td>उपण</td>
<td>लघु</td>
<td>रक्षा</td>
</tr>
<tr>
<td>2</td>
<td>Piper retrofractum</td>
<td>कड़ु</td>
<td>कड़ु</td>
<td>उपण</td>
<td>लघु</td>
<td>रक्षा</td>
</tr>
<tr>
<td>3</td>
<td>Zingiber officinale</td>
<td>कड़ु</td>
<td>मधुर</td>
<td>उपण</td>
<td>लघु</td>
<td>रक्षा</td>
</tr>
<tr>
<td>4</td>
<td>Carum roxburghianum</td>
<td>कड़ु</td>
<td>कड़ु</td>
<td>उपण</td>
<td>लघु</td>
<td>रक्षा</td>
</tr>
</tbody>
</table>

कुल: 273
After screening the table it can be concluded that properties & actions of this group are as follows -

**Rasa** -   **Katu**

**Vipak** -   **Katu** (Except Pippali, Pippali mool & Shrungaver - as they having Madhur Vipak)

**Veerya** -   **Ushna** (Except pippali - Anushnasheet)

**Properties** -   **Lagh, Teeksh & Raksh** (Except Pippali & Shrungaver - as Snigdha)

**Action** -   Shoohaghna, Deepan, Pachan, Kaphavataghna & Vatanuloman,

2) **Angamarda Prashaman Mahakashaya** (Restoratives):

<table>
<thead>
<tr>
<th>Sanskrit Name</th>
<th>Botanical Name</th>
<th>Rasa</th>
<th>Vipak</th>
<th>Veerya</th>
<th>Guna</th>
<th>Karma</th>
</tr>
</thead>
<tbody>
<tr>
<td>विदारी गंधा</td>
<td>Desmodium gangeticum D.C.</td>
<td>मधुर</td>
<td>मधुर</td>
<td>उष्ण</td>
<td>गुरु</td>
<td>वृष्ण, वृहण, दल्य, सर्वदीयोधर, स्विज्ञ, स्विज्ञ, सर्वदीयोधर, सर्वदीयोधर, सर्वदीयोधर, सर्वदीयोधर,</td>
</tr>
<tr>
<td>पुष्किळिणी</td>
<td>Uraria picta Des.</td>
<td>मधुर</td>
<td>मधुर</td>
<td>उष्ण</td>
<td>गुरु, दीप, वृष्ण, सर्वदीयोधर, सर्वदीयोधर, सर्वदीयोधर,</td>
<td></td>
</tr>
<tr>
<td>No.</td>
<td>Name</td>
<td>Label 1</td>
<td>Label 2</td>
<td>Label 3</td>
<td>Label 4</td>
<td></td>
</tr>
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<td>-----</td>
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<td>---------</td>
<td>---------</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Bhrati</td>
<td>Solanum indicum Linn</td>
<td>कुटु</td>
<td>कुटु</td>
<td>उपण</td>
<td>लघु, रुक्ष, तीक्ष्ण</td>
</tr>
<tr>
<td>4</td>
<td>कण्ठकारिक</td>
<td>Solanum xanthocarpum</td>
<td>तिक</td>
<td>कुटु</td>
<td>उपण</td>
<td>लघु, रुक्ष, तीक्ष्ण</td>
</tr>
<tr>
<td>5</td>
<td>एरण्ड</td>
<td>Ricinus communis Linn</td>
<td>मधुर मधुर</td>
<td>कुटु</td>
<td>उपण</td>
<td>तिन्ध्व, वातनाशक</td>
</tr>
<tr>
<td>6</td>
<td>राकाःरठी</td>
<td>?</td>
<td>तिक कुटु</td>
<td>शीतल</td>
<td>लघु, रुक्ष</td>
<td>कंडुल्ल, लितार्हन</td>
</tr>
<tr>
<td>7</td>
<td>चंदन</td>
<td>Santalum album Linn</td>
<td>तिक कुटु</td>
<td>शीतल</td>
<td>लघु, रुक्ष</td>
<td>कंडुल्ल, लितार्हन</td>
</tr>
<tr>
<td>8</td>
<td>शकरी</td>
<td>Vetrarea zizanioides Linn</td>
<td>हलदकुटु</td>
<td>शीतल</td>
<td>रक्षा</td>
<td>अंगभर्त्तप्रशारम, वाहशामक</td>
</tr>
<tr>
<td>9</td>
<td>एला</td>
<td>Elettarica cardamomum</td>
<td>कुटु मधुर</td>
<td>शीतल</td>
<td>लघु, रुक्ष</td>
<td>अंगभर्त्तप्रशारम, रोजन, दीपण, शिरोदिक, विनाशक</td>
</tr>
<tr>
<td>10</td>
<td>मधुक</td>
<td>Glycyrrhiza glabra Linn</td>
<td>मधुर मधुर</td>
<td>शीतल</td>
<td>गुरु, तिन्ध्व</td>
<td>वातपित्रस, वातनाशक</td>
</tr>
</tbody>
</table>

275
After Screening this table it can be concluded that properties and actions of this group can be stated as follows:

- **Rasa** - Madhyr Tikta
- **Vipak** - Madhur / Katu
- **Veerya** - Anushna sheet

**Properties** : Laghu, Rukshya, Snigdha

**Action** : Angamard Prashaman, Balya, Brunhan, Vrushya, Vatanashaka.

### 3) **Vedanasthapana Mahakashaya** - (Anodynes)

<table>
<thead>
<tr>
<th>No</th>
<th>Sanskrit Name</th>
<th>Botanical Name</th>
<th>Rasa</th>
<th>Vipak</th>
<th>Veerya</th>
<th>Guna</th>
<th>Karma</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>शीत</td>
<td>Shorea robusta</td>
<td>काश्य</td>
<td>कुठु</td>
<td>शीत</td>
<td>लघु</td>
<td>स्निध्व</td>
</tr>
<tr>
<td>2</td>
<td>कटकल</td>
<td>Myrica napi</td>
<td>कुठु</td>
<td>कुठु</td>
<td>तप</td>
<td>तप</td>
<td>प्रवल, मद्य, तीक्ष</td>
</tr>
<tr>
<td>3</td>
<td>पप्पक</td>
<td>Prunus cerasoides</td>
<td>काश्य</td>
<td>कुठु</td>
<td>तीक्ष</td>
<td>लघु</td>
<td>स्निध्व</td>
</tr>
<tr>
<td>4</td>
<td>कक्ष</td>
<td>Entrochepheillus kadamba</td>
<td>काश्य</td>
<td>कुठु</td>
<td>शीत</td>
<td>रक्त</td>
<td>दृश्य</td>
</tr>
</tbody>
</table>
After screening this table it can be concluded that properties and actions of this group can be stated as follows.

- **Rasa** - Kashay-Teekta, Vipak - Katu, Veerya - Sheet
- **Properties** - Ruksha, Laghu, Teekshna
- **Actions** - Vedanasthapan, Shothaghna, Jwaraglita Vishaghna etc.

**Sushruta Samhita**: In 38th Adhyay of Sootrasthan, Sushruta had described some groups of herbs - Gana. Following are some Gana which are having action of controlling different types of pains. These are as follows -
1) Vidarigandhadi Guna:

विदारिगंधाया विदारी विश्वदेवा विश्वदेवा श्वेतस्य पुष्करणीं शताब्दी सारिवा कृपणसारिवा
जीवार्षक्षमी सहाता हृदरस्त्वो नाष्ट्वो नुष्ट्वो एको तस्यां तृष्णिकाली अष्ठियो वैति।
(सू. सू. २०१५)

विदारिगंधा शालपर्णी, विदारी विपाकिक केंद्र: सत्त्वदेवा गांगेशर्की.

प्रायम्य गदायमें भीतडुपुण्या। श्वेतस्य मोक्ष्यर्थ: पुष्किर्या पुष्करणी। महासाहा-
मान्यपर्णी। हृदरस्त्वा - मुद्रणपर्णी। बृहस्त्वो शुचिमकला श्वेतस्तलाच।

Properties: विदारिगंधायादी: अथ गुण: पिताजीवलय:।

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Sanskrit Name (हिंदी-ि)</th>
<th>Botanical Name</th>
<th>Rasa</th>
<th>Vipak</th>
<th>Veerya</th>
<th>Guna</th>
<th>Karma</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Desmodium gangeticum D.C.</td>
<td>Ipomoea digitata Linn</td>
<td>मधुर</td>
<td>मधुर</td>
<td>शीत</td>
<td>स्वस्त</td>
<td>हास्य, स्नेह, स्नायु,</td>
</tr>
<tr>
<td>2</td>
<td>विदारी</td>
<td>Grewia papulifolia</td>
<td>मधुर</td>
<td>क्षुद्र</td>
<td>शीत</td>
<td>स्वस्त</td>
<td>हास्य, स्नेह, स्नायु,</td>
</tr>
<tr>
<td>3</td>
<td>सहदेवा</td>
<td>Sida rhombifolia Linn</td>
<td>मधुर</td>
<td>मधुर</td>
<td>शीत</td>
<td>स्वस्त</td>
<td>हास्य, स्नेह, स्नायु,</td>
</tr>
</tbody>
</table>

शापु गुणानुगमित शुद्धिकार विज्ञान। (सू. सू. २०१५)
| नं | शाक्यनामा | वैदिकविना | मधुर | मधुर | शीत | मुख. | वातपिताम्बुर | कल्याण | सूक्ष्म | वाजीकरण | वातावरण | मूर्ति | शोधक | सांघारिक | वातपिताम्बुर | सुशक्त, कल्याण | सांघारिक | वातपिताम्बुर | सुशक्त,
<table>
<thead>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Tribulus terestris Linn</td>
<td>मधुर</td>
<td>मधुर</td>
<td>शीत</td>
<td>मुख.</td>
<td>वातपिताम्बुर</td>
<td>कल्याण</td>
<td>सूक्ष्म</td>
<td>वाजीकरण</td>
<td>वातावरण</td>
<td>मूर्ति</td>
<td>शोधक</td>
<td>सांघारिक</td>
<td>वातपिताम्बुर</td>
<td>सुशक्त, कल्याण</td>
<td>सांघारिक</td>
<td>वातपिताम्बुर</td>
<td>सुशक्त, कल्याण</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Uraria picta Deves</td>
<td>मधुर</td>
<td>मधुर</td>
<td>शीत</td>
<td>नुमा</td>
<td>तिकड</td>
<td>निम्न</td>
<td>वातपिताम्बुर</td>
<td>कल्याण</td>
<td>सूक्ष्म</td>
<td>वाजीकरण</td>
<td>वातावरण</td>
<td>मूर्ति</td>
<td>शोधक</td>
<td>सांघारिक</td>
<td>वातपिताम्बुर</td>
<td>सुशक्त, कल्याण</td>
<td>सांघारिक</td>
<td>वातपिताम्बुर</td>
</tr>
<tr>
<td>3</td>
<td>Asparagus racemosus</td>
<td>मधुर</td>
<td>मधुर</td>
<td>शीत</td>
<td>मुख.</td>
<td>तिकड</td>
<td>निम्न</td>
<td>वातपिताम्बुर</td>
<td>कल्याण</td>
<td>सूक्ष्म</td>
<td>वाजीकरण</td>
<td>वातावरण</td>
<td>मूर्ति</td>
<td>शोधक</td>
<td>सांघारिक</td>
<td>वातपिताम्बुर</td>
<td>सुशक्त, कल्याण</td>
<td>सांघारिक</td>
<td>वातपिताम्बुर</td>
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<tr>
<td>4</td>
<td>Hemidepsis indicus</td>
<td>मधुर</td>
<td>मधुर</td>
<td>शीत</td>
<td>मुख.</td>
<td>तिकड</td>
<td>निम्न</td>
<td>वातपिताम्बुर</td>
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<td>सूक्ष्म</td>
<td>वाजीकरण</td>
<td>वातावरण</td>
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<td>सुशक्त, कल्याण</td>
<td>सांघारिक</td>
<td>वातपिताम्बुर</td>
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<tr>
<td>5</td>
<td>Irenocarpus frutescens</td>
<td>मधुर</td>
<td>मधुर</td>
<td>शीत</td>
<td>मुख.</td>
<td>तिकड</td>
<td>निम्न</td>
<td>वातपिताम्बुर</td>
<td>कल्याण</td>
<td>सूक्ष्म</td>
<td>वाजीकरण</td>
<td>वातावरण</td>
<td>मूर्ति</td>
<td>शोधक</td>
<td>सांघारिक</td>
<td>वातपिताम्बुर</td>
<td>सुशक्त, कल्याण</td>
<td>सांघारिक</td>
<td>वातपिताम्बुर</td>
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<tr>
<td>6</td>
<td>?</td>
<td>मधुर</td>
<td>मधुर</td>
<td>शीत</td>
<td>मुख.</td>
<td>तिकड</td>
<td>निम्न</td>
<td>वातपिताम्बुर</td>
<td>कल्याण</td>
<td>सूक्ष्म</td>
<td>वाजीकरण</td>
<td>वातावरण</td>
<td>मूर्ति</td>
<td>शोधक</td>
<td>सांघारिक</td>
<td>वातपिताम्बुर</td>
<td>सुशक्त, कल्याण</td>
<td>सांघारिक</td>
<td>वातपिताम्बुर</td>
</tr>
<tr>
<td>7</td>
<td>?</td>
<td>मधुर</td>
<td>मधुर</td>
<td>शीत</td>
<td>मुख.</td>
<td>तिकड</td>
<td>निम्न</td>
<td>वातपिताम्बुर</td>
<td>कल्याण</td>
<td>सूक्ष्म</td>
<td>वाजीकरण</td>
<td>वातावरण</td>
<td>मूर्ति</td>
<td>शोधक</td>
<td>सांघारिक</td>
<td>वातपिताम्बुर</td>
<td>सुशक्त, कल्याण</td>
<td>सांघारिक</td>
<td>वातपिताम्बुर</td>
</tr>
<tr>
<td>8</td>
<td>Teramnus labialis</td>
<td>तिकड</td>
<td>मधुर</td>
<td>शीत</td>
<td>मुख.</td>
<td>तिकड</td>
<td>निम्न</td>
<td>वातपिताम्बुर</td>
<td>कल्याण</td>
<td>सूक्ष्म</td>
<td>वाजीकरण</td>
<td>वातावरण</td>
<td>मूर्ति</td>
<td>शोधक</td>
<td>सांघारिक</td>
<td>वातपिताम्बुर</td>
<td>सुशक्त, कल्याण</td>
<td>सांघारिक</td>
<td>वातपिताम्बुर</td>
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</tbody>
</table>
|   | कुष्ठरक्ता | Phaseolus trilobus | मधुर | मधुर | शीत | लघु, रक्षा, तीक्ष्ण | स्वस्थ, जीवनीता, पचायु, जिराधज, शोध, अनुलोम, बालपिनाक, बीज, पाचन, नुसा, शृङ्खल, वाहाकल, कार्किल, क़ास्तास, कुछजालक, दीपक, पाचन, सारक, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अतिकाल, शोध, कार्किल, वाहाकल, अति
Vidarigandhadi Gana can be stated as follows.

**Rasa - Madhur**  
**Vipak : Madhur**  
**Vayu : Anushnasheet**

**Properties - Snigdha , Laghu,**

**Actions :** Vatapittanashan, Balya, Vrishya, and useful in Shosh, Gulma, Angamarda , Shwas and Kas.

2) Varunadi Guna:

- दस्तांगविन शिक्षा महाविन्द तकरी मेस्वरुणी पुत्तीक जत्तमाल मोट अविवादेन
- तराकं वन्धेक वासुक के पर वेषमान सतावशी विवर अजापृणी नवा उद्देशक यथा

- अश्वेल : कुकुश : सुनम्भु मुनि : .............. शिक्षा : शोभाभजनक : मधुकिश्चित : रक्षाभोजनक : तकरी अर्थात : मेस्वरुणी करकेत श्रुणी. पुत्तीक वेषमान : जत्तमाला ब्रह्मपुरस्त भोजक, भोजक अंकोल पुष्पों, अविवादेन सतावशी विवर : .............. सूर्यविद्यांश्चरण ब्रह्मपुरस्त जीलपुष्प ब्रह्मपुरास्त विवर : .............. ब्रह्मपुरस्त : ( ब्रह्मपुरस्त )
- अश्वेल : मकक्षपपसी लुण्जाति : .............. अजापृणी छंगाविषाणिक जत्तमाली (आवर्ती इति चक) चर्च : कुश : ( इत्यादि डिका )

**Properties :**

- दस्तांगविन शिक्षा महाविन्द तकरी मेस्वरुणी पुत्तीक जत्तमाल मोट अविवादेन

- विवरित्विषिद-शूल गुरुभावायंतर विद्राधिन् (सू. यु. 38:11)
<table>
<thead>
<tr>
<th>S. No</th>
<th>Sanskrit Name</th>
<th>Botanical Name</th>
<th>Rasa</th>
<th>Vipak</th>
<th>Veerya</th>
<th>Guna</th>
<th>Karma</th>
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<tbody>
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<td>वरण</td>
<td>Crativa religiosa</td>
<td>तित्त</td>
<td>कटु</td>
<td>उप्य</td>
<td>रक्षा</td>
<td>वीपण, वरण, रक्षा</td>
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<td></td>
<td></td>
<td>लघु मधुर</td>
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<td></td>
<td>लघु, कृमिधान, गुणमादन, वातकक्षक</td>
</tr>
<tr>
<td>2</td>
<td>आर्गशि</td>
<td>Barleria strigosa</td>
<td>तित्त</td>
<td>कटु</td>
<td>उप्य</td>
<td>लघु</td>
<td>शोधान, कुटूँडन</td>
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<td></td>
<td>willd</td>
<td></td>
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<td></td>
<td>वेदनाश्यापन, कक्षावतान</td>
</tr>
<tr>
<td>3</td>
<td>बृंघु</td>
<td>Moringa concanensis</td>
<td>कटु</td>
<td>कटु</td>
<td>उप्य</td>
<td>तीक्ष्ण, विचली</td>
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<td>सारक, शोधान</td>
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<tr>
<td>4</td>
<td>मधुर्बृंघु</td>
<td>Moringa pterygosperma</td>
<td>मधुर</td>
<td>कटु</td>
<td>उप्य</td>
<td>तीक्ष्ण, विचली</td>
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<td></td>
<td>बीपक, शोधान</td>
</tr>
<tr>
<td>5</td>
<td>तक्षीरि</td>
<td>Clerodendron phlomidis</td>
<td>कड़</td>
<td>कटु</td>
<td>उप्य</td>
<td>रक्षा</td>
<td>वातकक्षक</td>
</tr>
<tr>
<td>(छोटी अरण-प्रिय)</td>
<td></td>
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<td></td>
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<td></td>
<td>वातकक्षक</td>
</tr>
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<td></td>
<td></td>
<td>शोधार, वातावरण</td>
</tr>
<tr>
<td>6</td>
<td>मेश्लुष्मी</td>
<td>Pistacia integerrima</td>
<td>कषाय</td>
<td>कटु</td>
<td>उप्य</td>
<td>लघु</td>
<td>वातावरण, वातकक्षक</td>
</tr>
<tr>
<td>(अज्ञुष्मी)</td>
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<td></td>
<td>वातावरण, वातकक्षक, शोधार</td>
</tr>
<tr>
<td>7</td>
<td>पुष्तिक</td>
<td>Holoptelea integrifolia</td>
<td>कषाय</td>
<td>कटु</td>
<td>उप्य</td>
<td>लघु</td>
<td>वीपण, कृमिधन</td>
</tr>
<tr>
<td>(चीरकिल्लवड़)</td>
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<td></td>
<td></td>
<td></td>
<td>शोधार, कक्षावतान</td>
</tr>
</tbody>
</table>

282
<table>
<thead>
<tr>
<th>Plant Name</th>
<th>Family</th>
<th>Genus</th>
<th>Type</th>
<th>Place of Origin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pongamia glabra</td>
<td>Fabaceae</td>
<td>Pongamia</td>
<td>Tree</td>
<td>India</td>
</tr>
<tr>
<td>Akkiligum</td>
<td>Lamiaceae</td>
<td>Harungania</td>
<td>Tree</td>
<td>India</td>
</tr>
<tr>
<td>Salvadora oleifera</td>
<td>Euphorbiaceae</td>
<td>Salvadora</td>
<td>Tree</td>
<td>Africa</td>
</tr>
<tr>
<td>Barleria cristata</td>
<td>Acanthaceae</td>
<td>Barleria</td>
<td>Tree</td>
<td>India</td>
</tr>
<tr>
<td>Coccinia indica</td>
<td>Cucurbitaceae</td>
<td>Coccinia</td>
<td>Tree</td>
<td>India</td>
</tr>
<tr>
<td>Zeylenica</td>
<td>Annonaceae</td>
<td>Zeylenica</td>
<td>Tree</td>
<td>India</td>
</tr>
<tr>
<td>Siilaneiluis</td>
<td>Salicaceae</td>
<td>Siilaneiluis</td>
<td>Tree</td>
<td>India</td>
</tr>
<tr>
<td>Achyranthes aspera</td>
<td>Apiaceae</td>
<td>Achyranthes</td>
<td>Tree</td>
<td>India</td>
</tr>
<tr>
<td>Linn</td>
<td>Rutaceae</td>
<td>Citrus</td>
<td>Tree</td>
<td>India</td>
</tr>
<tr>
<td>Vangrans</td>
<td>Euphorbiaceae</td>
<td>Vangrans</td>
<td>Tree</td>
<td>India</td>
</tr>
<tr>
<td>Achyranthes aspera</td>
<td>Apiaceae</td>
<td>Achyranthes</td>
<td>Tree</td>
<td>India</td>
</tr>
</tbody>
</table>
After screening this table it can be concluded that properties and actions of Varunadi-Gana can be stated as follows:-

<table>
<thead>
<tr>
<th>Rasa</th>
<th>Vipak</th>
<th>Veerya</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teekta - Katu</td>
<td>Katu</td>
<td>Ushna</td>
</tr>
</tbody>
</table>

Properties : Laghu, Rooksha, Teeksha.


3) Veeratarvadi Gana :  

बीरतर सहचरवद्यः दह्व वृक्षादानिः गुह्राजनलुष्क काव्याश्रमाभिः आदिशानं भ्रूणं वसुक विरस भ्रूणकुण्डिका पशुसन्धिर कपोलधरा श्वायत्रा तोडः।

(सु सूत्र, 1813)
<table>
<thead>
<tr>
<th>Botanical Name</th>
<th>Common Name</th>
<th>Latin Name</th>
<th>Plant Type</th>
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<tbody>
<tr>
<td>Dendrophthoe</td>
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<tr>
<td>Lonicera (Linn)</td>
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<tr>
<td>Barleria cinerea</td>
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<td>Barleria pinonitis</td>
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<td>Saccharina mutia</td>
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<td>Ram Vipaka</td>
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<tr>
<td>Verna Guna</td>
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**Sanskrit**

<table>
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**Hindi**

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**Bengali**

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<td>मधुर</td>
<td>मधुर</td>
<td>शीत</td>
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<td>मधुर</td>
<td>शीत</td>
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<td>Alangium salvifolium</td>
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<td>कटु</td>
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<td>श्रेणी</td>
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<td>कृशाणिटका</td>
<td>Barleria cristata</td>
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<td>?</td>
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<td>(अ.ि. सू. १४/२४, असुरघात)</td>
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<td>Tribulus teestris</td>
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After screening this table it can be concluded that the properties and actions of Veeratarvadi Guna, can be stated as follows -

**Rasa**: Teekta - Madhur - Kashaya  
**Vipak**: Katu/Madhur  
**Veerya**: Sheet  

**Properties**: Laghu, Snigdha  

**Action**: Useful in Ashmari (Renal calculi), Sharkara, Mootrakruchhra (dysuria) Mootraghat (Anurea), Ruja (Mild Pain), Vat-Vikar etc.

---

7) **Pippalyadi Guna**:

<table>
<thead>
<tr>
<th>Sanskrit Name</th>
<th>Botanical Name</th>
<th>Rasa</th>
<th>Vipak</th>
<th>Veerya</th>
<th>Guna</th>
<th>Karma</th>
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<td>मधुर</td>
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<td>स्थिर</td>
<td>दीपज, पाचन, कृप्या</td>
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<td>कडु</td>
<td>मधुर</td>
<td>उपाय</td>
<td>लघु</td>
<td>शूलधन, व्यास-कासाहि, वातकाश, कृमिधन, क्षास्तकासाहि, कादशुलधन</td>
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<td>उपण</td>
<td>लघु, शेष</td>
<td>वातकफ़ड़न, शुरुद्धज</td>
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<td>उपण</td>
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<td>उपण</td>
<td>लघु, शेष</td>
<td>शीत्कः, शूलधज, कोठधज, वातकफ़ड़न</td>
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<td>शीत्कः, शूलधज, कृमिधज, वातकफ़ड़न</td>
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<td>हरेगुड़ा</td>
<td>Vitex negundo</td>
<td>कंठू मधुर</td>
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<td>लघु, शेष</td>
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<td>शेष, शीतः लघु, शेष</td>
<td>शीत्कः, शूलधज, कृमिधज, वातकफ़ड़न</td>
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<td>Effect</td>
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<td>Preparation</td>
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<td>Holarrhena antidysenterica</td>
<td>टकु</td>
<td>श्रेय</td>
<td>श्लो</td>
<td>वाटावालोमण, वातकपटमण</td>
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<td>Cyclea peltata, Cissampelous parieir</td>
<td>कड़ू, कुंडू</td>
<td>उच्च</td>
<td>लघु</td>
<td>लघु, कृमिमध्य, कृबोधच, कृष्टकक्ष, कृष्ण, ब्रह्म, संधानी, शूलदण, त्रिबोधहर</td>
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<td>रक्षक</td>
<td>वीपन, रोचन, तीक्षण, कृमिमध्य, शूलदण</td>
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<td>Brassica nigra</td>
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<td>उच्च</td>
<td>रक्षक</td>
<td>रसिक्षम, रसंधानक, केूंडूभ, लघु, कृमिमध्य, ज्वरधन, वाह्यामक, रक्षपेतन</td>
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<td>श्रेय</td>
<td>रक्षक</td>
<td>रसिक्षम, रसंधानक, केूंडूभ, लघु, कृमिमध्य, ज्वरधन, वाह्यामक, रक्षपेतन</td>
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<td>Ferula narthex</td>
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<td>उच्च</td>
<td>तीक्षण, दीपन, पाचन, रोचन, सर, वाटावालोमण, सरिद्ध, विवर्ध-शूलदण</td>
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<td>17</td>
<td>Clerodendron serratum</td>
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<td>रक्षक</td>
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<td>Manadenia tenacissima</td>
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<td>उच्च</td>
<td>मुख, दीपन, पाचन, शूलदण, कृमिमध्य, अनुवलोमण, विकोपहर</td>
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| 19  | Aconitum heterophyllum | कठाय     | उच्च      | रक्षक      | रक्षक, कृमिमध्य, शूलदण, वीपन, पाचन, ब्रह्मो,
After screening this table it can be concluded that properties and actions of Pippaladi Gana are as follows:

<table>
<thead>
<tr>
<th>Name</th>
<th>Properties</th>
<th>Action</th>
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</thead>
<tbody>
<tr>
<td>Rasa</td>
<td>Katu, Teekta, Vipak: Katu Vipaka</td>
<td>Deepan, Pachan, Shoolagni, Vatamahni, Vatanuloman,</td>
</tr>
<tr>
<td>Usefulness in: Gulma, Shool, Aryan, Aycrca, Pratisyaya, Ami-dosa, etc.</td>
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</table>

After screening this table it can be concluded that properties and actions of Acorus calamus are as follows:

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<th>Name</th>
<th>Properties</th>
<th>Action</th>
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</thead>
<tbody>
<tr>
<td>Rasa</td>
<td>Katu, Teekta, Vipak: Katu Vipaka</td>
<td>Deepan, Pachan, Shoolagni, Vatamahni, Vatanuloman,</td>
</tr>
<tr>
<td>Usefulness in: Gulma, Shool, Aryan, Aycrca, Pratisyaya, Ami-dosa, etc.</td>
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<tr>
<td>S. No.</td>
<td>Sanskrit Name</td>
<td>Botanical Name</td>
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<tr>
<td>1</td>
<td>वृहत्ती</td>
<td>Solanum Indicum</td>
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<td>2</td>
<td>केंटकारिका</td>
<td>Solanum xanthocarpum</td>
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<tr>
<td>3</td>
<td>कुटज फल</td>
<td>Holarrhena antidysenterica</td>
</tr>
<tr>
<td>4</td>
<td>पाझा - राज</td>
<td>Cyclea peltata</td>
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<td>5</td>
<td>मधुक</td>
<td>Glycyrrhiza glabra</td>
</tr>
</tbody>
</table>
After screening this table, it can be concluded that the properties and actions of *Brihatyadi Gana* can be stated as follows:

- **Rasa**: Tikta - Katu
- **Vipak**: Katu
- **Veerya**: Ushna

**Properties**: Teekshna, Laghu, Rooksha

**Actions**: Tridoshahara, Roojanashan, Pachan, Mootrajanan, useful in Aruchi, Shwas, Kasa, Mootракruchhra, Rhidrog.
As we have discussed in previous chapter; in Ayurvedic literature like Brihatrayi, Laghutrayi, Nighantu and many other books, there are so many drugs having Shoolaghna i.e. analgesic effect. Some of them are single herbal drugs, some are compound herbal drugs, some are mineral drugs, some are animal products. Some Kalpa i.e. Compound drugs like different Guggul kalpa, Shoolahar Vati etc. are also there. To select proper pain killing drug amongst all these drugs, was too difficult to find a shell having a pearl from the ocean. Then I decided to trust in Apta-vachan. While thinking on that, I remembered one Sootra from Charak Samhita. It was

```
सुवर्णी शूलमूल चन्द्र चिंतक नाम:।
शाबड़कपिनीया स्वात्तृ शूलधनी चोपसाधिता॥ (च.सू २/१६)
```

In which it is stated that, Yavagoo made up from Panchakol is useful as Deepaneeya and Shoolaghna.

Considering biasless meaning of shool as a type of Pratikool Vedana i.e. distressing sensation or pain; I started to compile on Parchokul.

Pancha means a group of five; while Kol means Pippali. A group of five drugs in which Pippali is main drug, or stated at first. Another meaning of Kol is related to quantity. One Kol means 1/2 Karsha i.e. 1/2 Tola (about 5 gms) Quantity of ingredients of Panchekol is one Kol (1/2 Karsh). The term Panchakol is defined as

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पिपाली चन्द्र चिंतक पिपालमूल चचित्रक।।
प्रेतकोल इति स्वात्तृ.........॥ (श.सं म.खं ६/१३)
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पिपाली चन्द्र चिंतक पिपालमूल चचित्रक।।
एक्त्र सिद्धितेष्वरभि; पंचकालकमूलपृष्ठ:॥ (शो.ए)
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Panchakol is group of five drugs Viz - Pippali, Pippalimool, Chavya, Chitrak and Nagar, Let us see the Dravyaguna i.e. properties and actions of each of them -
Botanical Name: Piper longum.
Family: Piperaceae.

**Gramhokata classification:**

चरके - (सू.अ.२) - दितिरितिचन त्रेण्योधु, वमन त्रेण्योधु
(सू.अ.४) - वीपनीये, तृषिषिषे, हिंकानिमिहणे, काताहे, केंद्रे, आस्थापलोपने,
शुधु प्रायमेन दितिरितिचने - श्रीतीति आग्ने, या चातुर्यात श्रीपली पठाने।

सुधुरे - (सू.अ.३५) श्रीपल्यादि गणे तथा -
(सू.अ.३९) उद्यानथागारे, दितिरितिचने या गणे श्रीपली पठाने।

**Synonym:**

- पिप्पली कुकरा श्रीपली चपला मागदी कणा।
- कटुबीजा च कोरंज्वी वंदेही सिर्कतंडुला।
- ब्यायम द्वारंपला कुकरा कोलाच मण्डोद्रव्या।
- उपणारोक्तकुल्याच समुख्या तीणशंकंडुला।

(राजनिपंडु, पिप्पल्यादि वर्ग ६११-१२)

**Properties & Actions:**

क्षेप्लाल मधुरा वाच्या गुर्दी विनिधा च पिप्पली।
सा शुधुका कर्मवाहनी कदृढ़णा कृष्णसंभव।
(च.सू. २७/२७७)

तेघां गुर्दी स्वादुशीता पिप्पल्यार्डा कक्षापदा।
शुधुका कर्मवाहनी सा वृद्धा पिताविरोधिणी।
(सू.सू. ४६/२३)

क्षेप्लाल मधुरा स्वादु शीता तस्य गुर्दी विनिधा च पिप्पली।
सा शुधुका विधिरता ५ त्रिदिधा वृद्धा रसे कटु:।
स्वादुपाकाडा मिल क्षेप्ल स्वासनसापरा सरसा。
न नामशति उपयुक्ती रसायनविद्य दिना।
(अ.ह.सू. ६१६१-१६२)

आरा अशुभुका पिप्पलित क्षेप्लाल मधुरसा। शीतीया गुरू: विनिधा
वाच्या गुरूका पिप्पल्यार्ण आर्डा: पिप्पल्या: सकाशाद विपरीता,
शीतीयाचवदीन उपणा। गुरू वीपर्यविंश लघु:। विनिधा विपर्यव: तु
अत्र नामति विनिधेयक्षुब्यांत। तथा वृद्धा रसे कटु।
कर्त्त रस्तवाल तथा कर्त्त पाकर्त वातां स्वति आहे। स्वाभुपाका तथा अनुग्रहादि हळते। सारण एवं विधानां तां पिपली अत्यधिक न युंगजीत रसायन विधी विदा पिपली वर्धानादि रसायने विधान एवं अतिरिक्त उपयुक्तत। — (सर्वघं शुद्ध दिता)

पिपली कटुका स्वाभुपाका स्नियङ्ग त्रिशोष जित।
तुत्त ज्वरोतर जनत्वामानार्थीच च रसायनी। — (धन्वंतरि निघण्डु: शतपुपप्पाविवर्ण २/७४)

पिपली उँगरा वृष्णि स्नियङ्गोपणा कप्रतिकका।
चौथरी मारत व्यासकला 'काला प्लेज्पाकायापहा।
— (सर्वघं शुद्धु: पिपलाविवर्ण ९/११)

पिपली चौथरी वृष्णि स्वाभुपाका पावके रसायनी।
अनुग्रहाका कटुका स्नियङ्ग वस्त्रातिहार लघु।
पितले रेवशी हळते व्यासकारोतर ज्वरान।
कुष्ठ प्रमहेद्वुलमार्क: ज्ञरीहशुल्कमारतान।
आद्री कफप्रपाद स्नियङ्ग शीतला मधुरा शृुः।
— (मदनपाल निघण्डु: शंकरादि वर्ण २/१३/१४)

पिपलावार्थ विह्या मृती रसायनी स्नियङ्ग कफप्रेणा।
शुक्कर लघु: स्वाभुपाका स्नियङ्गावुणणा रसे कटु।
कफवात ह्या रसायन सरा वृष्णि रसायनी।
चौथरी पाणी इथा पितला व्यासकारस्वलु।
निहत्ति कफ्युलमार्के मेहसीह ज्वरोतरान।
तीखोपणा भावत्स्लेल्पीही त्वमाधिवारित चौथरी।
श्रेय प्रसाद मधुरात्पीत हुळित च पिपली।
औपनवात सरस्वात पाकाश वातस्वदन्तुलोमानी।
— (केशवेच निघण्डु: अोवधि वर्ण १/१५६-१६२)

पिपली चौथरी वृष्णि स्वाभुपाका रसायनी।
अनुग्रहाका कटुका स्नियङ्ग वात्स्लेल्पः ह्रदुः।
पिपली रेवशी हळते व्यासकारोतर ज्वरान।
कुष्ठ प्रमहेद्वुलमार्क: प्लरीहशुल्कमारतान।
— (भावप्रकाश निघण्डु: हरीतवादि वर्ण १/७५,७६)

296
Considering all these references it can be concluded that, Pippali having following properties and actions

**Rasa:** Katu  
**Vipak:** Madur  
**Veerya:** Anushnasheeta  
**Properties:** Guru, Teekshna, Snigdha, Sara  
**Actions on Dosh:** Kaphayataghna, Pitta-ayurvedhini  
(Due to Madhur Vipak), Vatanulomaan  
**Karmakara:** Deepan, Pachan, Vrushya, Shoolghna, Shirovirechan,  
Mrudu-Virechan, Balya, Rasayana, Medhya, Mootral,  
Krimighna, Yakrut-Uttejaka.

**Doses:** Ajverna, Agnimandya, Gifma, Krimi, Arochaka, Shool,  
Kasa, Shwas, Hikka, Parshwashool, Pandu, Rajayakshma,  
Jwar, Visham-Jwar, Anah, Jeerana-Jwar, Prasuti-Jwar,  
Amavata, Grudhrasi, Katischool, Plecharag, Pramecha, Udur.

**Chemical composition:** Volatile Oil - 0.7 %

**Alkaloids:** 4-5 % Piperine, Piplartin, Sisemin, piplasterol, and  
Alkaloid A : and Pipplitorine Alkaloid 'A' - Which is newly found, is  
similar to pipplitorine ; has specific bacteriostatic action on "Mycobacterium tuberculosis H-37 R.V. Strain."
Pippali - Mool

Botanical name: Piper longum.
Family: Piperaceae.

Granthokta Classification:
(च.सू.२) - शूलमाशक दवावेदु क्रिमिन्जी दवावेदु।
(च.सू.४) - दीपजीये; शूलमाशके च महाकलादी पिप्पलीमूल पकड़ते।
(च.सू.३८) - पिप्पल्याब्दी गाणे पिप्पलीमूल पकड़ते।

Synonyms:

पारिवारिक पिप्पलीमूल मूलं तु चविकाशिर।
कोलमूलं कटुधिकः कटुमूलं कटुण्यम्।
सर्वांधिः च प्रातः विरुण शोषांसंलयम्।
सुधीः अठिसः च वेय पतयायम्: स्युपचतुर्वश॥

-(साधनिया tu पिप्पल्याब्दी वर्ष 6/19.२२)

कोलमूलं कणामूलं मानाध्य मानाधिच्छिदा।
(केवेद लिघु, आयुर्याब्दी वर्ष 5/१२५)

Properties & Actions:

- पिप्पली मूलं दीपजीय पाचनियानाद प्रशामज्ञानम्।
- कटुण्यं पिप्पलीमूलं श्वेषसंघात नाशानम्।
  वातोषिषितकरं हनितं कृतीवांगिः प्रदीपसिद्धिः॥
  -(वधवंतिर लिघु: शातपुष्पाब्दी वर्ष २/५६)

- कटुण्यं पिप्पली मूलं श्वेषं क्रिमिवादसानम्।
  दीपज वातोषिषितं रोखं पितकोपनम॥
  -(साधनिया tu पिप्पल्याब्दी वर्ष 6/३२)

- दीपज मं पिप्पली मूलं कटुण्यं पाचनं लघु।
  रक्षं पितकरं श्रेणि कर्कवातोदराध्य॥
  -(मदनपात निघु, शुरुंगाब्दी वर्ष 2/१८)

299
After considering all these references it can be concluded that, Pippalimool having following properties and actions

**Rasa:** Katu  
**Vipaka:** Katu  
**Veerya:** Ushna  

**Properties:** Laghu, Rooksha  

**Action:** on Dosh: Shleshma Sanghat Nashan, Vatahar, Pittakara  
Karmakara: Deepan, Pachan, Bhedan, Krimishtha Shoolagahna.  
Artav-janan, Rochan, Garbhashaya Shodhan, Garbhashaya - Sankochak  

**Diseases:** Agnimandya, Anah, Ajeerna, Gulma, Plecharog, Udar, Krimirog, Shwas, Kshay-Rog, Katisshool, Arsha, Kasa, Kashtartava (Dysmenorrhoea), Sandhigata - Vata, Visham-Jwar, Vilamba-Prasav. Kapha - Vataj Shool, Kaphanubandhi Amlapita, Anavat, Grudhrasi, Pakshaghat, Urustambhu, Vatajwar, Jeerna-Jwar, Sootikarog, Sootika-Makkal  

**Chemical composition:** Piperine - 0.15 to 0.18 %  
Piplatrin - 0.13 to 0.20 %  
yellow crystals and one pungent alkaloid.
Botanical Name : Piper retrofractum Vahi.
Family : Piperaceae

Classification :
- चरके  -- बीजबद्धे, तुसिध्ने, अशोध्ने, शूलप्रशामने च महाकाशो चच्च्य पञ्चायते।
  (च सू.४)
- सुदुःते  -- पिप्पल्यादि गणे।

Synonyms :
- चविका चिठ्टोल्या च तविगर्त सर्थपानुः।
- वन्वी च कोलवन्ती च कोलं कटुस्मसतक्षमः।
- तीक्ष्णा करिणिका चविकृक्करी नैसहुः।
  (राज निघंद; पिप्पल्यादि वर्ग ६/४१)

Properties and Actions :
- चविका चिठ्टोल्या मूलं मरिचाल्पनानं गुणे।
  (आ.ह.सू. ६/१६५)
- चविक्यं च कटुकोण्यं स्वाज्ञानन्तुब्धिपन्न चर्मः।
  काव्यं चकर्मं वाताश्वाश्च घ्नेत।
  (धनवंतरि निघंद; श्रत्पुष्पादि वर्ग २/७४)
- चविक्यं स्वाज्ञानन्तुब्धिकुटं लघु रोगमः।
  जन्तुवा कार्यं कार्यास्त शूलाति कृतमः।
  (राजनिघंद; पिप्पल्यादि वर्ग ६/४१)
- पिप्पली ग्रुङ्वंतः वादिशोधादि गुहापापमः।
  चर्मो सुप्पपणं ग्रास्वास्तकास स्वयं विशाश्च शाश्च।
  (भादपातिनिघंद; शुलकारी तर्क २/१४)
Chavya' can be stated as follows.

**Rasa :** Katu  
**Vipak :** Katu  
**Veerya :** Ushna.

**Properties :** Laghu, Roomsha, Veeksha.

**Action :** On Dosh - Kaphodrekahar; Vatakop-shaman, Pittakar, Vatanuloman.

**Karmakata :** Deepan, Pachan, Lekhan, Shoolagha, Krinighna, Bhedan, Kochan, Garavish-nashak, Truptighna.  
**Yakrutottejak**

**Disease :** Shwas, Kasa, Shool, Arti, Rajayakshna, anal disaease like 'Arshha', Udarshool, Adhman, Agniimandya, Ajeerna.  
**Udar-rog, Shwas, Krimi-rog,**

**Chemical composition :**

- Moisture - 9.5 %, Protein 12.2 %, Stable oil - 6.6 %,  
- Volatile Oil - 1.5 %, Starch - 39.5 %, fibers - 5.8 %  
- Alkaloids - Piperine - 4.5 %, other alkaloids similar to the pallitourine.
Botanical Name: Plumbago zeylanica
Family: Plumbaginaceae

Classification:

चरके (सू.अ.४) - लेखनीये भेदनीये दीपनीये, अशोधने, तृसिद्धे.
शूलप्रशमने महक्षणे, कटुस्कंदे च चित्रक पद्धते ।
सुधुते (सू.अ.३६) - आरण्यवाही, वरण्यवाही, तुषक कावी, विप्पल्लाही, जूसावी, आमलप्पावी च गने ; पंपकोले, पद्मयाण चित्रक पद्धते ।

Synonyms:

चित्रको हुत भ्रुण व्यालो दरुणो दहनो रुमण ।
अजिनालि हवि: पार्थी वाङ्क्रमा विशेषत ।

Properties and Action:

- चित्रकमूलं दीपनीयं, पायनीयं गुर्वितुरकार्वशं: शूलहरणं .......
  (च.सू.३१)

  ..........चित्रक .............कस्मिनो पाचने लघु ।
  (सू.सू.४६)

- चित्रक: कटुपाचे वाङ्क्रमु काचनो लघु:।
  रुक्षोणे भभणी कुष्ठ कोषार्थ: क्रृमि कारसजित ।
  श्वेतमातिलाम्बे गाही तच्छाके श्लेष्मवालतमु ।
  (मवनपाद विघटः)
- चित्रक द्रव्याग्रनिषो भिन्नति बहुशो गुपानाल स्विधकः।
- लक्षणाकुपणतया प्रवीणस्ति देहायो नस्ताति वाहिकः।
- चित्रक दैनिकति प्राकामलोर्ति बहुदी बलम्।
- कि चित्रक यदि वाहिकाः कुश्लो वैये: सदा स्तुत्यते।
  (प्रिय निघंटु)

- चित्रक ५ विसम: पाके कटुकः कपसलोक्तेऽऽ।
- वातोदरशी बहुभी कृमि पापु विनाश:।
  (धन्वंतरी निघंटु)

- चित्रक ५ विसम: पाके शोभाः कृमि क्रुद्धः।
  (अ.ह.सु. ६/१४६)

After considering all these reference: properties and action of 'Chitrak' can be stated as follows:

**Rasa**: Katu, Aipaka: Katu
**Veerya**: Ushna

**Properties**: Laghu, Raksha, Teeksha
**Action**: on Dosh - Kaphavatashak, Pittakar
**Karmakara**: Deepan, Pachan, Grahi, Bhedan, Swedal,
Lekhan, Shoolaguna, Krimighna, Truptighna
**Dhapatra**: Agnimitra, Mveena, Gushma, Shool, Anua
  shool, Shotha, Arsha, Graham, Udar, Pandu
  Kushtha, Shwitra, Atisar, Yakrut-Rog.

**Chemical Composition**: Roots contain a active
Principle - Plumbegin - 0.9 to 1.0 %, which is quite irritent and
crystalline
Plumbagin - 2- Methyl - 5- hydroxy, 1:4 naphtha quinone. It is
locally irritent and bacteriosidal, while, internally it creates
contraction in intestinal, uterine and cardiac muscles and increases
expelling of Sweda, Mootra and Pitta.
**NAGAR**

**Botanical name:** Zingiber officinale Rox.

**Family:** Zingiberaceae.

**Granthokta Classification:**

- **परके** (सू,अ.४) - बीपजीये, तृसिद्धे, अरुचीद्धे, तृप्पणिहनादी, शुल्पाशामने व महाकाण्ये नागरं पञ्चाते।
- **दुबुळे** (सू,अ.२८) - विप्पन्यादिदी गणे, प्रिकटकाण्ये नागरं पञ्चाते।

**Synonym:**
- शुव्यविप्पन्यावाच नागरं विश्वाधाजम।
- उपविनकाष्ठब्रुहंब्रुहं महीषधम।

**(पृष्ठ निगम)**

**Properties & Actions:**

- रोगनं दीपण शृष्टं आर्किक विश्वाधिशम।
  वात श्वेत्त्र विबन्धिशु रसस्त्रीयपविश्वले।
  *(सू.86/166)*

- सर्वोस्ते दीपणं शृष्टं उपाभ वातककापिशम।
  ग्यापके गाघुं दुरा रोगनं विश्वाधिशम।
  *(च.सू.२५/२३९)*

- नागरं कफवाचनं दिपाके मधुरं कद।
  शृष्टिग्नं रोगनं हुघ रोगनं सर्वें सद्यं दीपणम।
  कफनिहुरं स्वर्य विविष्याणानं शूलनुत।
  कफः रोगनं हुघ शृष्ठं विवारं कफम।
  *(सू.86/२२६,२२७)*

- नागरं दीपणं शृष्टं बाह्य हुघ विविष्याणुत।
  रुचिं लघु स्वाभुपाक स्विग्य्योणं कफकालिक।
  *(अह.सू.७/१६३)*
After considering all these references; properties and action of ‘Nagar’
can be stated as follows -

**Rasa : Katu**  
**Vipak : Madhur**  
**Veerya : Ushna**

**Properties** : Laghu, Snigdha

**Action** : on Dosh - Kaphavataghna, Vatanaloman, Sama-Pittanashak
Kamukata : Deepan, Pachan, Grahi, Rochan, Shoolaghna, Vibandahara (Srotoshudhikar), Vrushya, Truptighna, Amapachak, Swarya, Malasangrahaka, Hridya, Sheetprashaman, Krimighna, Shothaghna, Shirovirechana.


Chemical Composition :

- Moisture - 10.9 %, Protein 15.4 %
- Fibers 7.2 %, Starch 5.3 %, Oxides - 0.6 %
- Volatline Oil - 1-2.5 % (Especially tubercles with bark)
- Volatile Oil (Oil of Ginger) - Zingiberenc - 35.6 % and Zingiberol Pungent active principle - Oleo-resin (gingerin) - 6.5 % (Gingerol, Shogaol, Zingerone etc.)
"PANCHAKOL"

After discussing Dravyaguna i.e., properties and actions of each drug of Panchakol, let us see the properties and actions of "Panchakol" as a whole group.

Definitions:

- पिप्पली पिप्पलीमूल चव्य चित्रक नागरे |
  एकाक्र मिश्रितेष्यि : पंचकोलमूलचायते ॥
  (श. 2.पंचकोल - १)

- पिप्पली चव्य विभवारा पिप्पलीमूल रिचाके ।
  पंचकोल इति रच्यात । ॥
  (श. म. ६/४३)

A compound of five drugs viz "Pippali (Piper longum - fruit), Pippalinool (Piper longum - root), Chavya (Piper retrofractum - stem), Chitrak (Plumbago zeylanica-root), Nagar (Zingiber officinale Rox - rhizome)" in equal quantity is known as Panchakol.

Properties and Actions:

- गुलामजीवसनां हृदयं कर्नातरम |
  -(अं ह. स. ६/१६७)

- पिप्पली पिप्पलीमूल चव्य चित्रक श्रवणवर ।
  शाकाशामातिः व्याक्यस्ति | ॥
  -(च. सू. २/१७)

- पिप्पलिवत : कपार : वर्तिकां वाजिलाहुयी : ।
  विहुआदिपालो गुलमशुलत्त्व क्षामापावल : ॥
  -(श. शा. ३८/२२)

- पंचकोलं इतिहारं रचयं पाण्डवीपनम् |
  आशाव प्रीति गुलमध्य शूल हलोरपरम | -(श. म. ६/१४)
Rasa :  Katu
Vipak :  Katu [ Except Pippali and Nagar - as Madhur.]
Veerya :  Ushna [ Except Pippali as Anushnasheet]
Properties :  Laghu, Teekshna, Rooksha
   [ Except Pippali and Nagar as Snigdha]
Action : on dosh - Kaphavata - nashak, Vatanulomak, slight
Pittaprakopak, [ Tridoshagha - by Yoga-Ratnakar]
Karmukata - Deepan, Pachan, Rochan, Grahi, Krimighna,
Shoolaghna, Swarya, Medohar, Truptighna,
Sheetaprashaman, Vibandhahara [Srotoshuddhikar]
Shothaghna, Swedajan. 
Diseases : Agnimandya, Ajecrna, Adhman, Anah, Trupti, Shool,
Gulma, Plecha, Udar, Koshtha-gata -Vat. Kas, Shwas,
Pratishyay, Aruchi Medorog, Shoth, Amarat, Sandhigata -
Vata, Jvar.

Properties and related actions are shown in the following table:-

<table>
<thead>
<tr>
<th>Properties</th>
<th>Related Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>* Ushna, Snigdha</td>
<td>Vata-Shaman, Vatanuloman Deepan Shoolaghna</td>
</tr>
<tr>
<td>* Ushna, Teekshna</td>
<td>Agnideepan, Amapachan, Kaphanashan, Vibardhahara, Lekhan</td>
</tr>
<tr>
<td>* Katu, Ruksha</td>
<td>Pachan, Medohar, Krimighna</td>
</tr>
<tr>
<td>* Katu, Ushna</td>
<td>Pachan, Medohar, Krimighna</td>
</tr>
<tr>
<td>* Katu-Vipak, Ushna Rooksha</td>
<td>Grahi, Deepan</td>
</tr>
<tr>
<td>* Katu, Rasa</td>
<td>Rochan</td>
</tr>
<tr>
<td>* Ushna</td>
<td>Shataprashaman, Sankochhar Swedar.</td>
</tr>
</tbody>
</table>

308
We have already discussed the important role of Vatadosh in pathogenesis of Shool in production as well as transmission of shool. As we have discussed previously, there are two types of Vata-prakop viz.

1) Dhatukshay janya Vataprakop & 2) Margavarodhajanya Vataprakop.

We have already discussed the properties of Panchakol. Now we will discuss the Sampraptibhang a of Shool according to causative factor.

1) Shool produced by Margavarodhajanya Vataprakop:

Panchakol is mainly very useful in Shool produced by Margavarodhajanya Vataprakop. Margavarodh in the pathway of Vayu is caused by Kaph, Ama etc. and properties appraised to responsible for Margavarodh are Guru, Mand, Sheeta, Panchhiti, Atisanidh. While Panchakol is exactly opposite of these properties i.e. Lithu, Teekshna, Ushna, Rooksha, Vishada. Due to these properties Panchakol acts as Vibandhahara i.e. Srotovishidhuan, hence destroys the Margavarodh. Sankoch due to increased Sheet Guna of Vayu is also cause of Margavarodh. Here Ushna Guna of Panchakol dilets the pathway of Vayu (Vikasi Karma) hence destroys the Margavarodh. Ushna Guna of Panchakol acts as Deepan & Pachan; digests the excess Ama & Kled in pathway of Vayu & destroys the Margavarodh. Ushna, Teekshna, Rukshna & Lithu properties of Panchakol eliminate kapha-prakop and hence destroy the Margavarodh.

Thus after removal of obstruction, Ushna Guna of Panchakol acts as Vatanulomak and treats the Vata Dosh also.

2) Shool produced by Dhatukshayajanya Vataprakop:

Though lesser than Margavarodhajanya Vataprakop; this type of shool also get relieved by using Panchakol. This happens due to Madhur Vipak of Pippali and Nagar; Anushnasheet Veerya of Pippali, Yogavahita of Pippali and Snidgha Guna of Pippali and Nagar. Pippali is stated as Rasayan. Pippali and Nagar both are Vrushya; hence useful in Shool produced by Dhatukshayajanya Vataprakop. All the drugs of Panchakol are having Ushna Guna and so that act as Deepan & Pachan. Deepan means increase the activity of Jatharagni; as well as Dhatvagni. Dhatvagni Mandya is one of the causes of Dhatukshaya (as in the Samprapti of Prameha). It increases quantity of Ama & Kled; which saturate in the srotas and
becomes a cause of Margavardha also. Once Sookshma Pachan is hampered, Poshak Dhatvaush will not converted properly into Poshya Dhatu and then their will be Ditotdshaya [ as in Prameha - all the types of Prameh lately tend into Vataj Prameh ] Panchakol increases the Dhatwani and corrects the Sookshme Pachen and hence become useful in this type of pain. Pachan and Vibandhahar activites of Panchakol are also useful to correct the Sookshma Pachan

3) **Pittaja shool**: Panchakol is much useful in shool produced by Sama- Pitta; when Pitta is aggravated by Drava and Amla Guna, Dravatva of Sama-pitta is get absorbed by Ushna Guna of Panchakol (especially due to Nagar) this action to knows as Grahi. While if the shool is due to Niram Pitta; there is no or very little use of Panchakol. Madhur Vipak of Nagar & Pippali is useful to minimise the Niram Pitta ( upto some extent)

4) **Kaphaj shool**: Katu, Ushna, Laghu, Rooksha & Teekshna; these properties of Panchakol act against Madhur, Sheet Guru, Snigdha & Munda properties of Kaphadosh - Hence Panchakol is quite useful in Kaphaja Shool.

5) **Amaja Shool**: Due to properties like Katu, Ushna, Teekshna & Laghu; Panchakol acts as Deepan & Pachan; hence digests the Ama & becomes useful in Amaja Shool

6) **Krimij Shool**: Due to properties like Katu, Ushna & Teekshna; all the five drugs of Panchakol group act as Krimighna & hence useful in Krimij Shool.

7) **Vata Sangaja Shool**: Due to Ushna & Snigdha properties, Panchakol acts as Vatanumolan; hence useful in Vata-Sangaja shool like Adhman, Anah, Atop, Koshthagata Vat etc.

As each drug of Panchakol group is stated as Shoolaghna ; the synergesic action of combination of all these five drugs should be more potensised.

Considering all these points it can be concluded that Panchakol may widely be used as broad spectrum Shoolaghna while it may be contraindicated in Shool produced by Niram Pitta, or side effects of the Panchakol like Pittaparakop may be minimised by Madhur Vipak of Pippali, Pippalinmool and Nagar & Anushnasheet Veerya of Pippali; while Rookshatva may be minimised by Snigdha Guna of Pippali and Nagar.
Yavagoo is a dietary recipe (like cereal porridge or gruel) prepared from rice. That's why it is described in Samhita under the heading of Krutanna Varga.

Base of Yavagoo, i.e., from which Yavagoo is prepared, is known as Sadhan dravya. Sadhan dravya are of two types: Aharya dravya as rice, sesame, black gram etc. and Aushadhraavya like Panchakol, Bila, Vidanga etc. This Sadhan dravya is well-digested in water. There are different opinions about the proportion of Sandha dravya & water as

- यवागू : पद्मुङ्गे संसिध्या विलासवा ||
  (यो. २. सिद्धान्त पाकगुण / ८)

- साध्यं चाँद्यपलं नश्र्यं च चतुः भक्तपलं जले।
  तत्कन्नुः श्रविष्टेन यवागूः साधयेत ध्रुवायम् ||
  (शासं. म. खे. १६१)

- अनं पंचमुङ्गे साध्यं विलेपी च चतुः गुणे।
  मण्डक्षूद्विधंशुगुणे यवागूः पद्मुङ्गेः संसिध्या ||
  (च. सू. २/१७. ख.)

- विवाट्यवितज्ञतिणां रहस साधयेत।
  तथा पदक्षूद्विधेन यवगूर्धशक्तने वा ||
  (का खिल ४/१२)

- यवागूरिविधिधिप्रोक्तम मण्ड पेया विलेप्यति।
  .......... यवागूर्धशु सिद्धा स्वादी ।
  (अ. आ. ६/२४. २७ विद्यो.)

Yavagoo is prepared from Aharya dravya only is excellent dietary but less medicinal value. But if it is added with Aushadhi dravya, it has wide medicinal value; where Yavagoo acts as a vehicle for those medicines. That's why Charak had described 28 different Yavagoo useful in so many diseases in 2nd Adhyay of Sootras than. Panchakol Yavagoo - a seedling of this thesis - is one of those 28 Yavagoo. For this research project Yavagoo is prepared as per reference of Chakradatta and Yogaratnakar; as quoted above. Quantity of Aharya dravya, Aushadhi dravya it not clearly mentioned anywhere in Samhita; but we can get it in Chakradatta's commentary on Charak Samhita. He says -
It means though the exact quantity of Sudhan dravya and Aushadhi dravya is not mentioned, it depends upon the state of Doshapradhanaya, Agni, Bala, Vaya, Vyadhi, Koshtha and Dravya used to make Yavagoo. According to Vruddha Vaidya Vyavahar i.e. traditional concept Sudhan-dravya for Yavagoo is of two types: Rasapradhan i.e. Aharya dravya and Veeryapradhan i.e. Aushadhi - dravya.

The quantity of Ahar dravya is 4 Pal. i.e. 16 Tola or approximately 160 gms. While Aushadhi dravya is divided into 3 types according to Veerya viz Teekshna Veerya, Madhyam Veerya and Mrudu Veerya & their quantities are 1 Karsh (about 10 gms.), 1/2 Pal (about 20 gms.) and 1 Pal (about 40 gms.). But according to Aguivesh the quantity of Aushadhi draya like Pippal, Shunthi etc., should be 1/2 Karsh (i.e. about 5 gms.) i.e. 1 kol. According to Soodshastra, quantity of water should be 6 times more to that of total quantity of Tandul Bhesaja Samuday. i.e. Ahar dravya & Aushadhi dravya togetherly. According to Sushrut the quantity of rice for Yavagoo should be 1/4 of the normal consumption of rice by that individual. Here it is mentioned that Yavagoo is Swalpa - tardula. There are 2 meanings of word Swalpa-tandula. Swalpa means coarse grinded rice or quantity of rice in Yavagoo is lesser than that of Moda, Peaya & Vilepi. According to Dalhan, Yavagoo means Peya....
Properties & actions of **Yavagoo** :-

1. **Panchakol Yavagoo**
   - Used for treatment group of 20 pts.
   - Prepared by following method:

2. **Plain Yavagoo**
Sadhan Dravya -

a) Aharya Dravya - Coarse grinded rice - 30 Gms.

b) Aushadhi Dravya - Coarse grinded Panchakool Choorna - 5 gms, Water - 210 ml.

2) Plain Yavagoo: Used for "Gr- C" - a control group of 17 Pts. Yavagoo was prepared by following method

- Sadhan Draya - Coarse grinded rice - 30 Gms.

Water 180 ml