CHAPTER 1

Disease Review
1. Introduction:

Spermatorrhea has not been dealt as a separate disease in Modern medicine. Description of similar disease is also not found in Ayurveda. Only in appendix of Madhav Nidan\(^1\) edited by Yadunandan Upadhyay and in Ayurved Siksha\(^2\) by Amrit Lal Gupta we come across a disease named “Shukrameha” which is tends to approximate but exactly not spermatorrhea. It indicates that in classical period prevalency of this disease was either low or absent due to the then’s social, bountifulness of natural plant nutrients, economical and spiritual atmosphere of the world. Ancient sages considered Shukra as the important humoral factor of the individual. Spermatorrhea is a disease which is directly involve with the action of Shukra. Hence in this context discussion of Shukra is indispensable.

2. Shukra at a Glance:

Caraka\(^3\) describes in details the origin of Shukra in 15th Chapter of Chikitsa Sthanam of his Samhita.

रसात्रत्वं ततो मांसं मांसाम्बेदततोहस्त्यं च।
अस्यं माङ्गा तत: शुक्रं शुक्राकुर्मवर्षादिक।

च.च.ि. ९५/९६

Exactly similar versions have been given by other classical author such as sushruta\(^4\), Sarangadhara\(^5\) and Bhabprakash\(^6\) etc.

In brief resume, it is important to secure a proper appreciation of the pattern of distribution of nutrients to tissue elements, present all over the body, both in regard to space and time vis à vis the three well-known
hypothesis viz. a) **Kshira dadhi nyaya** b) **Kedari-kulya nyaya** and c) **Kale kopotha nyaya**:

The kshira dadhi nyaya, also spoken of as Sarvatma parinama paksha or the doctrine of enmasse transformation, seeks to explain the classical concept that rakta is formed by the transformation of rasa; mamsa by the transformation of rakta; medas by the transformation of mamsa; asthi by the transformation of medas; majja by the transformation of asthi and sukra by the transformation of majja, in a kind of consecutive metamorphosis i.e. the enmasse transformation of the previous dhatu into the next higher one, as illustrated below:

The nutrient substrate absorbed from intestine: **Rasa → Rakta → Mamsa → Medas → Asthi → Majja → Shukra.**

The final product of this kind of parinama – the **shukra**, according to this hypothesis, is responsible for the causation of pregnancy.

The entire process of transformation of the nutrients derived from food into several tissue elements, visualised by this doctrine, has been illustrated with the analogy of the sourcing of milk, in which, the entire milk substrate is transformed into curd. Pressing this analogy, it has been pointed out that the entire rasa substrate is transformed into rakta; the rakta, in its turn, is similarly metamorphosed into mamsa; the mamsa, thus formed is then converted to medas; medas likewise, evolves as asthi; asthi is then changed into majja and majja is transformed as shukra, which latter is responsible for causing pregnancy.

Reputed Ayurvedic personality **Vaidya Bhagwan Dash** nicely represented transformation of dhatus from different Ahara drabyas in a schematic form which shown in **Chart 1.**
Chart 1. Showing Different Steps Aharadravyas undergo to be transformed into Dhatu
Maharshi Agnibesh\(^9\) quoted:

\[
\text{रस इति यथा वर्ण सर्पिलाम तिले यथा।}
\text{सर्वभागात तेरे शुक्र संस्कर्णे तथा।}
\]

च.चि. २(४)/४६

As juice of sugarcane exists in the entire sugarcane plant, Ghee remains in whole of curd, oil remains in every parts of the sesame seed, shukra remains all over the body which has the sensation of touch.

In this context *sushruta*\(^{10}\) stated:

\[
\text{यथा पदासि सर्पिलसु गुड़स्वर्णस्य यथा।}
\text{शरीरस्य तथा शुक्रगृणै विकारितवर्त:।}
\]

सु.श. ४/२९

As ghee in milk, sugar in sugarcane, shukra pervades the entire body of an individual.

In Ayurveda shukra has been considered as a very important constituent of an organism. *Agnibesh* mentioned that generation is maintained by shukra.

*Sushruta*\(^{11}\) deals shukra with special emphasis. In 15th Chapter of sutra sthana he mentioned that shukra promotes sexual stability, valour and courageousness, happiness, strength, pleasure and causes production of better progeny.

\[
\text{शुक्र धैर्यं चक्रं प्रीति देहवलं हर्षं बीजार्थं।}
\]

सु.शू. ५५/७

In sutra sthana 7th chapter of *Astanga Hridaya, Vagbhatta*\(^{12}\) stated:

\[
\text{स्मृतिमेधा आयु आरोग्यपु: इत्त्रिय यशो वल्ले।}
\text{अधिकार यन्तरसो भवति स्नीषु संयता।।}
\]

A.ह.शू. ७५७६
Good memory, intelligence, longevity, health, nourishment, acuity of sense organs, reputation, strength and slow ageing are achieved by restoration of shukra as a result of controlled sexual indulgence.

We get several references of the shukra in Laghutrayee. Bhabaprakash stated:

शुक्र सौम्य सिते शिङ्गं वलुप्पितकं स्मृतम्
गर्भविज्ञ वपूःसारे जीवविशेषं जन्मः॥ (भ.ग.प.पृ.खंड.ु.म भाग)

In Brihatrayee, we find the specific characters of pure and healthy shukra have been clearly mentioned.

Caraka stated:

शिङ्गं घनं पित्रिलं च मधुरं चाविदाहि चाँ
रेतं: शुद्धं विजानियाच्छवेतं संशिक्षानविभम्
च.चि: २०/७४५

The shukra which is unctuous, dense, slimy, sweet, non-irritating and white (transparent) like a crystal is to be known as pure or normal.

Sushruta mentioned:

स्फटिकांग्रं वदं शिङ्गं मधुरं मधुशांगि च
शुक्रमिष्टति केचित तेल श्रीरनितं तथा॥
सुश्र. २/१२

Shukra which is transparent like crystal, fluid, glossy, sweet and emits the smell of honey; or like oil or honey in appearance, should be considered healthy.

Vagbhatta opined:

शुक्रं शुकलं गुरूं शिङ्गं मधुरं बहलं बहुः
पृथमाशिकतं तेलांम सद्गुर्जयं आर्तं धुः॥
अ.ह.शा. ९/१७
Shukra which is white in colour, heavy, unctuous, sweet, thick, more in quantity, resembling either ghee, honey or sesame oil is suitable for producing the embryo.

*Sara* means essence, excellence, purity, exuberance or predominance. It refers to tissue vitality or the constitutional peculiarity which means strength as well as this stable and enduring aspect of the constitution.

The human body is made up of seven dhatus. All persons will not have the same proportion, excellence or purity of each one of these dhatus. There is variation to a considerable degree. So human beings have been grouped into eight saras (including satwa sara) depending upon the excellence, purity, predominance of each one of the dhatus and manas.

In connection of shukra Ayurvedic classic nicely described its distinctive features which are given below.

Persons having the excellence of Shukra dhatu are characterised by gentleness, calm and dignified look, cheerfulness, sexually potent, strong and good rows of teeth, heavy buttocks, dazzling appearance, fair complexion and voice. Such persons are loved by woman. They are strong and endowed with happiness, power, health, wealth, honour and children.

Ancient Indian sages laid great stress on maintenance of optimum level of shukra. They described clinical features of diminution of Shukra.

In *Caraka Samhita* we find the following features of diminution of shukra.

In diminution of shukra the person suffers from weakness, dryness of mouth, pallor, lassitude, exertion, impotency and non-ejaculation of shukra.
Sushruta also mentioned the features of diminution of shukra. These are i) pain in the penis and testis ii) lack of power for sexual intercourse iii) delayed emission of shukra and iv) the emitted matter consisting of a small quantity of shukra marked with shreds of blood.

Caraka do not forget to mentioned the causes of diminution of shukra.

The causes of diminution of shukra are due to old age, worry, some diseases like emaciation, exertion, fasting, excessive indulgence with woman etc. He also mentioned the causative factors of ejaculation of shukra from the body.

According to Caraka eight different factors are responsible for ejaculation of shukra. These are Harsa (excitement), tarsa (passionate desire), Saratva (fluidity of shukra), paichhilya (sliminess), gouraba (heaviness), anubhava (atomicity), Pravana bhava (the tendency to flow out) and drutata of vayu (the force of vayu).

Ayurvedic Classics are nicely described the symptoms of promotion of shukra. These are:

i) Ati pravritti - pramana vriddhi (Quantitative increase and frequent emissions of shukra; premature ejaculation also)

ii) Ati Stri kamata (Increased sexual desire)

iii) Shukrasmari (Formation of seminal stones)
According to Ayurveda Shukra doshas are eight types.

Sarangadhar\textsuperscript{19} mentioned eight types of Shukra doshas-vataja, pittaja, kaphaja, kunapa, puyabha, kshina, granthila and malabha shukra. These are shown in \textbf{Chart 2}.

\textbf{Chart 2. Schematic representation of Eight types of Shukra doshas}
3. Pomposity of Shukra in Ancient Literatures:

In Rig veda, kama is the God of desire, and as such he is said to be the cause of creation. Kama has been magnified as supreme God in Atharba veda and there he has been identified as Agni which is pivot of diseases. Eros, the God of love has been described as the creator of the Universe in the Greek mythology. He has been considered as the son of Dharma (Justice) and Sraddha (Regard) or Lakshmi (Fortune). He is also styled as “Self existent” or "un-born". Rati, the daughter of Daksha is his wife. Kama is handsome to look, rides on a parrot, his bow is made up of sugarcane, bowstring made up of bees and the tip of the arrow is flowery. A fish has been displayed on his banner20.

This idea in ancient India obviously focus on importance of shukra.

Ancient Indians considered this subject with higher magnitude. Kama and Rati is indispensable factors in the context of shukra.

The famous legend of Chyavana has been vividly described in Veda21, Satapatha Brahmana22, Upanishad and Mahabharata23 etc. He was a famous sage, the son of Bhrigu. He could not give up his desires even in advanced age. He married the young and beautiful Sukanya, the daughter of Saryati. His sexual indulgence with his second wife Sukanya resulted in further loss of shukra leaving him shattered and dicomposed condition. He regained his youthful vigour and beauty by judicious medication of Ashvini Kumaras. In reality shukra is not only the means of producing children but also essential to regulate the physiological functions of the body of an organism.

In Atharva Veda it is mentioned that healthy progeny may be produced by pure shukra. So, for restoring of normalcy in shukra various types of treatment had been instructed.
Tantric alchemical ideas grow around the male female symbolism. According to Tantra a person may achieve the higher attainments by following the rules and conducts laid down in the Tantras. Indirectly Tantrica ideas advocates promotion and preservation of shukra which regulates the life.

Bhishma, the great hero of famous Indian epic Mahabharata\textsuperscript{24}, preserved shukra by his unswerving determination of infrangible Brahmacarya. For this he achieved unlimited span of life and enabled to deviate Lord Srikrishna from his stern determination.

Lakshana, the valiant warrior of another great Indian epic Ramayana\textsuperscript{25}, acquired the power of killing Indrajit, an warrior of great valour by preserving shukra through unabated Brahmacarya of twelve years.

Astanga Ayurved i.e., Ayurveda has eight specialized branches. The seventh branch i.e., Rasayana which deals the maintenance of youth and prevention of old age. The eighth branch Vajikarana which deals with the measures calculated for increasing sexual potency. Vajikarana is widely restored to among those afflicted with sexual debility, sexual inadequacy or poor quality of shukra.

So, Ayurveda has laid great stress on the subject concerned with Shukra.

4. Physiology of Male Sexual Function\textsuperscript{26}

Normal male sexual function requires coordinated regulation of the following physiologic events: libido or sexual desire, sustained penile tumescence or erection, ejaculation, orgasm, and detumescence.

4.1 Libido

Libido is generated in the central nervous system and stimulated by a variety of visual, tactile, imaginative, auditory, and gustatory stimuli. These stimuli
are received in a number of cortical and subcortical regions of the brain, including the limbic system, and relayed via the preoptic - anterior hypothalamic area to spinal cord centers that control penile erection. Therefore, disturbances in libido are nearly always accompanied by disturbed erectile function or impotence.

Libido is regulated primarily by psychic factors and the sex steroid milieu, in particular serum testosterone concentrations. Thus, psychological disturbances of all degrees (from stress to major psychiatric illnesses), central nervous system lesions, drugs that alter brain function, and androgen deficiency may disturb normal libido and potency. Occasionally, castrated males maintain sexual desire and erectile function for long periods, suggesting that the requirement for androgens may be quite variable.

4.2 Erection

Erections are generated by two separate but synergistic mechanisms, one involving sensory stimulation of the genitalia, mediated through a spinal reflex arc (reflexogenic erections), and another involving psychogenic stimuli from higher brain centers (psychogenic erections). In reflexogenic erections, afferent sensory fibers from the penis travel in the pudendal nerve to the sacral spinal erection center (S2 to S4). Efferent parasympathetic fibers arising from this center travel in the nervi erigentes and innervate the blood vessels of the corpora cavernosa of the penis; efferent somatic fibers traveling in the pudendal nerve innervate the pelvic floor (ischiocavernosus and bulbocavernosus) muscles. Sympathetic fibers originating in the thoracolumbar spinal erection center (T12 to L1) innervate the muscles of the vas deferens, accessory sex glands, and internal sphincter of the bladder. In psychogenic erections, projections from higher brain centers descend in the lateral spinal columns and regulate both the thoracolumbar and sacral spinal erection centers.
Penile erectile tissue consists of paired corpora cavernosa on the dorsum of the penis and the corpus spongiosum that surrounds the urethra and forms the glans penis. The corpora are composed of spongelike, interconnected trabecular spaces lined by vascular epithelium and smooth muscle and are surrounded by a thick fibrous sheath, the tunica albuginea. Activation of the spinal erection centers results in relaxation of the penile smooth muscle and vasodilation of the cavernosal arteries (branches of the internal pudendal arteries). These actions are mediated by cholinergic, β-adrenergic, and peptidergic (e.g., vasoactive intestinal peptide) receptors. As a result, blood flow into the trabecular spaces of the corpora is increased, causing engorgement of the penis (tumescence). Expansion of the trabecular walls against the tunica albuginea compresses subtunical venules and impedes venous outflow, resulting in sustained tumescence, i.e., an erection.

Failure to achieve an adequate erection or impotence has many potential etiologies, including androgen deficiency, central and peripheral nervous system diseases, vascular disorders, and penile abnormalities.

4.3 Ejaculation

Ejaculation is stimulated by sympathetic nervous system activation, which results in contractions of the vas deferens and accessory sex glands and emission of seminal fluid into the urethra. Emission is followed by reflex rhythmic contractions of the ischiocavernosus and bulbocavernosus muscles and expulsion of semen from the urethra, i.e., ejaculation. Like erection, the ejaculatory reflex is under considerable control by higher cerebral centers. Sympathetic activation also stimulates closure of the internal urethral sphincter, thereby preventing retrograde ejaculation.

Premature ejaculation is usually due to performance anxiety or an emotional disorder and rarely has an organic etiology. Retrograde ejaculation
into the bladder usually occurs in patients with sympathetic neuropathy (e.g., with diabetes) or after bladder neck surgery. Reduced or absent ejaculation may occur with androgen deficiency, sympatholytic drugs, sympathectomy, or extensive retroperitoneal/pelvic surgery.

4.4. Orgasm

Orgasm, the pleasurable sensation that usually accompanies ejaculation, is primarily a central nervous system-mediated phenomenon that, under normal circumstances, is influenced by ascending pathways associated with ejaculation. However, orgasm can occur in the absence of erection or ejaculation (e.g., with temporal lobe lesions). Conversely, normal libido, erection, and ejaculation can occur without orgasm; this is nearly always due to a psychological disorder.

4.5. Detumescence

Detumescence results from contraction of the penile smooth muscle and α-adrenergic vasoconstriction of the cavernosal arteries, which reduce arterial blood flow into the penis. As a result, the trabecular spaces of the corpora collapse, sub tunical venules are decompressed, venous outflow is increased, and the penis becomes flaccid. In many cases, premature detumescence may contribute to the pathophysiology of impotence (e.g., venous leak or incompetence). Failure of detumescence, priapism, is often painful and unrelated to sexual intercourse. It is commonly idiopathic in etiology but may be associated with spinal cord injury, sickle cell disease, chronic myelogenous leukemia, and intracorporal injection of vasodilatory substances used in the treatment of impotence.

4.6. The basic sexual cycle:

The basic sexual cycle is controlled by reflex mechanisms organized within the lumbosacral segments of the spinal cord. A summary of the events during erection and ejaculation is presented in Table 1.
The initial event of the sexual response during the excitement phase is penile erection, which is followed by glandular emission and ejaculation.

**Table 1. Control of erection and ejaculation by the nervous system of man**

<table>
<thead>
<tr>
<th>Physiological parameter</th>
<th>Afferent</th>
<th>Efferent</th>
<th>Central pathway</th>
<th>Changes in the affected organ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Erection</td>
<td>Pudendal nerve</td>
<td>Sacral parasympathetic</td>
<td>Sacral spinal reflex</td>
<td>Dilatation of arterial supply to corpus cavernosum and corpus spongiosum</td>
</tr>
<tr>
<td>Reflexogenic</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychogenic</td>
<td>Visual, auditory, tactile, olfactory</td>
<td>Lumbar sympathetic</td>
<td>Supraspinal origin Sacral parasympathetic</td>
<td></td>
</tr>
<tr>
<td>Glandular secretion</td>
<td>Pudendal nerve</td>
<td>Sacral parasympathetic</td>
<td>Sacral spinal reflex</td>
<td>Seminal vesicles and prostate</td>
</tr>
<tr>
<td>Seminal secretion</td>
<td>Pudendal nerve</td>
<td>Lumbar sympathetic</td>
<td>Intersegmental spinal reflex (sacrolumbar)</td>
<td>Contraction of vas deferens, ampulla, seminal vesicles, prostate, closure of bladder neck</td>
</tr>
<tr>
<td>Seminal emission</td>
<td>Pudendal nerve</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ejaculation</td>
<td>Pudendal nerve</td>
<td>Somatic efferents in pudendal nerve</td>
<td>Sacral spine reflex</td>
<td>Rhythmic contractions of bulbocavernosus and ischiocavernosus muscles</td>
</tr>
</tbody>
</table>

**4.7 Mechanism of Penile erection**

The mechanism of Penile erection with figure nicely represented by Stanley G. Koreman in the chapter Male Impotence in Endocrinology are shown in **Fig. 1**.

The numerous interconnected lacunar spaces of the corpora cavernosa are represented as a single space with the trabeculae making up its wall. In the flaccid state (upper panel), helicine artery and cavernosal artery resistance minimize corporal blood flow, and venous drainage is prompt. In the erect state (lower panel), arterial and sinusoidal
smooth-muscle relaxation increases arterial flow, expanding the sinusoids against the unyielding tunical wall. Compression of the subtunical venous plexus inhibits cavernosal drainage, resulting in a high intracavernosal pressure and little blood flow.

5. Nidan (Aetiology)\textsuperscript{1,2}

Masterbation and other animadverted ways of discharging semen.

6. Rupa (Clinical features)\textsuperscript{1,2}:

   i) Involuntary discharge of semen without orgasm due to touch, look even imagination and reflection of the female subject.

   ii) Unnecessary seminal emission due to the perverted thinking.

   iii) Seminal emission due to the copulation in dream about female subject.

   iv) Patients are generally fearfull, timid, irritant by trifle matters.

   v) Dream of dreadful objects.

   vi) Loss of concentration.

   vii) Seminal emission 3 to 4 times daily without any real cause.

   viii) Seminal emission simply by increased abdominal pressure or jerking of the body.

   ix) Irritability

   x) Adamancy

   xi) In chronic stage of this disease loss of erection and sexual inadequacy develop.

   xii) Patients are subjected to depression.

   xiii) They may develop suicidal tendency.
7. Upadrava (Complication)\textsuperscript{1,2}:

The possible complications are:

i) Black spot on lower eye lid

ii) Complexion becomes muddy.

iii) Mental and physical weakness

iv) Susceptibility to diseases

v) Sexual inadequacy

vi) Infertility

vii) Mental abnormality

viii) Indigestion

ix) Constipation

x) Scanty urine

xi) Nocturnal emission

xii) Loss of vision

xiii) Malaise

xiv) Loss of enthusiasm.

xv) Restlessness

xvi) Flatulent dyspepsia

xvii) Headache

xviii) Palpitation

8. Vyadhi Vyabachheda (Differential Diagnosis):

8.1. Shukrameha:

20 types of Prameha have been described in the Ayurvedic literatures; among them 4 types Vataja Prameha, 6 types Pittaja prameha and 10 types Kaphaja prameha. Sukrameha is one of ten types of kaphaja prameha.
Ayurvedic scholars diagnosed this disease by the feature - passage of semen like urine or urine mixed with semen frequently.

Mahamohopadhyaya Gananath Sen^29 also confused when he mentioned sukrameha as spermatorrhea.

8.2. Spermaturia : The condition will be called as spermaturia when spermatozoa will be present in the urine.

8.3. Albuminuria : It is also another pathological condition when albumin will be present in the urine.

8.4. Glycosuria: When glucose will be present in the urine.

8.5. Phosphaturia : A condition in which there is an excessive excretion of phosphates in the urine.

8.6. Klaibya^30 : भासार्तः स्त्रियंनान्तः मोचसुधाल्या चेतितः।
ल्लानशिष्णूशन नित्यिर्यः स्यादेततु क्तृत्वा विलक्षणमुः।
च.चि. 30/1956.

In klaibya the following symptoms are present.

a) Sexual inadequacy

b) No seminal discharge

c) Sexual act may be associated with dyspnœa and perspiration.

9. Vyadhi vinischcaya (Diagnosis) : Spermatorrhea

10. Sadhyasadhyatta (Prognosis) :

Prognosis of this disease is not available in any Ayurvedic literatures till now. In this series we have found that the disease spermatorrhea can be cured by proper management in early stage. Very chronic cases either may be cured or rarely may be cured by great obstacles. So, prognosis of this disease is not uniformly favourable.
11. Management

11.1. Prophylaxis:

11.1.1. Swasthavritta (Personal hygiene): The main aim and objects of Ayurveda are to promotion and preservation of health and strength in healthy and treatment of disease in ailing and afflicted. In Ayurveda average span of human life fixed at hundred years and he live a healthy life.

Ayurveda advocates that a man must follow the prescribed regimen of life for attainment full longevity with vigour and vitality.

Prescribed regimen of life as advocated by Brihatrayee are summarised below:

11.1.1.1. Dinacarya (Daily routine): In cases of Dinacarya (daily routine) Ayurveda instructs to get up early in morning before sunrise, cleaning of tongue and eyes, collyrium to the eyes, use of nasal drops, mouth gargles, medicated smoke, betel-chewing, oil massage, physical exercise, bath, diet and sleep etc., in appropriate time with their specific quality and quantity.

11.1.1.2. Ritucarya (Regimen of life in different seasons): Ayurveda considers reaction of tridosas due to the changes in the external environment for alteration in successive seasons in terms of caya, prokopa and prasama. The main object of it to adopt and overcome the stresses produced by seasonal variations. The year is divided into six ritus (seasons) commencing with Magha masha. These are Shishira ritu (Magha and Phalguna masha i.e., middle of January to middle of March), Vasanta ritu (Caitra and Baishakha masha i.e., middle of March to middle of May), Grishma ritu (Jyaistha and Asadha masha i.e. middle of May to middle of July), Barsha ritu (Shrabana and Bhadra masha i.e., middle of July to middle of September), Sarat ritu (Asvina and Kartika masha i.e., middle of September to middle of November)
and Hemanta ritu (Agrahayana and Pausha masha i.e., middle of November to middle of January). Ritusandhi (transitional period) requires to adopts with the altered new seasons. In Ayurveda Ahara (diet), Vihara (mode of living) and Carya (routine living) have been vividly instructed for prophylaxis of disease, decay and death.

11.1.1.2.1. Ahara, Vihara and Ahitas in different Ritus:

HEMANTA AND SISIRA RITU

Ahara: Sweet, sour, salty food and drinks, cow's milk, fat, oil, sugarcane juice, hot water, meat of aquatic and marshy animals, madira and sidhu types of wine and honey.

Vihara: Oil massage, oil application on head, warm water bath, unction with aguru, kesara, heavy and warm garments, adequate sexual indulgence.

Ahitas: Avoid light food and drinks, exposure to cold, avoid pungent, bitter and astringent food, gruel, avoid day sleep.

VASANTA RITU

Ahara: Pungent, bitter and astringent food and drinks, barley, wheat, easily digestable food, luke warm water, drinking of sidhu and mrdvika types of wine, Asaua and Arista.

Vihara: Emesis, smoking, exercise, warm water bath, body smear with aguru and chandana, women enjoyment in blossomed gardens.

Ahitas: Avoid heavy, oily, sour, sweet diets, curd, cold food and drinks, avoid day sleep.

GRISHMA RITU

Ahara: Sweet, cold, oily food and drinks. ghee, milk, sali rice, alcohol in little quantity.

Vihara: Body smearing with chandana and aguru, cold water bath, day sleep, light and thin dress, walking in cool gardens and bank of rivers.
Ahitas: Avoid salt, sour, pungent and hot foods, avoid over exposure to sun, alcoholic drinks and sexual intercourse.

VARSHA RITU

Ahara: Very light and easily digestable food, sour, salty and unctuous diet, old barley, wheat, sali rice, honey, vegetable soup, boiled well or pond water, madhvi and arista.

Vihara: Emesis, purgation, oily enema, oil massage, clean cotton clothes, fragrant garlands, humidity and moisture free environment and habitat.

Ahitas: Avoid excessive exercise and sex, avoid day sleep and drinking of river water.

SARAT RITU

Ahara: Sweet, bitter, astringent, light, cold food and drinks, easily digestable foods, rice, barley, sugar, ghee, intake of ghee prepared with bitter medicines.

Vihara: Purgation, blood letting, clean and fine clothes, anointing the body with paste of chandana, usira and karpura, moon light and Hamsodaka (clear and beneficial as nectar) for the purpose of bathing, drinking and swimming.

Ahitas: Avoid alkaline, salt preparations, curd, fat, oily food and drinks, avoid meat of aquatic and marshy animals, sun bath and oil massage, avoid strong liquor, day sleep and eastern breeze.

Table 2. Relationship of dosha with season.

<table>
<thead>
<tr>
<th>Dosha</th>
<th>Chaya</th>
<th>Prakopa</th>
<th>Prasama</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vata</td>
<td>Grishma</td>
<td>Varsha</td>
<td>Sarat</td>
</tr>
<tr>
<td>Pitta</td>
<td>Varsha</td>
<td>Sarat</td>
<td>Hemanta</td>
</tr>
<tr>
<td>Kapha</td>
<td>Sisira</td>
<td>Vasanta</td>
<td>Grishma</td>
</tr>
</tbody>
</table>

Table 3. Relationship of Purificatory measures of dosha with season

- **Vata**: Vasti karma in Varsha ritu
- **Pitta**: Virechana karma in Sarat ritu
- **Kapha**: Vamana karma in Vasanta ritu
11.1.1.3. Sadvritta (Socio-behavioural conducts) : According to Ayurveda good and happy life needs appropriate socio-behavioural conduct. Abhighata (stress) is the cause of diseases. Now-a-days psychosocial stress is an important factor for genesis of large number of diseases. Spirituality regulates our life as remote control. Indian spirituality teaches to differentiate the right and wrong. It influences us to realise truth. Realisation or truth is the best achievement of Indian life.

Caraka has given a comprehensive account of socio-behavioural conducts e.g. everybody should respect God, preceptors, teachers, saints as well as superiors. He should show his pleasing behaviour. He should give up his negative qualities, lead a moral life, control his evil habits, build good character, possess the consciousness of dharma and adharma. He must cultivate virtues, developed patience, destroy impurities etc. Ancient Indian Rishis were well known of the fact that defective interpersonal relationship begets psychological stress which in its turn produces difference types of psychosomatic ailments. They also emphasised wrong judgement is the principal cause of stress in our everyday life. Wrong activities produce anxiety, worries, disappointment, resentment etc. which may act as the aetiology of different ailments. Psycho-social stresses should be avoided as a result of which body and mind may be free from physical and mental diseases.

11.1.2. Application of Rasayana and Vajikarana :

11.1.2.1. Rasayana means Vitalizer. Drug, diet, conduct and measures which leads to prevent ageing, to impart longivity, to give immunity and body
resistance, to develop mental faculties, to impart vitality, lustre of the body and to prevent diseases. It leads to the replacement of dhatus and enlivens not only the body but also the mind.

अच्छायश्चौक्षाख्त्व सिन्धुश्च रथा दुमः।
अनिश्चत्वाच कर्त्तव्यम् नरः॥

च.चि. २/१/१६

A person without progeny is like a solitary tree which cannot give shade, devoid of fruits and pleasing smell.

11.1.2.2. Vajikarana means viriligenic medication. It yeilds a person desirous of better progeny and a pleasure conjugal life. It is noteworthy that India has always held fast the importence of Brahmacharya. Hence, Vajikarana therapy should not be used simply to exploit sex for sensual pleasure. It is specially meant to give birth healthy, tenacious sperm and ovum to bear a healthy child. It is needless to mention that sexual appetite has also occupied more important place in human life, though it should be regulated as well as sublimated to achieve noble purposes of life. Ayurveda is chiefly concerned with the ways by which a life may be good or bad, happy or unhappy. The life will be happy when it will be undisturbed neither by physical nor by mental diseases.

11.1.3. Practice of Yoga : Yoga is the way of cessation of all mental fluctuation. It directly acts on the cerebral cortex either by reducing or increasing the activity. It restores the functions of cerebral cortex to its normalcy. Yoga is the original contribution of Indian sages. It is a very important measure for the prevention and control of psychosomatic diseases. Yoga makes the body fit and strong, the mind pure and fresh. For the development of a person he must require pure blood, strong bone marrow and nerves, unerring knowledge and pure semen. All these can be achieved by yoga. Brahmacarya gives vigour and pure semen in the body produces celestial lustre or electrical power. It is found that in healthy normal individual
a regular practice of yoga brings the neurohumoral pattern to normalcy. Besides, it improves the functional efficacy of all the organs and tissues by improving their microcirculation. Yoga is not only for promotion of mental health in common people but also it is essential for the management of different psychic and psychosomatic ailments.

11.1.4. Acara Rasayana: Literal meaning of Acara is conduct. The conduct which serves as Rasayana is known as Acara Rasayana. In this connection Ayurveda advocates Sadacara or good conduct.

Caraka\textsuperscript{32} says:

\begin{quote}
तत्त्वादिनमक्रोधे निवृत्तं मधमीहुर्तात्र।
अहिंसकमनायास्य प्रशान्तं भ्रियवादिनमू॥
जपशीच्छर्यां धीरं ज्ञानित्यं तपस्विनमू॥
देवगीन्द्राङ्गाणाच्युतां गुरुव्याधिः मृत्यु॥
आनुस्मर्यां नित्यं नित्यं कारणवेदिनमू॥
सम्पाद्यवेणिस्मित्यं कृष्णावासिनमू॥
देशक्रल प्रमाणिण्यं युक्तिमयमहकृतमू॥
शस्त्राचारर्यै शैवमयात्मप्रवर्तनीयमू॥
उपसितारं वृद्धानामातिकरानं जिततस्तनामू॥
धर्मशास्त्रपरं विधानरं नित्यसाधयनमू॥
गुरूः तस्मिन नाम: प्रयुग्तके यो रसायनमू॥
रसायनगुणानु संवाहं वशीकर्णं स सममुन्ते॥
चित्र.9 (२)/३०-३६
\end{quote}

One who speaks the truth, who is free from anger, who abstains from alcohol and sexual congress, hurts no one, avoids over-strain, is tranquil of heart, fair spoken, is devoted to repetition of holy chants and to cleanliness, is endowed with understanding given to alms-giving, diligent in spiritual endeavour; delights in reverencing the Gods, cows, Bramhins, teachers, seniors and elders; is attached to non-violence, and is always compassionate, moderate and balanced in his waking and sleeping; is given to regular taking of milk and ghee; is conversant with science of clime, season and dosage,
versed in propriety, devoid of egotism, blameless of conduct, given to wholesome eating, spiritual in temperament and attached to elders and men who are believers and self controlled and devoted to scriptural texts; such a one should be known as enjoying the benefits of vitalization therapy constantly. If one who is endowed with all these qualities make use of vitalization therapy, that man will reap all the benefits of vitalization which have been described above.

"No man who has not rid himself of the evils, both of mind and body, beginning with the gross ones, can ever expect to come by the benefits resulting from vitalization."

11.1.5. Samshodhan therapy (Purification therapy) : Charaka stated an emetic once a week, laxative once a month, venesection twice a year as prophylaxis measures.

11.2. Curative :

11.2.1. Removal of aetiological factors.

11.2.2. Elimination of any mental cause responsible for genesis and maintenance of the disease.

11.2.3. Avoidance of any addiction like Ganja opium, alcohol, heroin etc.

11.2.4. Bad habits like masturbation must be given up.

11.2.5. Samshodhana therapy (Internal Purification) : It is essential for elimination of accumulated doshas. Usual preparatory procedures (purbakarma) viz. Snehana and Swedana, principals purificatory measures (Pradhan karma) viz. Vaman, virechan etc. and the post purification therapy (Paschat karma) should be done by Samsarjana karma.

Vagbhhatta instructed by an indirect reference for vasti after emesis and purgation if vitiated sukra is associated.
11.2.6. Yuktivyapasraya Chikitsa (Therapy based on reasoning) :
Administration of Sukrajanak (Spermatopoietic), Prajasthapak (Fertility promoter), Sangasthapak (Restorative of consciousness) and Medhya (Intellect promoter) dravya.

According to charaka the following ten drugs are **Sukrajanak** (Spermatopoietics).

Jeevakshobhakakolasee kolkolani bhoparni maaaparni
Meadakshobhajitalakoolini idit dshamani shukjanmanani bhavita.

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These are: **Jivaka** (Microstylis wasclichii Linn.), **Rishavak** (Microstylis muscifera Ridley), **Kakoli** (Roscoea purpurea Royle), **Kshirakakoli** (Roscoea purpurea Royle), **Mudgaparni** (Phaseolus trilobus Ait), **Masaparni** (Teramnus labialis Spreng), **Meda** (Polygonatum cirrhijolium wall.), **Vriddharuha** (Asparagus racemosus wild), **Jatila** (Nardostachys jatamansi DC.) and **Kulinga** (Rhus succedentia).

Caraka stated the following ten drugs as **Prajasthapak** (fertility promoters).

Aindri (Citrullus colocynthis Schrad.), **Brahmi** (Bacopa monnieri Linn.), **Satavirya** (cynodon dactylon Pers.), **Sahasravirya** (a variety of cynodon dactylon Pers.), **Amogha** (Emblica officinalis Gaertn.), **Avyatha** (Tinospora cordifolia Miers.), **Asiva** (Terminalia chebula Linn.), **Arista** (Picrorhiza Kurroa Royle.), **Vatyapuspi** (Sida rhombifolia) and **Visvakseenakanta** (Callicarpa macrophylla vahl.).
According to Caraka Sangasthapak dravyas (restorative of consciousness) are:

हिंदुकौटियारिमेशा स्त्रिया चौरक चय-स्थायोलोगी
जैनिकपल्लुपाष्यकोरहिंय इति दश्शेमाणि संज्ञायोपनामि भविति।

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Hingu (Ferula narthex Boiss.), Kaitarya (Murraya koenigii spreng.),
Arimeda (a variety of Acacia Catechu Willd.), Vaca (Acorus calamus Linn.),
Coraka (Angelica glauca Edgw.), Vayastha (Bacopa monnieri Linn.),
Golomi (a variety of Acorus calamus Linn.), Jatila (Nardostachys jotamansi DC),
Palankasa (Commiphora mukul Eng.) and Asokarohini (Picrorhiza Kurroa Royle).

According to Sushruta Medhayushkamiya dravyas are: Sveta Vakuchi (Psoralea corylifolia Linn.), Citraka (Plumbago Zeylanica Linn.),
Mandukparni (Centella asiatica Linn.), Brahmi (Bacopa monnieri Linn.),
Vaca (Acorus calamus Linn.), Haimabati (Iris germanica Linn.), Bilva (Aegle marmelos Corr.),
Nilotpala (Nymphaea stellata wild.), Swarna (Gold),
Vasa (Adhatoda vasica Nees), Priyangu (Callicarpa macrophylla vahl.),
Putranjibak (Putranjiva roxburghii), Yasthimadhu (Glycyrrhiza glabra Linn.).

11.2.7. Daivavyapashraya Chikitsa (Spiritual therapy): Method of spiritual therapy goes back to the hoary past and finds mention in Rigveda and Atharvaveda. According to Ayurveda the divine or unseen element, the Adrishta and Purushakar (human effort) are together involved in health and disease. When Adrishta is weaker, Purushakar can certainly counteract it; in any case purushakar is able to minimize the severity of the disease cause by divinepowers.

11.2.7.1. Incantation (Mantra): It is one of the methods of spiritual therapy. Treatment of diseases by appropriate mantras in specific condition, is
essential where Adrishta is overpowering the human effort. It is mentioned in Ayurveda that sacred herbs\textsuperscript{34} (Aushadhi) can cure disease by acting with human effort to win the Adrishta. We also come across such references like the root of Sahadebi tied in head can cure the fever as well as kakjangha root can cause sedation.

11.2.7.2. Mani (precious Gems) : From the dawn of civilization India has been attracted by Adhibhoutika beauty along with that of Adhyatmika and Adhidaivika. Its (Mani or Gems) Adhibhoutika importences with that of Adhyatmika attracted foreigner. Atharva veda has laid stress on different aspects of Gems. Reputations of the Gems has been realised from Gupta period when country was at her Zenith towards civilization. Kalidas, the Shakespear of India to describe chastity of Shakuntala used the term 'Anabiddha Ratna' (untouched gems). He also used the word 'Ananta Ratna Prabhaba' (with endless glow) to describe splendour of Himalayas in his famous poetical work 'Kumar Sambhav'. At that time famous personality Barahamihir contributed one chapter i.e., Ratna parikshadhyaya in his famous work "Brihat Samhita". Some believe that from that period wearing of Gems has been introduced considering their good and bad effects on the body.

11.2.7.3. Mangala (Propitiatory rites) : It means to achieve success in ceremony. The measures which are auspicious indicating good fortune. Here propitiatory rites which includes spiritual ceremony to eradicate disease.

11.2.7.4. Bali (Auspicious offerings) : In Rig Veda the word 'Bali' used to indicate auspicious oblations. Any offering to certain God or spirit is known as bali. It also means gift of animate or inanimate object to God or spirit for pleasing them. In Rig veda it is a great devotional act.
11.2.7.5. Upahar (Gift) : Upahar is complimentary gift to a God to reach at the goal. It is a type of religious service to draw attention of supernatural power.

11.2.7.6. Homa (Sacrifices) : Homa is a religious act for making an oblation to the God and Godess by casting clarified butter into the fire. It is also one type of sacrifice to serve the purpose.

11.2.7.7. Niyama (Religious observance) : Niyama is one of the subservients of concentration. It comprises i) purification ii) contentment iii) austerity iv) inaudible mutterings and v) persevering devotion to the Lord. Observance of the spiritual rules are clearly instructed in almost all ancient Indian spiritual literatures.

11.2.7.8. Prayaschitta (Ceremonial penitence) : Prayaschitta is a synonym of Chikitsa (treatment) in Ayurveda. It means atonement. This type of spiritual act removes the fear of disease from the mind of a patient. It is calculated for ceremonial penitence.

11.2.7.9. Upavasa (Fasts) : It means to abide in a state of abstinence from food. Ayurveda laid great stress on fasting towards prophylaxis and cure of the different diseases.

11.2.7.10. Swastayayana (Prostrations) : Chanting of auspicious hymns is known as Swastayayana. It is a religious service performed for fighting against the evil powers, remission of sins and recovery from illness.

11.2.7.11. Pranipata-gamana (Pilgrimages) : Pranipata-gamana includes travelling of holy places. It can drive out all negative thoughts of sickness, weakness and ill health. Besides, it restores confidence in the patients mind, influence the sub-conscious mind of the patient, stimulate it and correct the effect of abnormal mental conditions.
11.2.8. Satwavajaya Chikitsa (Psychotherapy): Ayurved is basically a system of treatment with Psychosomatic orientation almost in all aspects. **Sattavavajaya** method of treatment is the real measure for prevention and cure of mental diseases. According to Ayurved derangement of understanding (dhi), will (dhriti) and memory (Smriti) is the volitional transgression (Prajnaparadha) which is the chief causative factor of mental illness. Eternal and non-eternal, good and evil, right and wrong will be mistaken when understanding (dhi) is deranged. Mind can not be restrained from harmful rather undesirable objects when will (dhriti) will be deranged. Mind cannot memorise the memorable things and is clouded with passion and delusion when memory will be deranged. Hence, to restore true understanding, control of mind and the normal state of memory etc. Constitutes the important part of treatment in mental illness. Sattavavajaya method of treatment rectifies deranged understanding, will as well as memory of mentally abnormal subjects. In brief withdrawal of mind from the harmful objects is the basic principle of psychic therapy. Ayurved further instruct that when mental abnormality due to the emotional disorders like *kama*, *bhaya*, *krodha*, *harsha*, *irsha* and *lobha*, it should be treated by producing opposite type of emotions e.g. *kama* by producing *krodha* and vice versa.

11.2.9. Rasayana and Vajikarana therapy: Modern research works reveal that Rasayana and Vajikarana drugs promotes not only physical but also mental well being. So in the treatment of spermatorrhea rasayana and vajikarana drugs usually yields better result.

It is also discussed in prophylaxis.