SUMMARY

1. Collection of plant Achyranthus aspera (Panchang of plant) in the month of November to January because it is the peak season of this plants.

2. The collected plant was dried in the shade for about 15 days.

3. The collected dried plant was burnt in a container and a ash was prepared.

4. Ash was dissloved in water and kept for one day and on second day the supernatant fluid was taken away and evapo rated to obtained Kshar.

5. The prepared Kshar was sent to Sidhi pharmacy, Lalitpur (U.P.) for the preparation of injections of Apamarg kshar.

6. Sidhi pharmacy again purified Kshar and injections were prepared as per the procedure for injection given in the Pharmacopoeia of India (Vol. 2 (A-P) published in 1985).

7. Concentrations was kept at 50 mg/ml each ampoule is of 2 ml.
8. Thus prepared ampoules were sent to the Author for further laboratory analysis and clinical trials.

9. The laboratory study was conducted at Government Ayurved and Unani pharmacy laboratory, Nanded and other relevant laboratories.

a) The concentration of Kshar per ml was checked in the laboratory.

b) The qualitative analysis confirmed.

c) The chemical analysis of kshar and its physical properties were examined.

d) The toxicity of the drugs was ruled out by injecting it to rats and rabbits intramuscularly and intravenously.

e) The histopathological examinations of organs of rabbit was carried out at Government Medical College, Histopathology Department, Nanded.
CLINICAL STUDY :

The clinical study was conducted at Government Ayurvedic College, Nanded.

1. For clinical study special case paper is prepared which included all points mentioned in ayurveda as well as in the modern medical science.

2. Diagnosis of patient was done with the help of digital and proctoscopic examination.

3. Essential laboratory investigations i.e. Hb %, Urine for albumin and sugar etc. were carried out in all patients.

4. Patients were admitted one day prior to operation to perform preoperative measures.

5. The examination of patients was done as per case paper and recorded in it.

6. Through examination particularly cardio vascular and respiratory system and other systemic examinations.
7. Following investigation were performed routinely:

- Blood - Hb %
- Urine - Albumin and sugar
- B.T. & C.T. -

And in exceptional cases.

- BSL, BUL, ECG, ESR, Haemogram, and LFT etc.

8. Pre operative measures.

- Shaving
- Enema
- Laxative or Purgative according to kostha of patients.
- Written consent was obtained from all the patients.
- Injection T.T. 0.5 ml I/M.
- Test dose of APK injection.
- Injection Atropine 0.6 mg. I/M.

ON THE DAY OF OPERATION:

- Enema in the morning - with soap water.
- Injection Atropine 0.6 mg. I/M. 30 minutes prior to Inj. APK.
- Written consent (If not taken earlier).
Patient is taken in the operation theatre.
Position of the patient for the operation.
Rt. lateral or Lt. lateral as per position of the internal haemorrhoids. (Previously we were using Lithotomy position).
The operative field cleaned with dettol or Betadine solution.
Drapping of the part done.

The trolley having all essential instruments for injection APK taken (i.e. Inj. APK, 10 ml glass syringes, spinal needles of diff. sizes, xylocaine jelly, Proctoscopes long straight artery forcep, gauze, cotton and kidney tray etc.) All the above instruments were sterilized by a autoclaving.

The assistant takes xylocaine jelly over the index finger and applies to anal part so that the cite of piles gets local anaesthesia and also it will produce lubrication for to introduce the proctoscope.

The proctoscopic examination must be performed by assistant surgeon. The surgeon, assistant and the nurse must wear autoclaved gloves and gown, cap and mask.

After introducing proctoscope obturator was removed and piles visualised. The big size piles were selected for injection APK.
The injection solution taken in syringe as per size of piles injected in the base of the vein submucously. Before injecting the solution the plunger is withdrawn to see that it is not in the vein. If it is in the vein then the needle is inserted in different place or at the same place but not in the vein. Preferably inject the solution in one puncture to avoid leakage of solution. No pain is suffered during piercing the needle but slight discomfort after injecting the solution because of fullness around the haemorrhoids.

Do not pierce deep in to the pile mass or in the sphincter otherwise patient will get severe pain.

In some patients if piles are congested and veins tortous and large and if we pierce the vein there is severe bleeding. In that case withdraw the needle and stop the procedure and control bleeding with the help of roller gauze kept in the anal canal for 4 to 6 hours. The bleeding will stop. The operative procedure is postponed for 7 to 8 days.

To give inj. APK large size proctoscope is required to visualize the piles easily but it should not cause discomfort to the patient.
The light source is again a problem but it can be solved by using head lamp.

Also good assistant is required to hold a proctoscope firmly but by practice one need not have an assistant.

The position of patient may be right lateral or left lateral as per position of internal haemorrhoids. Lithotomy give discomfort to the patient because of side bars and the edge of the table.

The needle should be long i.e. spinal because it should traverse the length of proctoscope. The bore of spinal needle should be 22, 23, 24 number. If we use large bore needle it will damage the veins and there may be profuse bleeding. Solution of injection being water soluble can easily pass through the needle.

After introducing the solution in the piles the colour of the piles becomes pink red to white and if proctoscope is removed then it prolapses from the anal orifice.

POST OPERATIVE :

The swelling of the piles outside the anal orifice remains for 4 to 6 hours and then gradually reduces.
The reddish coloured discharge present upto 6 hours and then reduces to nil in 24 hours.

The mucoid discharge may be present after 3rd day and may remain upto 5th day. In the postoperative care local examination of anal region was carried out without proctoscope. The examination was swelling, discharge, bleeding, and redness etc. As well as general examination of the patient such as TPR, BP, RS and CVS every 2 hourly for the first 6 hours and then 6 hourly for 12 hours was carried out.

After 24 hours every day local examination as well as general examination was performed for 7 days. On 3rd day, 5th day and 7th day gentle proctoscopic examination was performed to see the local effects of injection APK over the piles and other tissues.

The site of injection is found to be inflammed, swollen and there is slight mucoid discharge present after 3rd day which remained upto 5th day. Patient is afebrile and there is mild discomfort. There is no problem for defaecation. Liquid diet was started after 3 hours after the injection like tea, coffee etc. and semisolid food was allowed on the same day evening. Normal diet was allowed from the next day morning.
Special diet was advised particularly 'Sasneha Shaak','Yoosh', 'Mamsa Ras','Takra', 'Soorana','Go-ghrut','Shali Shashthik' and 'Navneet'. Apathyakara food stuffs like 'Vidahi','Abhishshyandi', and in vihar 'Vegavarodh','Utkatasan', and 'Pravas' was not allowed.

Along with the above mentioned diet anuloman dravyas like Gandharva Haritaki was given on the date of injection therapy in the evening and thereafter every day for 15 days.

On the second day patients were given Sitz baths and gandharva haritaki every night as per individual requirements. Other drugs employed were antianaemics and general tonics. Drugs were also employed for associated conditions like tenasmus, chronic colitis etc.

The patients can start their routine work after 2nd or the 3rd day. Sedentary work is allowed on the same day.

Uptill now no patient required any extra analgesic or sedatives post operatively. No antibiotics or no antiinflammatory agents were required in the present study.

The dose of injections was decided by 'prakruti','Age','Sex','Diet','size' and 'gravity of the piles'.
and general tolerance of the patient. This was from 2 to 6 ml at one time for 2 or 3 occasions.

In some patients two small sized piles injected in the same sitting. Whereas in some patients the injections were not continued because of bleeding or the inflammation.

In the procedure we have come across different types of patients of different age groups, sex and occupations etc.

We have also noted with interest that hereditary plays its role as a couple of patients were brother and sister. Few cases turned out to be cancer rectum.

Usually the patients were discharged on second day. Many patients were discharged on the same day evening.

The follow up was carried out every day for about a week (7 days) and every week for another one month and every fortnightly for 2 months.

There were no complications in our study. The condition of all the patients was always very good and cheerful.

The effects of injection APK over the piles recorded clinically
as well as photographically.

Obtained data was classified and tabulated. On the basis of classification and tabulated information suitable conclusions were drawn.