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## DIFFERENT TREATMENT MODALITIES IN ANORECTAL DISEASES - A REVIEW ON AYURVEDIC AND MODERN ASPECT

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#### ABSTRACT

In the field of surgery the commonest problem faced by patient is anorectal diseases like Piles, Fissure, and Fistula. There are many options available for treatment of these diseases. But one should consider particular treatment in particular situation. But due to lack of knowledge patients many times undergo wrong treatment and worsen disease. So in this article a focus is drawn on various treatments described in Ayurvedic *Samhitas* as well as Modern sciences in order to come to certain conclusion for decision making for treatment of specific condition of these diseases. **Key Words:** Anorectal surgeries, treatment of *Arsha*, Treatment of Fistula, *Ksharsutra*, Choice of treatment in Anorectal diseases

#### **INTRODUCTION:**

Anorectal diseases like Piles, fissure, fistula are common in human being due to his erect posture as well has habitat. Sushruta had also mentioned Arsha (Piles) as Arivat Pranan Shrunoti. i.e. harmful like an enemy. So these are the conditions to be treated with much care in order to cure the patient. So there are various treatment modalities described by Ayurveda as well as modern science. But while treating various conditions in these diseases one should consider a particular modality in particular situation. Considering anorectal diseases mainly three-four conditions are elaborated in Samhitas like Arsha, Parikartika and Bhagandar. While in modern science also same pathologies are describe at anorectal region like - Piles - resembling Arsha, Fissure in Ano-resembling Parikartika and Fistula in Ano resembling Bhagandar. All these are different entities and require different modalities for treatment. But lack of this awareness miss concepts, patients go for wrong treatment and face many complications. So in this article proper treatment described in Ayurveda and Modern science is elaborated with comparing basic principles of both methods. This article will be helpful for determiner particular treatment option in specific Anorectal Diseases.

## Management of Anorectal diseases by Ayurvedic methods:

a) Arsha (Piles): Vagbhata says that Arsha is swelling in anal canal which obstructs anal canal and troubling patient like enemy. <sup>[1]</sup> Sushruta has told that *Arsha* is a diseases in which vitiated Doshas along with Rakta (Blood) collects in the major vessels in body (Pradhan Dhamanis) and goes towards anal canal and create a swelling (Ankur). [2] While considering pathophysiology Sushruta says that Arsha is common in patients who have Mandagni (Poor digestive power). So in treatment also Sushruta has mention various treatments in which Bheshaja (Oral Medicine) is the first line of treatment.

Sushruta has mentioned four types of treatments in *Arsha* (Piles)<sup>[3]</sup>.

- 1. Bheshaja (Oral Medicines)
- 2. Kshar (Alkali)
- 3. Agni (Heat-Cauterization)

- 4. *Shastra* (Operative)
- 1. Treatment by Bheshaja:- Medicinal treatment should be given in piles which are new, having less involvement of Doshas, Having less symptoms. While treating Arsha by medicines or treatment should be arranged considering Agni (i.e. Digestion) of patient. Vagbhata has told that checking Agni (Digestion) of patient is very important in Arsha, Atisar and Grahani diseases as these are inter dependent diseases.<sup>[4]</sup> Also one should differentiate bleeding and non-bleeding piles. Vagbhata says that in non-bleeding piles Bhallataka (Aconitum Ferox) is important drug while in bleeding piles Vatsak (Holearhena Antidysentrica) is the main drug. Takra (Butter Milk) is the drug of choice in all kind of Arsha (Piles) in order to normalize vitiated Doshas and also to increase bala (Power) of patient. <sup>[5]</sup> Sushruta has advised Panchakarma treatment in Vata dosha pradhan Arsha, Virehan in Pitta pradhan Arsha and Rrkta Prdhan Arsha. Shunthi (Zingiber officinale) and Kulith (Macrotyloma Uniflorum) in Kapha Pradhan Arsha.<sup>[6]</sup> Charaka has given basic line of treatment in 14th Adhaya of CharAkasambrita Abhyanga. as. Swedan, Dhuma, Avagaha, Lepa, Raktamokshana, Deepan, Pachana, Anulo*mana*, *Sarpi*, *Basti*, *Takra*, etc., drugs.<sup>[7]</sup>
- Treatment by Kshar:- In piles which are soft, wide and deep should be treated by Kshar. <sup>[8]</sup> Also Sushruta has told to use Kshar in the Arshas which are Vatakaphaja and Pitta Raktja. Kshar karma should be done in patient who is Balwan (having good strength). After giving proper position to patient one should introduce Arshoyantra (resembling Proctoscope) and apply Kshar. After applying Kshar wait up to counting 100 (Vakshatmatra) and close Ashoyarika the color of Arsha should be like ripen Syzygium (Pakwajambuphala). When this sign is achieved, wash pile mass

with *kanji* (Acidic in nature) or curd. After this treatment patient should be advised to take proper diet and treatment should be repeated after seven days if required.<sup>[9]</sup>

- 3. Treatment by *Agni*:- Agni *Chikitsa* (Treatment with heat cauterization) is advised in piles which are rough, immovable, big and hard. <sup>[10]</sup> Also *Arsha* which are *Vata Kapha Pradhan* should be treated with *Agni Karma*.
- 4. Treatment by *Shastra:- Shastra Karma Chikitsa* (Operative treatment) should be done in piles which are having small pedicle (*Tanumoola*), Elevated (*Vchritani*). Sushruta has mentioned to excise such piles with the help of instrument and should be cauterized immediately.<sup>[13]</sup>

b) Parikartika(Fissure in Ano): Parikartika itself denotes the cutting pain .Though now a days *Parikartika* is separate disease but in the history it was mentioned a complication of some other disease or some Ayuredic procedures like Basti. Kashyap has described Parikartika as complication in pregnancy.<sup>[12]</sup> Sushruta mentioned Parikartika as a complication of one of the Panchakarma treatment -Basti<sup>[13]</sup> Sashruta doesn't mention directly Parikartika disease but he described a disease resembling it as Kshataguda while describing Netra Vyapad (complication of instrument of Basti)in Sushruta Chiktsasthan 36/6. <sup>[14]</sup> considering treatment of *Parikartika* the main objective of treatment is to relieve pain, which provides relaxation of Sphincter. Sushruta has advised to treat this condition same as wound management mentioned in Sadyakshta -vidi (Treatment of traumatic injury)<sup>[15]</sup> Kashyapa has given detailed medicinal treatment of this diseases. He says oral medicines should be prepared by Madhuka (Glycyrrhiza Glabra) Kantakari Surattense) Shwadaunshtra (Solanum (Tribulus Terrestirs) etc. according to Dasha Pradhanya.

c) Bhagandar (Fistula in Ano): Sushruta has described Bhagandar disease like a disease in which there is Daran (deformity) of pubis (Bhag), Guda (Anus) and Bati. Vagbhata says in Bhagandar there is pustule or swelling formation near anus within periphery of two fingers. In Purrarroop of Bhagander Bhagandri Pildka (perianal abscess) is seen which should be treated first as first eleven types of treatments described in Shashtra Upakrama in the management of Vrana (Sixty types of treatment in management of wound)<sup>[16]</sup> Yoga Rtnakar has described various treatments for Bhagandari Pidaka as Raktamokshana (Bloodletting), Aganikarma (cauterization) and various types of Lepa.(local applications). Sushruta has described detailed procedure of Ksharsutra Vidhi while describing Visarpa Nadi Adhava Stana Rog Chikitsitam of Chikitsasthan.<sup>[17]</sup> Sushruta told to find direction of Fistula with the help of Eshani (probe) and after finding direction apply a thread which is incorporated with Kshar. then tie this thread. This procedure should be repeated till the track is fully cut<sup>[18]</sup> In case of multiple fistulae at anal canal (Shataponak) Sushrula has advised not cut all fistulae at a time but keep some fistulae intact to prevent large wound which will be difficult to heal. For this purpose four types of incisions are told - Ardhalanglak, Langlak, Sarvatobhadrak and Gotirthak. <sup>[19]</sup>. Discharging fistulae are to be cauterized or *Kshar* to be applied on *Stravi* (Discharging) fistulae. If there is pain at site of operative Anutail (oil) should be applied.<sup>[20]</sup>

## B) Management of Anorectal diseases by Modern Science:

a) **Piles:** Modern Medicine Sciences categories piles as external and internal. Internal piles are covered by mucosa membrane while external hemorrhoids are covered by skin. Internal Hemorrhoids are further classified in four stages according to severely

First Degree- hemorrhoids does not come out.

Third Degree-hemorrhoids come out only during defecation and not return by themselves but need to be replaced manually and then they stay reduced. Fourth Degree- The hemorrhoids that are permanently prolapsed. At this stage great discomfort is complained of with feeling of heaviness in the rectum.<sup>[21]</sup>

Treatment options involves mainly two - methods

a) Conservative or non operative method- This adapted when hemorrhoids are secondary to other disorders like constipation are secondary to given laxatives, topical cream application.<sup>[22]</sup>. Conservative treatment of hemorrhoids includes from dietary and life style modification and some of medicines.

- 1. Dietary and lifestyle modification- Since shearing action of passing hard stool on the anal mucosa may cause damage to the anal cushions and lead to symptomatic hemorrhoids, increasing intake of fibers or providing added bulk in the diet might help. Eliminate straining during defecation .fiber supplement reduced the risk of persisting symptoms and bleeding but did not improve the symptoms of prolapse, pain and itching. Medicines like calcium Dobesilate are also believed to be effective in management of first degree hemorrhoids to some extent.
- 2. Injection Therapy-This is treatment of choice for first degree hemorrhoids and also useful for early second degree hemorrhoids. The treatment includes giving injection 5% phenol in Almond oil (3-5ml) in upper and of hemorrhoid above level of anoretal ring. This injection causes fibrous tissue reaction in the submucosa of anal canal.<sup>[23]</sup>
- 3. Elastic banding (Barron)- This is used for second degree Hemorrhoids. Hemorrhoid tissue is grasped and rubber band is applied to base of hemorrhoids using

an applicator. The tissue which is banded necrosis and sloughs away to leave a scar in the area of vascular pedicles

- 4. Cryosurgry- Liquid nitrogen or carbon dioxide is applied to the hemorrhoid .This produces a liquefactive necrosis of tissue. Problems with cryosurgery are poor control of depth of freezing and profuse seropurulent discharges.
- 5. Haemorrhidectomy-The indications for Hemorrhidectomy are Third degree hemorrhoids. There are manly two types of hemorrhoidectomy.

a) Open Hemorrhidectomy (Milligan-Morgen)

b) Closed Hemorrhideclomy.<sup>[24]</sup>

- 6. Stapled Hemorrhidectomy- Stapled Hemorrhoidectomy was first described in 1995, Stapled Hemorrhoidectomy is one of the newer surgical technique for treating haemorrhoial artery ligation it has rapidly became the treatment of choice for third and fourth degree hemorrhoid. Since the surgery does not remove the hemorrhoids but rather the abnormally lax and expanded haemorrhoidal supporting tissue that has allowed the hemorrhoids to prolapse down, is tightened.
- b) Fistula in Ano: A fistula may first present as an acute abscess or at times simply as draining sinus that may irritate the perianal skin Management of fistula include gentle probing along the dentate line for internal opening following Goodsal's Rule. Methylene blue is useful to identify track. Drainage of primary intersphinctirc infection in all types of fistulas, well as the primary track across the external sphincter and secondary tracks within the anorectal fossa is important for superficial fistulas involving small quantities of sphincter muscle, primary fistulotomy is simple and fistulas involving greater than one fourth to placement should be preferred over primary fistulotomy. Seton placement -A seton of monofilament nylon tied loosely

around the fistulous track may be used to drain the trans- sphincter fistula .The seton may be removed 2to3 months later at which time the track may heal spontaneously.If not the track gradually over a few weeks and minimizes the sphincter defect and the risk of significant fecal incontinence. In rare circumstances with complex, deep or recurrent fistulas newer alternatives to fistulotomy are preferred to avoid the complication of fecal incontinence Fibrin glue injections of track and advancement flap closure of primary opening heal complex fistula.

c) Fissure in Ano: Treatment of fissure includes conservative management medical Therapy and Surgical management

a) Conservative management- Practice parameters from American society of colon and rectal surgeons state that conservative therapy is safe has few side effects and should usually be first step in therapy for all fissure types Breaking the cycle of hard stool, pain and spasm is primary aim of treatment by adequate fluid, fiber and if necessary stall softeners.

b) Medical Therapy- Mainly two topical agents, Nitrates and calcium channel blockers and one injectable agent, Botu-linum of fissure in Ano.

c) Glycerin Trinitrate (GTN)- Chemical Sphinctrotomy'' is the term used for medical management of fissure in Ano with GTN.Nitrates are metabolized by smooth muscle cells to release nitric oxide which is the Neurotransmitter mediating relaxation of internal anal sphincter muscle. The most common side effect of GTN are headache and hypotension A second probable drawback is tachyphylaxis.

d) Calcium channel Blockers- Calcium channel blockers prevent influx of calcium into smooth muscle cells, decreasing intracellular calcium and preventing smooth muscle contraction. Postural dizziness or an unanticipated drop in blood pressure is the problem seen with calcium channel blockers.

e) Botulinum A toxin Injection- Botulinum A toxin is a potent neurotoxin and when injected into internal anal sphincter, it produces a chemical denervation of motor end plates with subsequent decrease in resting anal pressure and improved perfusion. But it has also some side effects like temporary minor incontinence and urgency, cost is high, recurrence, unclear ideal location of injection. f) Surgical Management-

i) Manual dilatation of Anus- Once the first line of treatment for chronic anal fissure; manual dilatation in its original form is found to cause variable degrees of hear of sphincter muscle. The aim of procedure is to reduce sphincter tone.by controlled manual stretching of internal sphincter. This procedure is gradually being abandoned because it frequently produced an uncontrolled tearing of sphincter muscle which result in incontinence so sometimes balloon dilatation is preferred over manual dilatation in order to achieve controlled pressure.

ii) Lateral Internal Sphinctrotomy- Internal in sphinctrotomy was first described by Ersenhammer in 1995. It is performed by two methods- open or closed. In both methods internal anal sphincter fibers are divided laterally. This sphinctrotomy may cause incontinence in 0 to50% of patients.<sup>[25]</sup> Other complications are hematoma, abscess, formation recurrent ulcer formation and persistent mucus discharge.

## **DISCUSSION:**

Piles, fissure and fistula are the common diseases occurring at anal region and we come across many patients with one of above problem .Various treatments are available in present era for each of these condition. Each treatment is designed in order to achieve minimal complications and recurrence of the disease. As it is well known that recurrence of any of the above

disease is common so in this review article detailed study of various treatment modalities was done. An Ayurvedic view as well as modern view was studied. Now considering Arsha (Piles), Ayurveda science consider Arsha as a systemic disease so while giving treatment Sushruta and other Samhita have told importance of Agani (Jatharagni - digestive power) One should consider improvement of Agni (digestion) in order to treat piles and after Agnivardhan four types of treatments are described, Bheshaja (medicines, Kshar (Alkali), Agni (Heat) and Shastrakarma (Surgery). Sushruta has told last option of surgery for treatment if piles. Because according to Sushruta, piles is disease of Rakta dhatu, vitiated with Tridoshas and collected at Dhamanies (veins) at anal canal. While in modern science piles are considered as manly local entity and either local or surgical invention is the main treatment of piles .Modern science describes various treatments like conservative method in which mainly treating constipation is concentrated. Sclerotherapy and banding is the treatment where stopping of blood low in pile mass (dilated haemorrhoial veins) is achieved, which resembles Ksharsutra ligation at base of piles described by Sushruta. In cryosurgery freezing of pile tissue is desired. This treatment can be compared with Kshar application described Sushruta.

The second most commonly occurring disease at anal canal is fistula in Ano which is described in Ayurveda Samhitas as Bhagandar. In case fistula in ano, Sushruta has advised to treat fistula in early stage in order to prevent its progression. So Sushruta has advised medical treatment in Bhagandari Pidaka (Perineal abscess) and if it bursts one should treat it as Vrana (Shasthi Upkrama) (Wound management). One of the best treatment option described by Sushruta for Fistula in ano is Ksharsutra in which application of treated incorporated with *Kshar* is applied in Fistula track and replaced frequently in order to achieve cutting and spontaneous healing of track.

Whereas modern science also describes operative method like fistulotomy but with moderate risk of incontinence due to chances of cutting of sphincter. So in modern science also 'Seton' mentioned resembling Ksharsutra is described. Only the major difference is modern science described to use a monofilament thread which doesn't have any medicinal value whereas Ksharsutra described by Sushruta is having medicinal value too. So cutting and healing both can be achieved by Ksharsutra. Considering Fissure in Ano, Ayurveda science has not described it as separate disease but described as Parikartika with complication of some other diseases or procedures. Sushruta has mentioned mainly local treatment for Parikartika, resembling Vrana (Wound) management told in 'Sadyakshata Vyadhi'. The main principle of Ayurvedic treatment is to achieved sphincter relaxation and wound healing. Same principle are described in modern science also same, but beyond that additional treatment like use of Glycerin Trinitrates, calcium channel blockers Botulinum- A toxin injection are also described. But comparing complication or side effects of these options, user of any one of these is defiantly restricted.

## CONCLUSION

Decision for right option of treatment for anorectal diseases is very important in order to avoid complications and recurrence. Looking towards treatment option described by Ayurveda as well as modern science we can conclude that many of the principles for treatment Anorectal diseases like piles, fissure, and fistula are same. But considering, removing basic cause or break cycle of pathophysiology, Ayurveda *Samhita* has elaborated more options. So in order to achieve complete cure one should consider operative methods describes by modern science along with Ayurvedic treatment in order to achieve holistic approach.

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