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#### **Review Article**

# A CRITICAL STUDY OF CAUSES OF BLEEDING PER ANUM WITH SPECIAL REFERENCE TO ARSHA IN SUSHRUTA SAMHITA

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#### **ABSTRACT**

Ano-rectal disorders are on exponential growth in the population of mankind, with bleeding per anum as one of the main prodromal symptom. Just like the metabolic or lifestyle disorders namely diabetes mellitus, hypertension, ano-rectal disorders also owe their etiology to irregular & improper diet, sedentary lifestyle, prolonged sitting in inaccurate postures, improper bowel habits & also psychosocial factors. In Ayurveda, Sushruta has described it vividly in *Arsha nidanam* that those people suffering from *Mandagni* i.e., reduced digestive power which leads to *Vata* aggravation alone or in combination with other *Dosas* and manifests itself with symptoms like bleeding per anum, pain, irritation, discharge in the *Guda*. In modern science, excessive straining, increased abdominal pressure and hard stools are told to be the etiology of symptomatic haemorrhoids as these causes leads to increased venous engorgement of the haemorrhoidal plexus and cause of prolapse of haemorrhoidal tissue. Bleeding, thrombosis and symptomatic haemorrhoidal prolapse may result. Some of the anorectal disorders mentioned by Sushruta are *Arsha*, *Parikartika*, *Bhagandara*.

KEYWORDS: Mandagni, Arsha, Haemorrhoids, Guda, Sushruta Samhita.

## **INTRODUCTION**

Ano-rectal disorders are on high spin just as other metabolic disorders. Most patients suffering with these disorders do not come for medical advice at an early stage due to embarrassment which results in the advancement of the disease to a more complicated state. Thus the challenge lies onto the Ayurvedic physician receiving the disease status at a dilapidated condition. Sushruta has mentioned very vividly about the various Gudagatarogas amongst them it is Arsha where bleeding per Anum or Raktamishritpurisha comes as a major complaint. Acharva Sushruta has mentioned this disorder in the 'Asta Mahagada' (eight grave diseases).[1] Arsha occurs in the Guda region, which is a Sadyapranahara Marma (vital regions of the body). Thus management of Arsha Roga can be troublesome if ignored for a long duration.

#### The anatomical structure of Guda[2]

Guda is the lower rectum having length of four and half Angula, containing three folds namely Pravahini, Visarjini and Samvarini placed one above the other just like the conch shell from proximal to distal. These are situated one above the other at a distance of one and a half Angula from each other. The diameter of Valli is four Angula and one Angula is the width. Guda has the colour resembling the palate of elephant.

## The Physiology of Guda [3]

The Pravahini layer 'Pravahayatiitipravaham' means it causes downward movement and bears the faecal matter, Visarjini layer 'Visiryatvisargini' causes the sphincteric action allowing evacuation of stool, Samvarini layer 'Samvarinotiitisamvarni' meaning controlling the final act of evacuation.

# Blood Supply of Guda[4]

Guda is the root of Purishavaha Srotas. It has an external opening and one of the Bahirmukha Srotas. It has Dhamani (Arteries) and Siras (veins) as well. There are eight Siras present in the middle part of the Sroni (pelvis) which supply to the Guda and Medhra). There are two Dhamanis supplying Guda in downward direction.

In modern science, the rectum is 18-20cm in length. The rectum has three lateral curvatures: the upper and lower are convex to the right, and middle to the left. On the mucosal aspect, these three curves are marked by semi-circular folds (houston's valves). The part of the rectum that lies below the middle valve has a much wider diameter than the upper third and is known as the ampulla of the rectum.

The blood supply consists of the inferior, middle and superior rectal vessels. Although the lymphatic drainage follows the blood supply, the

principal route is upwards along the superior rectal vessels to the para –aortic nodes. [5]

## Classification of Arsha [6]

There are different opinions of Acharya regarding the classification of *Arsha*.

# On the basis of origin

- 1. Sahaja
- 2. Janmottarakalaja

## On the basis of the character of bleeding:

- 1. *Ardra (Sravi)* bleeding haemorrhoid due to vitiation of *Rakta* and *Pitta dosha*.
- 2. *Shuska* non-bleeding haemorrhoids due to vitiation of *Vata* and *Kapha dosha*.

# On the basis of prognosis

- 1. Sadhya (Curable)
- 2. Yapya (palliative)
- 3. Asadhya (Incurable)

**In Modern Science,** the classification of haemorrhoids is as: [7]

- 1. **External Haemorrhoids**: Located distal to the dentate line and are covered with anoderm.
- 2. **Internal haemorrhoids:** located proximal to the dentate line and covered by insensate ano rectal mucosa. Internal haemorrhoids may prolapse or bleed, but rarely become painful unless they develop thrombosis and necrosis (usually related to severe prolapse, incarceration, and strangulation).

# **Grading of internal haemorrhoids**

**First degree haemorrhoids:** it bulges into the anal canal and may prolapse beyond dentate line on straining.

**Second degree haemorrhoids:** it prolapses through the anus but reduces spontaneously.

**Third degree haemorrhoids:** prolapses through the anal canal and require manual reduction.

**Fourth degree haemorrhoids:** it prolapses and cannot be reduced manually and are at high risk conversion to gangrene or strangulation.

**Exo- Internal Haemorrhoids:** straddle the dentate line and have characteristics of both of external and internal haemorrhoids.

# Nidanof Haemorrhoid (Arsha) [8]

Persons indulging in improper consumption of incompatible substances (Jirna & Viruddhaahar), excessive irregular intake of food (Atyasan, Adhyasan), suppression of natural urges (Vegaavarodh), regimen which increases Vatadosha, prolonged straining for defecation, too much travelling, doing Asanas like Utkataasana.

In modern science, excessive straining, increased abdominal pressure and hard stools increase venous engorgement of the haemorrhoidal plexus and causes bleeding, thrombosis & prolapse of haemorrhoidal mass.

Portal hypertension increases the risk of haemorrhoidal bleeding because of the anastomosis between the portal venous system (middle &upper haemorrhoidal plexus) and the systemic venous system (inferior rectal plexuses). Thus haemorrhoid is no longer prevalent in patients with portal hypertension but also normal population. [9]

# Pathogenesis of Arsha (haemorrhoid): [10]

Nidan ↓ Agnimandya ↓

Vitiation of *Vata* alone or in combination of other *Dosas* along with *Rakta* 

Spreads throughout the body through *Dhamanis* 

Mainly *Purishavahinidhamini* and settles itself in the *Gudavallli* 

↓ Causes *Twaksankocha* ↓

Develops Mamsaankuras

Mamsaankuras become large with contact of Shitajala.

↓ Arsha

Table 1: Symptomatology of Arsha Due to Specific Dosha and its Relevance in Modern Era [11]

Vataja arsha	Pittaja arsha	Kaphaja arsha
Parishuska (without any discharge),	Sadaharudhiraatisaryate	Mahammoola (wide based),
Visham (irregular surface),	(bleeding per anum with	sthira (fixed), vrittani (oval)
Vivarna (various colors of fleshy masses),	burning sensation), visarpini	Na vidhyatenasravanti (neither
sashulamsamhatamupaveshyate	(spreading in nature),	suppurates nor bleeds)
(frequently associated with constipation	jwardahapippasamurchaupdr	Kandubahulani (severe itiching)
and painful defecation),	ava(fever, thirst, fainting,	Sashleshmamamsadhavanpraka
katipristhaparshwamedhranabhigudapra	syncope as complications)	shaatisaryate (mucoid
deshavedana.	In modern era, it resembles	discharge along with stool),
In modern era, this can well associated	the features of a inflamed	In modern era, can be related to

with the characteristics of Sentinel tag in fissure-in-ano or hypertrophied anal papillae that project up from the dentate line or junction between the skin and the epithelial lining of the anus. A skin tag is redundant fibrotic skin at the anal verge, often persisting as the residua of a thrombosed external haemorrhoid.

thrombosed prolapsed haemorrhoid. Engorgement of a haemorrhoidal with acute swelling may allow blood to pool and subsequently clot, accompanied by severe incapacitating pain.

non-inflammed prolapsed thrombosed haemorrhoid. This mucous discharge is due to engorged mucous membrane which is the cause of *Pruritisani*.

Raktaja arsha	Sannipatik arsha	Sahaja arsha	
Pittalakshani (features similar to	It has features of all	Dustashonitashukranimittani (genetically	
Pittaja), Avagahapurisha (due to	the <i>Dosas</i> .	determined),	
passage of very hard stool there is	In modern era, it	Durdarshanani (difficult to visualize by naked	
discharge of huge amount of blood	can be compared to	eye)	
but painless), complications like	the dreadful	parushanipansunidarunanyaanatarmukhani	
Akshepak and all other features	malignant causes of	(hard to touch, pale in colour, situated above	
seen in <i>Raktaatiyoga</i> are seen.	rectum and anal	the upper rectum) and associated with	
In modern era, can be compared to	canal. The mass is	complications like weakness, cachexic and	
bleeding haemorrhoids. In some	seen to bleed on	immuno compromised.	
cases, a thrombosis haemorrhoid	touch, also hard to	In modern era, can be compared to features of	
can burst resulting in severe	touch and irregular	hereditary polyposis syndrome. It is a genetic	
bleeding. Internal haemorrhoids	in shape & size.	condition that predisposes a person to	
may prolapse or bleed, but rarely		increased risk of developing cancer and	
become painful until thrombosis or	Ayurveda	polyps. The mutated gene causing this disease	
necrosis develops.	al http://ljapr.in	is carried either by the mother or father.	

#### **Examination of A Pile Mass** [12]

- Inspection: internal haemorrhoids may not be visible.
- **Digital examination**: in early stages they are soft and compressible.
- Proctoscopic examination: the internal haemorrhoids, if any will bulge into the lumen of proctoscope.
- Sigmoidoscopy
- Colonoscopy

# Complications of Arsha (haemorrhoids) [13]

- Strangulation
- Thrombosis
- Ulceration
- Gangrene
- Fibrosis
- Suppuration
- Pylephlebitis

## Treatment of Arsha[14]

Sushruta has employed four modes of treatment for *Arsha* in *Arshachikitsasthan* namely:

Bhesaja (medicinal remedies) Kshara (application of caustic alkali), Agni (thermal cauterization) & Shastrakarma (Surgical intervention).

## Bhesaja

In a case of recent origin, where *Dosas* are not fully vitiated and without complications may prove amenable by *Bhesaja* alone. Medicinal treatment like

viban<mark>dh</mark>anashaka, deepan –pachanausadhi, raktastambhak, vrana –ropak and vedanashamakausadhis can be given.

#### Ksharakarma

Deep seated haemorrhoidal masses which are soft in touch, extensive, deeply situated, projectile should be treated with *Kshara* application. The *kshar* may be defined as a chemical substance obtained by filtering contents of plant ash after evaporation it to dryness. Sushruta has mentioned 24 *Ksharadravyas*. *Kshara* has the property of excising, incising, draining and scraping of unhealthy tissues. *Kshara* excises the pile mass gradually by the virtue of mechanical action and chemical cauterization. No special preparation of patient or any major operative procedure or equipment's is required. The treatment is ambulatory and patient may return to his work after 48 hours.

# Agni karma

Agnikarma is indicated in rough, fixed, broad and hard type of masses and mainly in *Vataj* and *Kaphajaarsha*. It is an important para surgical method. It has the capacity to destroy the diseased tissues completely.

#### Shastra Karma

It is indicated in pedunculated, large and discharging *Arshas*. The *Chedankarma* of *Arsha* is done with the help of sharp instruments like *Mandalagra*, *Karapatra*, *Nakhashastra* in shape of

semilunar incision. The process of applying *Kavalika* and Gophana bandage should be performed.

# In modern medical science the treatment of haemorrhoids include<sup>[15]</sup>

## **Medical therapy**

Bleeding from first and second degree haemorrhoids improve with the addition of dietary fibres, stool softeners, increased fluid intake and avoidance of straining. Associated pruritus can improve with maintenance of personal hygiene.

# **Rubber band ligation**

Persistent bleeding from first, second and selected third degree haemorrhoids may be treated with rubber band ligation.

**Infrared photocoagulation:** it is an effective office treatment for small first and second degree haemorrhoids.

**Sclerotherapy:** The injection of sclerosing agent can be given to bleeding haemorrhoid of first, second and selective third degree haemorrhoids.

Cryosurgery: application of liquid nitrogen in temperatures of -196 degree centigrade causes coagulation necrosis of the pile mass.

# Operative haemorrhoidectomy which includes

- Closed sub mucosal haemorrhoidectomy
- open haemorrhoidectomy
- stapled haemorrhoidectomy
- Doppler guided haemorrhoidal artery ligation.

## **CONCLUSION**

Thus it is seen that Sushruta has observed a broader field when discussing about Arsha and not merely as bleeding per anum. The specific features mentioned in different classification of Arsha according to Doshik involvement can be correlated with various types of bleeding haemorrhoid, prolpased haemorrhoid, sentinel tag and also congenital diseases in modern Science. Sushruta has also mentioned various treatment procedures for Arsha which are painless and effective in giving long term relief.

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