



# CLINICAL EVALUATION AND THERAPEUTIC APPLICATIONS OF *BILVA KSHARA*: A CASE STUDY

**Dr. Pooja Srinivas<sup>1</sup>, Dr. Asma<sup>2</sup>, Dr. Srishail Horaginmath<sup>3</sup>, Dr.Asha<sup>4</sup>**

- 1) Post Graduate Scholar of the Department of Shalya Tantra of Shri Vijay Mahantesh Ayurvedic Medical College and Research Centre Ilkal, Dt Bagalkot Karnataka.
- 2) Associate Professor of the Department of Shalya Tantra of Shri Vijay Mahantesh Ayurvedic Medical College and Research Centre Ilkal, Dt Bagalkot Karnataka.
- 3) Assistant Professor of the Department of Shalya Tantra of Shri Vijay Mahantesh Ayurvedic Medical College and Research Centre Ilkal, Dt Bagalkot Karnataka.

## ABSTRACT:

The present sedentary lifestyle, irregular food intake, and prolonged sitting affected the quality of life. Hemorrhoids are one such grave disease. The lifestyle change caused an increase in the prevalence of this disease. *Arsha* is a disease that occurs in ano rectal region called *Gudagata vikara*. In *Susrutha Samhitha* various treatment modalities are explained, they are *Bheshaja*, *Kshara*, *Agni*, and *Shashtra Karma*. *Acharya Dalhana* considers the importance of the *Kshara*, *Agni*, and *Sastra Karma* states that *Arshasam Shalyatantra vyadhi pradhanacha*. In *Charaka Samhita* explained the significance of the *Bheshaja* and exposed the adverse effect of *Shashtra Karma*.

Preparation of *Kshara* is a technique of extracting water-soluble substances from the ashes of some specific medicinal plants. *Acharya Susrutha* has told *Kshara asanusastra*, *upayantra*, *agropaharaniya* and one of the *upakrama of vana*. *Kshara* is said to be superior due to its property of *Chedana*, *Bhedana*, *Lekhana*, and *Tridoshagna*. After reviewing all classical textbooks, *Susrutha's* method seems ideal for preparing *pratisaraneeya Kshara*. *Kshara* was prepared according to a classical method and used for the external explanation of *Arsha*.

**Keywords:** Arsha, Pratisaraniya Kshara, Sushruta Samhita, Hemorrhoids, Lifestyle.

## INTRODUCTION:

*Arshas* is considered one among *Ashtamahagada*. *Acharya Vagbhata* defines *Arshas* as *Mamsa Ankura* which occurs at *Gudamarga*, obstructs the pathway, and troubles like an enemy.<sup>1</sup>

*Acharya Charaka* explains that *Arshas* is a condition where abnormal fleshy masses (mounds of dilated blood vessels) protrude in or around the rectum and anus causing pain, bleeding, and discomfort.<sup>2</sup>

The term Haemorrhoids is derived from the Greek word. Haima (Bleed) + Rhoos (flowering), means bleeding. It is a slippery slope of the anus cushions unusually due to mainly constipation.<sup>3</sup>

Hemorrhoids are dilated veins within the anal canal in the sub-epithelial region formed by radicles of the superior, middle and inferior rectal veins. The prevalence rate of piles is 4.4% in the world, in about 10 million people. It may occur at any age but is mostly seen in the age of 30-65 years. Incidence is equal in both sexes.

Hemorrhoids are of 2 types based on location -external and internal hemorrhoids. External hemorrhoid is situated below the dentate line and is covered by skin and are pain sensitive nerve endings in the area. Internal hemorrhoid is situated above the dentate line and is covered by mucous membranes and they are painless due to the absence of pain receptors in that region. The primary hemorrhoids occur at 3, 7, and 11 'o'clock positions. Secondary hemorrhoids occur between the primary hemorrhoids.

The main symptom is bleeding which is bright red, painless and occurs during defecation associated with constipation, prolapse, and mucous discharge.<sup>4</sup>

Based on prolapse, hemorrhoids are divided into 4 degrees: 1<sup>st</sup> degree- bleed only, no prolapse. 2<sup>nd</sup> degree- prolapse but reduce spontaneously. 3<sup>rd</sup> degree- prolapsed and has to be manually reduced. 4<sup>th</sup> degree- permanently prolapsed.<sup>5</sup>

Management of piles ranges from a simple dietic regimen to surgical excision. Conservative management like bowel regulation, use of laxatives, more fiber diet, sitz bath, and local topical applications. Interventional management like injection sclerotherapy, Rubber band ligation, Cryosurgery, Lord's anal dilatation, and Haemorrhoidectomy has been explained.<sup>6</sup>

"Acharya Sushruta" - a pioneer in the field of surgery has developed four treatments for hemorrhoids, apparently categorized based on specific symptoms. (a) 'Bheshja Chikitsa' (b) 'Kshara Karma' (c) 'Agni karma' (d) 'Shashtra karma'. "Kshara Karma" is very effective and acceptable in all medical procedures because it performs actions in both *Shastras* and *Anushastra* and acquires all three doshas.<sup>7</sup>

The prime cause of *Arsha* is the vitiation of *Jatharagni* leading to the vitiation of *Tridosha*, mainly *Vata Dosha*. These vitiated *Doshas* get localized in *Guda Vali* and *Pradhana Dhamani* which further vitiates *Twak*, *Mansa*, *Meda*, and *Dhatus* due to *Annavaha srotodushti* leading to the formation of *Arsha*.<sup>8</sup>

*Bilva* is a drug mentioned by *Sarangadhara* in the preparation of *Kshara* due to its property of *Arshogna*, *Tridoshagna*, and *Rakthastambana* property.

*Acharya Charaka* said *Bilva* is one of the *Arshogna Mahakashaya* due to its properties.<sup>9</sup>

## CASE REPORT:

A 40 year old patient came with present complaints of bleeding per rectum on and off and a mass has been coming out during defecation since 1 month. Patient had a history of constipation since 4 months approached *Shalya Tantra* OPD of R P Karadi *Ayurvedic* Hospital Ilkal.

Past History: Patient is n/k/c/o HTN and T2DM. There was no relevant past illness, drug history, and no significant family history. There was no prior any surgical intervention in the history noted.

The Personal History revealed that the patient was a non-vegetarian, driver by his occupation with loss of appetite and irregular meal times. His sleep pattern and micturition were normal. No history of any addiction.

## GENERAL PHYSICAL EXAMINATION:

a) Built :	Moderate	f) Blood pressure :	110/80mmhg
b) Nourishment :	Nourished	g) Temperature :	98.6 F
c) Pallor :	Absent	h) Respiratory rate :	20c/m
d) Icterus :	Absent	i)Weight :	52kg
e) Pulse :	88bpm	j)Lymphadenopathy :	Absent

**SYSTEMIC EXAMINATION:**

CNS: Conscious and Oriented

CVS: S1 S2 Heard

RS: B/L AE Clear No added sounds.

P/A: Soft, No tenderness.

**LOCAL EXAMINATION:****INSPECTION:**

No external opening was found.

Perianal region: NAD

Sphincter tone: Normal

PROCTOSCOPY EXAMINATION: 2<sup>nd</sup> Degree Internal Hemorrhoids at 3 and 11 'o'clock position.

**INVESTIGATIONS:**

CBC, ESR, BT, CT: Within Normal Limits.

HIV, HBsAg: Non-Reactive

**FINAL DIAGNOSIS:**

Based on physical examination and clinical findings, the patient was diagnosed as a case of *Abhyantara Arsha* (2<sup>nd</sup> Degree Hemorrhoids).

**PLAN OF TREATMENT:**

Under local Anesthesia, *Bilva Pratisaraneeya Kshara* was applied in one sitting. Post operatively oral medications were administered.

**OPERATIVE PROCEDURE****Pre-Operative Procedure:**

- Informed consent.
- Nil by mouth for a minimum of 6 hours.
- Part preparation.
- Injection of Lignocaine 2%, 0.5 ml test dose subcutaneously.
- Injection of Tetanus Toxoid, 0.5 ml IM stat.
- Phosphate Enema (100 ml).
- Secure the IV line and maintain the TPR chart.

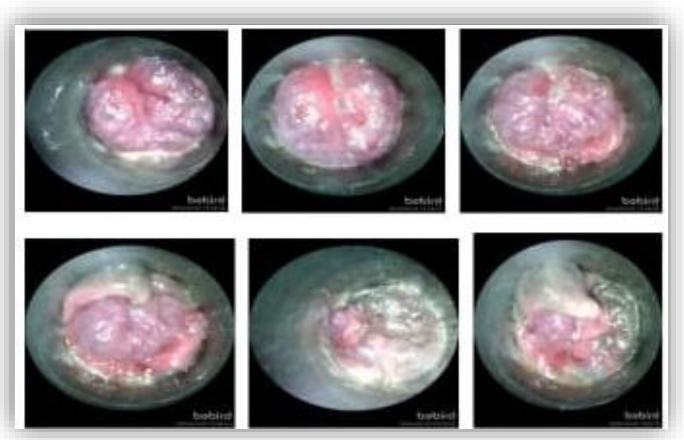
Operative Procedure:

- Patient will be made to lie down in lithotomy position.
- Under all aseptic precautions, painting and draping is done.
- Local Anesthesia (inj. Xylocaine 2%) was infiltrated.
- Lubricated protoscope will be introduced and position of the pile mass will be noted.
- *Pratisaraneeya Kshara* will be applied over pile mass and left for approximately 60 seconds.
- Then the pile mass will be cleaned with *Nimbu Swarsa*.
- The same procedure is repeated for each pile mass separately.
- Anal canal will be checked for any bleeding and hemostasis will be achieved.
- Anal canal packed with roller gauze wrung with *Yashtimadhu Taila* and dressing was done.

Post-Operative Procedure:

- Removed Anal Pack after 8 hours
- Tab.*Triphala Guggulu* 2/BD/AF/ warm water x 7 days
- *Avipattikara churna* 6 gms BD/ BF/ warm water x 7 days
- *Yashtimadhu Taila* 5 ml PR BD x 7 days

BEFORE APPLICATION



APPLICATION OF KSHARA

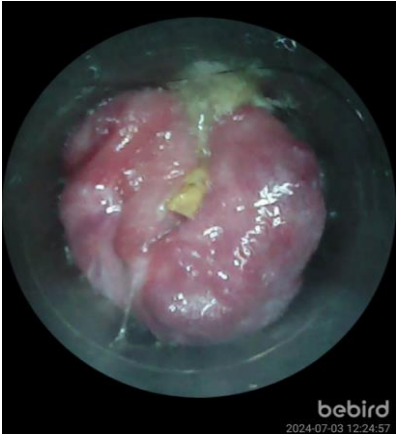


PAKWA JAMBU PHALA VARNA



SCAR FORMATION

HEALED ULCER

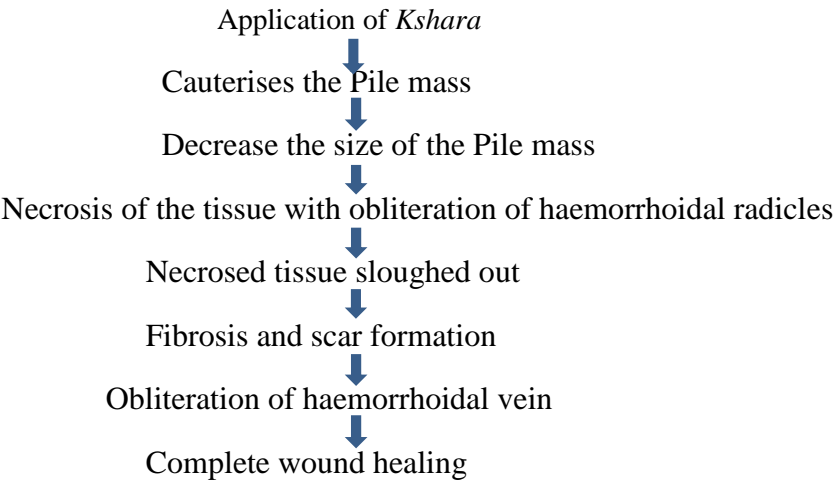


TOTAL EFFECT OF KSHARA KARMA:

DAYS	PATIENTS COMPLAINTS	OBSERVATION
1 <sup>st</sup> day – immediately after <i>Kshara Karma</i>	Mild pain, moderate burning sensation	Coagulation of hemorrhoid plexus, blackish discoloration of mass looks like <i>Jambu Phala Varna</i> .
3 <sup>rd</sup> to 7 <sup>th</sup> day	Swelling, blackish discharge with a mild burning sensation.	Oedema and softening of coagulated mass, sloughing, necrosis of mass.
8 <sup>th</sup> to 14 <sup>th</sup> day	Mild burning sensation	Observed mucosal ulcer on site, mass was reduced.
15 <sup>th</sup> to 21 <sup>st</sup> day	No such complaints	Healing of ulcer with a scar on the site with complete obliteration and adhering of scar to mucosa.

**RESULTS:** The Pile mass and rectal hemorrhage were reduced within 21 days and the patient was free from all the symptoms. After 21 days there was no Pile mass observed in proctoscopy.

PROBABLE MODE OF ACTION OF PRATISARNEEYA KSHARA





## DISCUSSION:

According to *Ayurveda Arsha* is caused by an imbalance in the three *Doshas* (*Vata*, *Pitta*, *Kapha*), along with improper diet and lifestyle, leading to poor digestion, and constipation and eventually raised to haemorrhoidal swellings. These can be internal (*Abhyantara Arsha*) or external (*Bahya Arsha*).

*Bilva* commonly known as Bael, whose various parts are used medicinally in *Ayurveda*. *Bilva* are known for their ability to balance the *doshas* and improve digestion.

*Bilva* was beneficial in treating digestive disorders, including those related to constipation and hemorrhoids. *Bilva Kshara* is an *alkali* obtained from the ashes of the *Bilva* plant. *Kshara* therapy (alkaline therapy) is a classical *Ayurvedic* procedure used for its *Teekshna*, *Shodhana* and *Lekhana* actions making it effective in reducing haemorrhoidal masses.

## MECHANISM OF ACTION OF *BILVA KSHARA* IN *ABHYANTARA ARSHA*:

***Ksharana*** : The scraping action of *Bilva Kshara* helps to reduce the size of the haemorrhoidal masses by cutting and breaking down the abnormal tissues.

***Vata Shamana*** : As *Vata Dosha* aggravation is a primary cause of constipation and hemorrhoids, *Bilva* balances *Vata* and improves bowel movements. This reduces the strain during defecation, addressing the root cause of hemorrhoids.

***Shodhana*** : *Bilva Kshara* has purifying properties, helping to detoxify the intestines, and removing accumulated wastes and toxins that contribute to the development of hemorrhoids.

**Anti-inflammatory effect**: *Kshara* helps to reduce swelling, pain, and inflammation in haemorrhoidal tissues, thereby offering relief to patients.

***Rakta Stambhana***: Hemorrhoids are often associated with bleeding. The astringent nature of *Bilva* helps in stopping the bleeding from hemorrhoids by coagulating the blood and promoting healing.

The drug *Bilva* is *Ushna Virya* and have *Kashaya Tikta* rasa due to which it is *Vata Kaphagna*.

Due to its *Kashaya Rasa* hemostasis is carried out and *Tikta Rasa* relieves venous congestion and due to *Ushna* and *Vata Kapha Shamak* property swelling is reduced.

**Tannins**: These have astringent properties, which can help shrink tissues and reduce bleeding associated with hemorrhoids.

**Marmelosin**: This compound has anti-inflammatory and laxative effects, which can reduce inflammation and ease bowel movements, preventing strain during defecation—a major cause of hemorrhoids.

**Luvangetin**: Known for its anti-inflammatory effects, it may help in reducing the swelling of hemorrhoids.

**Psoralen**: This compound has antimicrobial properties that could help prevent infection, which is crucial in preventing complications in hemorrhoids.

**Flavonoids**: These have antioxidant properties that help reduce oxidative stress and promote healing of the inflamed tissues.

## PROBABLE ACTION OF ADJUVANT DRUGS IN *ABHYANTARA ARSHA* :

### *TRIPHALA GUGGULU*:

- *Triphala* also heals the tissue along with increasing the digestion of the patient at the same time acting as a mild laxative.

- *Triphala* along with the anti-inflammatory and anti-infective action of *Guggulu* was found to have a marked effect in treatment of hemorrhoids.
- Ingredients of *Triphala Guggulu* were *Amla*, *Haritaki*, *Vibhitaki*, piper longum and *Guggulu*.
- *Pippali* promotes digestion and has *Vata Shamaka*, *Sothahara* and *Vrana Ropana* properties.
- It also soothes the inflamed mucous layer and helps in checking the further infection.
- *Guggulu* is one of the best known for its anti-inflammatory action.
- *Triphala* helps in easy bowel movements and relieves the constipation a problem often trouble people suffering from hemorrhoids.
- Owing to *Vata Shamaka*, *Sothahara*, *Vatanulomaka*, *Amahara* and *Vrana Ropaka* properties.

#### AVIPATTIKARA CHURNA:

- It effectively mitigates constipation and indigestion also owing to its *Rechana* property.

#### YASTIMADHU TAILA:

- *Yastimadhu* is one of the best medicines for pitta. It is *Vranaropaka* and *Anuloma*.
- *Tila taila* is best for *Vata*.

#### CONCLUSION:

*Kshara Karma* is very effective in the management of *Abhyantara Arsha*. The effect of *Kshara Karma* is highly recommended, it can replace the *Sastra Karma*. The findings revealed that there are maximum advantages, including a shorter hospital stay, no bleeding during or after the procedure, and no post-operative complications. Many researches also reveal that *Kshara* therapy not only minimizes complications but also reduces the recurrence of diseases with minimal side effects. A healthy diet and lifestyle modifications can prevent the recurrence of the disease. No adverse effects have been reported during the follow-up period.

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