

# Management of internal bleeding piles by ligation and plication followed by *Matra Basti* - A case report

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## Abstract

*Arsha* (hemorrhoids) is engorgement of the hemorrhoidal venous plexus, characterized by bleeding per rectum, constipation, pain in ano, prolapse and discharge per anum. It is a primary disease, with impaired digestion as the underlying pathogenesis. It is manifested due to improper diet, prolonged standing and faulty habits of defecation causing derangement of *Tridosha*, mainly *Vata Dosha*. Vitiating *Dosha* localizes in Houston's Valve, rectal arteries, fascia and vitiates Skin, muscles, adipose tissue and blood due to *Annavaha Srotodushti* (vitiation of gastrointestinal tract). A 45-year-old male patient came to the OPD of Dr. Sarvepalli Radhakrishnan Rajasthan Ayurved University hospital, Jodhpur, Rajasthan, with complaints of prolapsing pile mass during defecation, pain per anum with erosion and bleeding per anum while passing stool. On proctoscopy, pile masses were seen at 11 and 3 O'clock positions and few erosions were seen near the 3 O'clock pile mass. The case was diagnosed as "*Raktarsha*" - later stage of 2<sup>nd</sup> degree internal hemorrhoids at 11 and 3 O'clock positions, deeply situated, projecting one and caused by *Pitta* and *Rakta Dosha*; with bleeding tendency. Ligation of pile mass by surgical linen barbour thread number 20 on 11 O'clock positions and plication by absorbable chromic catgut on 3 O'clock positions of internal hemorrhoid were done under local anesthesia followed by *Matra Basti* (therapeutic oil enema) with *Jatyadi* oil. The pile mass and per rectal bleeding resolved in 10 days and the patient got relief from all the symptoms within 4 weeks. No complications were reported after the procedure. The patient was followed up regularly from the registered date onward till 3 months and proctoscopic examination did not revealed any evidence of recurrence of the hemorrhoids.

**Keywords:** Internal hemorrhoid, ligation, *Matra Basti*, plication, *Raktarsha*

## Introduction

Hemorrhoidal cushions are present in everyone; gradually, they become large and cause problems in only 4% of the general population and its prevalence peaks in people over 50 years of age. Bleeding pile is a common affliction which has been described and treated since the beginning of human civilization. Hemorrhoidal cushions are a part of normal anatomy but become pathological when swollen or inflamed.<sup>[1]</sup> Hemorrhoids that cause problems are found in 2:1 ratio of men and women. *Arsha* (hemorrhoids) is engorgement of the hemorrhoidal venous plexus, characterized by bleeding per rectum (P/R), constipation, pain in ano and prolapse and discharge per anum. It is manifested due to improper diet, prolonged standing and faulty habits of defecation causing derangement of *Tridosha*, mainly *Vata Dosha*. Vitiating *Dosha* localizes in Houston's valve, *Gudavali* (rectal arteries), *Pradhana Dhamani* (fascia) and *Mamsdhara Kala* (vitiates skin), *Mamsa* (muscles),

*Meda* (adipose tissue) and *Rakta* (blood) due to *Annavaha Srotodushti* (vitiation of Gastrointestinal Tract). Different treatment modalities are available such as expectant medical therapy, injection treatment, rubber-band ligation, manual dilatation, cryosurgery, infra-red coagulation and operative treatments such as formal hemorrhoidectomy. However, the risk of recurrence or of developing an infection of the wound after the operation is high.

Ayurveda provides cure and prevents recurrences of the disease. The present study was carried out using a combination of ligation and plication of pile mass followed by *Matra Basti* with *Jatyadi* oil.

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## Case Report

A 45-year-old male patient visited (September 2015) the outpatient department (OPD) of Dr. Sarvepalli Radhakrishnan Rajasthan Ayurved University Hospital, Jodhpur, Rajasthan, for the complaints of passage of hard stool for 3 months and profuse bleeding P/R, pain per anum (near 3 O'clock pile mass may be due to erosions near pile mass) and feeling of something coming out per anum since 1 month.

History of present illness revealed that the patient was apparently normal before 3 months. Gradually, he experienced the passage of hard stool. The problem increased day by day. The patient experienced something is coming out per anum for 2 months. Later, he developed pain per anum during defecation which lasted for the whole day and profuse bleeding P/R for 1 month. Past history revealed sclerotherapy (conservational treatment) in 2014. The patient was under allopathic medicines for the above complaints and did not tried any other system of medications. The disease re-occurred after 1 year in 2015.

Personal history revealed that the patient is a vegetarian, with reduced appetite, irregular food habits, more intake of spicy sweet and chilled foods, disturbed sleep, frequency of micturition 3–4 times per day, straining to pass stool and had no addiction to opium. The patient has a daily routine of two-wheeler riding. There was no genetic linkage of the disease noticed in the family.

General examination of the patient showed pallor vitals were pulse rate 74/min, respiratory rate of 18/min, blood pressure 120/84 mmHg and body weight of 60 kg. Per abdominal examination showed shrunken abdomen and no tenderness.

On local examination, skin of anal verge was found indurated. On digital rectal examination, tender but sphincter tone was normal. Proctoscopic examination confirmed two 2<sup>nd</sup>-degree (late stage) internal hemorrhoids at 3 O'clock position and 11 O'clock position. Lesions near the 3 O'clock position revealed pile mass. Blood discharge per anum was seen [Figure 1].

Based on the clinical presentation, the patient was diagnosed as a case of later 2<sup>nd</sup> degree internal bleeding piles at 3 O'clock and 11 O'clock positions. According to Ayurveda, the patient was diagnosed as a case of *Raktarsha* (bleeding piles).

The patient was advised for ligation and plication procedure followed by *Matra Basti* with *Jatyadi* oil. Before planning treatment, complete blood count and other tests were done to rule out conditions such as anemia, clotting disorder, diabetes mellitus, other infective disorders, human immunodeficiency virus, Venereal Disease Research Laboratory, and hepatitis. Ligation with surgical linen Barbour thread number 20 on 11 O'clock (to slough off the pile mass) and plication with absorbable chromic Catgut on 3 O'clock internal hemorrhoid (as mucosa is eroded near the 3 O'clock pile mass, it may bleed on transfixation) were



**Figure 1:** Before treatment

done under local anesthesia followed by *Matra Basti* with *Jatyadi* oil.<sup>[2]</sup>

## Treatment

### Preoperative preparation

Patient's consent was taken prior to operative procedure. Bowel preparation was done with soap water enema and the patient was kept fasting for 12 h before the surgery. Injection TT was administered I/M for prophylaxis. Lignocaine sensitivity test was done before surgery.

### Operative procedure

#### Ligation of 11 O'clock position pile mass by surgical linen Barbour thread number 20

1. The patient was placed in a lithotomy position. Painting and draping was done. A hemorrhoidal plexus block with liberal local infiltration of 2% lignocaine was given thereafter. The hemorrhoidal masses at 11 and 3 O'clock positions were identified. Gentle digital anal stretching of no more than 6 (3 + 3) fingers (Recamier/Maisonneuve procedure) was done. Intracanal packing was given to avoid soiling during operation
2. Revelation of the "Triangle of Exposure:" The skin-covered component of each of the main piles was seized with Allis tissue holding forceps usually in the 3, 7 and 11 O'clock positions and retracted outward, keeping the Allis tissue forceps in anatomical positions. This revealed the "Triangle of Exposure," i.e., the mucosal component or internal hemorrhoids at the upper pole and dermal component in the grip of Allis forceps at the lower pole. The internal pile at 11 O'clock position was grasped with a pile mass-holding forceps. The forceps attached to the right anterior pile were taken in the palm of left hand drawn outward and the left index finger was used to stabilize the inner aspect of the pile mass
3. The base of the pedicle of internal hemorrhoidal mass at 11 O'clock was transfixed and ligated by passing a round-body curved needle loaded with the surgical linen Barbour thread number 20.

### Plication of 3 O'clock position pile mass by absorbable chromic Catgut

The hemorrhoid at 3 O'clock position was held by pile-holding forceps and round-body curved needle with absorbable chromic catgut passed through the hemorrhoid mucosa. It was done repeatedly till the tightening of stretched pile mass mucosa by folding the mucosal surface in tucks. The pile mass got reduced in size. Gauze soaked in *Jatyadi* oil was placed inside the canal. One end of the anal packing given initially was withdrawn out for facilitating easy removal and a T-bandage was tied [Figure 2].

### Postoperative management

After operation, common analgesics and anti-inflammatory drugs were given to the patient. Isabgol husk was prescribed 1 tsf at bedtime for 4 weeks and a light fibrous diet till healing of the wound. The dressing was removed the next morning after a lukewarm sitz bath. From the 2<sup>nd</sup> day, *Matra Basti* with 50 ml of *Jatyadi* oil was administered P/R once daily. The treatment was continued for 4 weeks.

### Observation

Sloughing off of hemorrhoidal masses with automatic removal of linen thread at 11 o'clock position occurred in 10 days and absorption of chromic Catgut at 3 o'clock position occurred in 20 days. Wound healing was monitored daily till discharge of patient from the hospital.

The patient was advised to attend the OPD for examination once a week for 4 weeks. For this 4-week period, the following medicines were prescribed to reduce pain and inflammation and promote healing: orally: *Triphala* powder (5 g at sleep time with lukewarm water), tablet *Gandhaka Rasayana* (250 mg twice a day after food), tablet *Maha Shankha Vati*<sup>[3]</sup> (250 mg twice a day before food) and tablet *Triphala Guggulu*<sup>[4]</sup> (2 tablets of 500 mg each thrice daily before food); P/R: *Matra Basti* with *Jatyadi* oil. Plain lukewarm water sitz bath was advised after each defecation.



**Figure 2:** After procedure

During each follow-up visit, signs and symptoms were assessed. There was moderate-to-mild pain, burning sensation, tenderness, inflammation and brownish black discharge on the first and second visits. During the third and fourth visits, there was no pain, tenderness, discharge or anal stricture and the internal hemorrhoids had completely resolved [Table 1].

After this 1-month treatment, the following medications were prescribed for 3 months orally to cure digestive impairment. *Drakshasava* (10 ml twice daily with equal amount of water after meals), *Abhayarishta*<sup>[5]</sup> (10 ml twice daily with equal amount of water after meals) and capsule *Cytozen* twice daily. Relief from signs and symptoms was seen after follow-up of 3 months. No recurrence of the signs and symptoms occurred in the follow-up period. The patient got cured with no complications of the therapy [Figure 3].

Diet and lifestyle guidelines (high-fiber diet, adequate water intake, no straining or suppression of natural urges, avoiding over exertion and avoiding staying up late) were suggested to the patient and the patient was expected to follow these guidelines for at least 1 year.

### Discussion

Ligation by surgical linen Barbour thread number 20 and plication by absorbable chromic catgut followed by *Matra Basti* with *Jatyadi* oil were done in case of internal bleeding piles. The composition and mode of action are described as follows.

### Composition and action of surgical linen Barbour thread

It is a natural linen thread. It is made up of highest quality of flax. It has low extensibility and thus has the ability to hold a tight knot. It has high strength of 5 kg.<sup>[6]</sup> Linen degrades naturally and thus is a body-friendly sewing thread. It has high moisture absorption quality which also absorbs the secretions or discharges during sloughing of pile mass.



**Figure 3:** After treatment



**Table 1: Observations during follow-up visits**

Follow-up visit	1 <sup>st</sup> visit (after 7 days)	2 <sup>nd</sup> visit (after 14 days)	3 <sup>rd</sup> visit (after 21 days)	4 <sup>th</sup> visit (after 28 days)
General observations				
Appetite	Normal	Normal	Normal	Normal
Bowels	Regular	Regular	Regular	Regular
Sleep	Normal	Normal	Normal	Normal
Micturition	Regular	Regular	Regular	Regular
Blood pressure	130/90 mmHg	130/90 mmHg	134/74 mmHg	130/90 mmHg
Pulse rate	70/min	72/min	68/min	70/min
Patient's observation				
Pain	Moderate	Mild		
Pus	-	-		
Mucus	Mild	Mild		
Blood	Mild	-		
Itching	-	Mild		
Burning sensation	Moderate	Mild	Mild (occasionally)	
Surgeon's observation				
Discharge	Mild	Mild		
Sloughing	Mild	-		
Tenderness	Moderate	Mild		
Inflammation	Moderate	Mild		
Discoloration	Red	Red	Color of scar	Color of scar
Proctoscopic examination	Mucosal ulcer	Granulation	Mucosal ulcer healed	Normal

### Composition and action of chromic catgut suture

Catgut suture<sup>[7]</sup> is an absorbable, sterile surgical suture usually manufactured from purified connective tissue (intestine of sheep). It is a variant treated with chromic acid salt solution that reduces the rate of degradation or absorption. This treatment has a good stitch-holding time. It is smooth due to the dry presentation of the thread. It maintains uniform tensile strength which holds the ligated pile mass and controls bleeding. Being absorbable, it does not need to be removed.

### Composition and action of Jatyadi oil

Jatyadi oil<sup>[8]</sup> is an Ayurvedic oil preparation used for quick wound healing. It contains many herbs, namely *Jati*, *Nimba*, *Patola*, *Naktamala*, *Sikta*, *Madhuka*, *Kushtha*, *Haridra*, *Daruharidra*, *Manjishtha*, *Katurohini*, *Padmaka*, *Lodhra*, *Abhaya*, *Nilotpala*, *Tutthaka*, *Sariva*, *Naktamala* seeds and *Tila* oil [Table 2]. It balances *Pitta* and *Kapha Dosha*. In previous clinical studies, it has been proved that it contains flavonoids, essential oils, tannins, glycosides, steroids and alkaloids, which help in faster healing of wounds. It has the properties of cooling, antimicrobial, antibacterial<sup>[9]</sup> and nonirritant. It is useful in cleaning, soothing and healing of wounds. *Matra Basti* with *Jatyadi Taila* resulted in fast healing of lesions near pile mass, plicated pile mass and also the wound developed by sloughing off of ligated pile mass.

Combined effect of ligation, plication and *Matra Basti* resulted in relief from signs and symptoms of the patient which brought him to the hospital. During the hospital stay, the patient showed gradual recovery and was satisfied to

**Table 2: Composition of Jatyadi Taila**

Sanskrit name	Botanical name	Parts used
<i>Jati</i>	<i>Myristica fragrans</i> Houtt	Leaves
<i>Nimba</i>	<i>Azadirachta indica</i> A. Juss	Leaves
<i>Patola</i>	<i>Stereospermum suaveolens</i> DC	Root
<i>Naktamala</i>	<i>Pongamia pinnata</i> (L.) Pierre	Leaves
<i>Sikta</i>	Honey bee wax	Wax
<i>Madhuka</i>	<i>Glycyrrhiza glabra</i> Linn	Root
<i>Kushtha</i>	<i>Saussurea lappa</i> Clarke	Root
<i>Haridra</i>	<i>Curcuma longa</i> L	Rhizome (underground stem)
<i>Daruharidra</i>	<i>Berberis aristata</i> DC	Bark and root bark
<i>Manjishtha</i>	<i>Rubia cordifolia</i> Linn. sensu Hook. F	Root, stem
<i>Katurohini</i>	<i>Picrorhiza kurroa</i> Royle ex Benth	Root
<i>Padmaka</i>	<i>Prunus pudum</i> hort. ex Hook	Stem bark
<i>Lodhra</i>	<i>Symplocos racemosa</i> Roxb	Stem bark
<i>Abhaya</i>	<i>Terminalia chebula</i> Retz	Fruit
<i>Nilotpala</i>	<i>Nymphaea stellata</i> Willd	Rhizome
<i>Tutthaka</i>	Copper sulfate	-
<i>Sariva</i>	<i>Hemidesmus indicus</i> (L.) R. Br	Root
<i>Naktamala</i>	<i>Pongamia pinnata</i> (L.) Pierre	Seeds
<i>Tila</i> oil	Sesame oil	Seed oil

a great extent. In follow-up visits, he complained of mild discharge, pain etc. which subsided gradually and healing of wound occurred. No complications were reported after the procedure. The patient was followed up regularly from the registered date onward till 3 months and proctoscopic examination did not revealed any evidence of recurrence of the hemorrhoids.

## Conclusion

It can be concluded that internal bleeding piles can be well managed by ligation with the help of surgical linen Barbour thread number 20 and plication by absorbable chromic catgut followed by *Matra Basti* with *Jatyadi* oil. The treatment minimizes the rate of complication and recurrence of the disease. This line of treatment is also cost-effective. This case study shows that a combination of ligation and plication therapy followed by *Matra Basti*, conservative treatment (*Shamana Aushadhi*), diet restrictions and lifestyle modifications administered over a period of 1 year is effective in obliterating the pile mass as well as preventing recurrence on a long-term basis.

## Declaration of patient consent

The authors certify that they have obtained needed patient consent forms. In the form the patient has given his consent for his images and other clinical information to be reported in the journal. The patient understand that his names and initials will not be published and due efforts will be made to conceal his identity, but anonymity cannot be guaranteed.

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## Conflicts of interest

There are no conflicts of interest.

## References

1. Raakhi Mehra, Renu Makhija, Neera Vyas. A Clinical study on the role of *Ksara Vasti* and *Triphala Guggulu* in Raktarsha (Bleeding piles). *AYU* 2011;32: 192-5.
2. Parasurama S, editor. Sarangadhara Samhita of Sarangadhara, Madhyama Khanda. 6<sup>th</sup> ed., Ch. 9, Ver. 169-171. Varanasi: Chaukhambha Orientalis; 2005. p. 229.
3. Gyanendra P, editor. Agnimandyadhikarah. Bhaishajya Ratnavali. 1<sup>st</sup> ed., Vol. II, Ver. 39-40. Varanasi: Chowkhamba Sanskrit Sansthan Series Office; 2007. p. 849-53.
4. Parasurama S, editor. Sarangadhara Samhita by Sarangadhara, Madhyama Khanda. 6<sup>th</sup> ed., Ch. 7, Ver. 82-83. Varanasi: Chaukhambha Orientalis; 2005. p. 204.
5. Gyanendra P, editor. Bhaishajya Ratnavali. 1<sup>st</sup> ed., Vol. III. Ch. 13, Ver. 16. Varanasi: Chowkhamba Sanskrit Sansthan Series Office; 2008. p. 357-8.
6. Singh R, Arya RC, Minhas SS, Dutt A. A comparative study of Barron's rubber band ligation with Kshar Sutra Ligation in hemorrhoids. *Int J Ayurveda Res* 2010;1(2):73-81.
7. Available from: <http://www.dolphinsutures.com:8080/resources/information-on-catgut>. [last accessed on 2017 Nov 17] .
8. Tripathi B. Commentator. Sarngdhara Samhita, Madhyama Khanda, Sneha Kalpana, 9/168-171. 1<sup>st</sup> ed. Varanasi: Chaukhamba Surbharti Prakashan; 2013. p. 159.
9. Singh B, Jindal N, Bansal R. Antimicrobial potential of polyherbo-mineral formulation Jatyadi Taila – A review. *Int J Res Ayurveda Pharm* 2011;2(1):151-6.