

# Herbal Treatment for Hemorrhoids (Piles)

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## I. INTRODUCTION

### 1.1 Piles (Hemorrhoids)

Swollen and inflamed veins in the rectum and anus that cause discomfort and bleeding. Hemorrhoids can develop inside the rectum (internal hemorrhoids) or under the cutaneous anus region (external hemorrhoids). Nearly three out of every four adults will get haemorrhoids occasionally.

Hemorrhoids are a very common anorectal condition defined as the symptomatic enlargement and distal displacement of the normal anal cushions. They are a significant medical and economical issue that affects millions of people worldwide. There have been numerous claims made regarding the etiologies of hemorrhoid development, involving continuous straining and constipation. One of the most important symptoms of hemorrhoid disease is aberrant vascular channel dilatation and distortion, together with damaging changes in the connective tissue that supports the anal cushion. Hemorrhoids may show signs of vascular hyperplasia and an inflammatory response. The etiology and other clinical contexts of hemorrhoid illness were first covered in this article, followed by a discussion of the most recent non-surgical and operative therapy strategies.[1]

### 1.2 Types

External hemorrhoids

These are under the skin around anus. Common signs and symptoms might include:

- Inflammation or itching in the anal area
- Any discomfort or pain □ Anus is swollen.
- Bleeding occurs.

### Internal hemorrhoids

Inside the rectum are internal haemorrhoids. They rarely cause discomfort and are typically impossible to see or feel. However, straining or pain while urinating might lead to:

Small amounts of bright red blood may be seen on your toilet tissue or in the bowl. Bleeding that is painless during bowel motions.

A prolapsed or projecting hemorrhoid that pushes through the anal orifice, causing discomfort and irritation.[2]

### Thromboidal haemorrhoids:

An external hemorrhoid that has amassed blood and developed a clot (thrombus) may cause:

- Extreme Pain
- Swelling
- Inflammation/ Irritation
- A tough lump close to anus

## II. PATHOLOGY

- Hemorrhoids can be internal and external.
- Internal hemorrhoids are located upper dentate line and they occur due to dilatation of the superior hemorrhoid plexus.
- The connective tissue over the superior hemorrhoid plexus is innervated via visceral nerves and thus it is pain insensitive.

- External hemorrhoids are found below the dentate line and occur due to dilatation of the inferior hemorrhoid plexus.
- Weakening of the surrounding connective tissue and vein wall is the first stage of the pathogenesis of either form of haemorrhoids. All the risk factors (Age, Portal hypertension, Pregnancy, etc.) contribute to a worsening of this weakness or increase internal vein pressure.
- Increased internal anal sphincter tone causes the hemorrhoid to press against the muscle, reducing venous return and exacerbating the symptoms.
- The arteriovenous anastomosis may play a role in the development of hemorrhoids. This is supported by the fact that some hemorrhoids improve after ligating the connecting arteries.[3,4]
- The redundant bulging mucosa is easily injured causing bleeding. The blood is usually bright red reflecting high oxygen content due to the proximity of AV anastomosis

### Formation of hemorrhoids

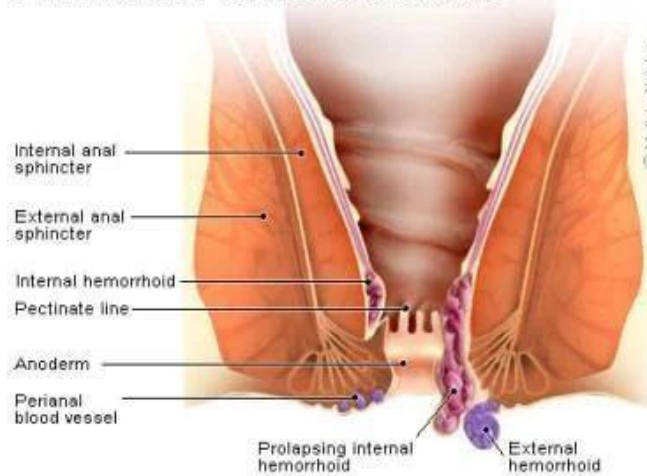


Fig 2.1

### 2.1 Causes

The veins around anus can expand or protrude as a result of pressure on them. Increased pressure in the lower rectum can cause haemorrhoids if:[5]

- Straining during bowel movements
  - Spending a lot of time on the toilet.
  - Experiencing persistent diarrhoea or constipation
  - Being obese
  - Being pregnant
  - Having anal intercourse
  - Eating a low-fiber diet
  - Regular heavy lifting
- **Increased Straining:** during bowel movements caused by constipation or diarrhea may lead to hemorrhoids .It is thus a common condition due to constipation caused by water retention in women through menstruation or premenstrual symptoms.[17] [18]
  - **Hypertension:** Due to the connections between the portal vein and vena cava, known as portocaval anastomoses, which exist in the rectal wall, particularly portal hypertension can also result in haemorrhoids.
  - **Obesity:** Can be elevating the pressure in the rectal vein. Overly tight muscles or slouching posture can put too much strain on the rectal veins.
  - **Pregnancy:** May lead to hypertonia, because put more strain on the digestive system during bowel movements, haemorrhoids are frequently linked to pregnancy.[13]

### III. TREATMENTS

#### 3.1 Home Remedy for Hemorrhoids

The aim of treatment of piles (Hemorrhoids) should be the relief of symptoms rather than improving the appearance of the anal canal. The relationship between constipation and piles has been recognized for centuries, and dietary manipulation to prevent constipation and straining is widely recommended. In one study high fiber diet has been found to be better than placebo in reducing symptoms. In another study, using Ispaghula husk, there has been a significant improvement in the fiber treated group with first and second degree piles.[6] [7]

1. In a bowl of yoghurt, mix some powdered black mustard. While having it, make sure to chew the mustard very carefully. After this, drink a glass of buttermilk.
2. Prepare some buttermilk, using cow's milk. Add peppercorns, ginger and rock salt to this. Have this mixture two times a day.
3. In a cup of milk, mash a ripe banana. Have this mixture 3 to 4 times in a day, to stop the pain experienced during piles.
4. Eating fiber-rich diets, as well as drinking lots of water, help to minimise the discomfort of already-existing haemorrhoids, make the stool softer and easier to pass.
5. For bowel movements, squatting is used.
6. You can also try yoga exercises. Cobra pose and bow pose are the best yoga poses for treating piles.
7. Drink plenty of water to flush out toxins and waste substances from your body. Water will also help to maintain normal bowel habits, eliminating the chance of constipation.
8. Eat more of fruits, vegetables and seeds such as Java Plum (Black berry) fruits, dry figs, Indian gooseberry, papaya, adish, bitter gourd, turnip, onion, rice, wheat, mango seeds and sesame seeds.

#### 3.2 Herbal Treatment for Piles

**Sesame Seed Oil (Sesamum indicum):**



**Figure 3.1**

Sesame seed oil has been used as healing oil for thousands of years. It is an antibacterial, anti-viral and natural anti-inflammatory agent. In the tissues and bone marrow, sesame seed oil absorbs rapidly and penetrates deeply. Consequently, it is used as a carrier oil. Vitamin E-rich sesame seed oil is also used to cure haemorrhoids.[6]



**Rue Care Oil (Rutagraveolens)**



**Figure 3.2**

It is cost-effective, proven, all natural, highly effective topical treatment for external, internal, bleeding and prolapsed piles. It brings immediate relief from intense hemorrhoid pain, stops bleeding and itching. With use of Rue Care, Oil there is no more need for painful hemorrhoid surgery. Anyone that has ever suffered from hemorrhoids knows how painful and uncomfortable they can be. Finding an effective and lasting remedy can be quite a task. Rue Care Oil is a natural option that works as a preventative treatment, as well as healing hemorrhoid. Rue Care Oil anti-inflammatory properties:

- Deliver immediate relief from pain, swelling, burning, and itching.
- Repairs damaged tissue.
- Shrinks hemorrhoids to normal veins.
- Revitalizes the skin.
- Prevents hemorrhoids from returning.
- The oil is easily absorbed and is therefore successful also in the treatment of internal hemorrhoids.[6]

**Olive Oil (Oleaeuropaea)**



**Figure 3.3**



Olive oil rejuvenated the skin. It is rich in omega-3 fatty acids. It has antiinflammatory, antioxidant properties, improves arterial flexibility, lowers the risk of coronary heart disease, and has beneficial effects on LDL cholesterol oxidation and cholesterol control.[6]

**Castor Oil :****Figure 3.4**

It is a natural product. A piles patient should get plenty of rest after using castor oil. This aids in the process of renewing bodily tissues. Additionally, when taken orally, castor oil acts as a laxative to alleviate constipation, further preventing piles. Castor oil may clean the body and get rid of bacteria, which lowers the risk of illness in the body.

You can avoid constipation by taking castor oil orally, which also reduces the swelling or irritation of piles or haemorrhoids. Always consume the dosage as mentioned on the package or as per the doctor's prescription.[6]

**Mint: (Mentha Piperita)****Figure 3.5**

Also known as peppermint, this herb, which has downy leaves and tiny, violet-white blooms, produces a strong oil that is used as a flavouring. Use to lessen itching and relieve pain from haemorrhoids. Since peppermint essential oil has demonstrated to be effective in the treatment of irritable bowel syndrome (IBS), some suggest Trusted Source that it could also help with hemorrhoids. The soothing menthol component of peppermint oil combined with its anti-inflammatory properties may help to relieve the pressure around your anus and make your bowel movements less painful.

People with sensitive skin should avoid peppermint essential oils. Remember to dilute this essential oil well before use.



**Terminalia chebula (Haritaki) extract**



**Figure 3.6**

Haritaki is called the "king of medicines" because of its extraordinary powers of healing. Terminalia chebula is wonder for the digestive system. Gallic acid and Chebulagic acid are the tannins present in Terminalia chebula which works to cure constipation, improves digestion and gastro intestinal motility of bowel by improving peristaltic movements and the slowly it helps to evacuate all faeces and poisonous waste from the system without causing any harm while purifying the blood. Thus, demonstrating laxative activity.

The compounds increases the frequency of stools and has got the property of evacuating the bowel completely. The oil present in the kernel of Terminalia chebula increases motility of the gastrointestinal tract with a protective effect on the gastrointestinal mucosa. Chebulagic acid have anti-bacterial activity which helps to treat Haemorrhoids. Chebulagic acid also helps to control bleeding associated with haemorrhoids. Chebulagic acid inhibits various inflammatory mediators like COX, LOX and TNF- $\alpha$  and thus have an anti-inflammatory activity also. Chebulagic acid promotes wound healing and helps to cure piles.[14]

Therefore, by minimising intra abdominal straining and prolapse, the above mentioned qualities of Terminalia chebula, such as digestive action, antihemorrhagic activity, wound healing, antioxidant, and GI prokinetic action, aid in the management of haemorrhoids.[8]

**Curcuma longa (Haridra) extract**



**Figure 3.7**

Haridra is a powerful anti-inflammatory, antiseptic and also helps to stop bleeding. Curcumin is the compound present in Curcuma longa which inhibits various inflammatory mediators like COX, LOX and TNF- $\alpha$  and thus have an anti-



inflammatory activity. Curcumin have anti-bacterial activity which helps to treat Haemorrhoids by effectively active against a wide spectrum of bacteria viz., *S. aureus*, *E. coli*, *P. vulgaris*, *S. dysenterae*, *Enterococcus faecalis* and even resistant strains associated with secondary infection associated with haemorrhoids. The antibacterial action prevents secondary infection of infected tissues and thus promotes faster healing of the infected tissues.

Therefore, the above properties of *Curcuma longa* like Analgesic, Anti –inflammatory, Anti –microbial helps in the management of haemorrhoids by reducing pain associated with pile.[9]

#### **Azadirachta indica (Neem bark) extract**



**Figure 3.8**

Since time immemorial Neem has been utilized by Indians to treat variety of ailments due to its strong medicinal properties. Nimbidin, Azadirachtin and Epoxy azadiradione are the active compounds present in Neem which are responsible for antibacterial activity. *Azadirachta indica* possesses antibacterial and antiseptic properties by effectively active against a wide spectrum of bacteria viz., *S. aureus*, *E. coli*, *P. vulgaris*, *S. dysenterae*, *Enterococcus faecalis* and even resistant strains associated with secondary infection associated with haemorrhoids. The antibacterial action prevents secondary infection of infected tissues and thus promotes faster healing of the infected tissues. Thus, exhibiting astringent property. The unripe fruit acts as a purgative and helps to heal piles. Epoxy azadiradione shows the anti-inflammatory activity against macrophage migration inhibitory factor.

Thus, it has anti-inflammatory and pain-relieving properties. Neem encourages waste removal and prevents constipation, which helps to prevent haemorrhoids. By thickening vein walls, it imparts antihemorrhagic activity, which stops bleeding and hence helps to cure bleeding piles. Nimbidine and Azadirachtin possesses analgesic activity. The analgesic effect shown is preferably by inhibition of prostaglandin synthesis, a peripheral mechanism of pain inhibition. It acts on the mediators which include prostaglandins, especially the E series, histamine, bradykinins, leucotrienes and serotonin, all of which also cause pain and fever. Thus, it is effective in acute inflammatory conditions associated with haemorrhoids. Therefore, the above various properties of *Azadirachta indica* like Antihemorrhagic action, Analgesic, Anti –inflammatory, Anti microbial, Astringent, laxative, purgative action helps in the management of haemorrhoids by controlling bleeding and pain.[10]



**Glycyrrhiza glabra (Yastimadhu) extract**



**Figure 3.9**

Glycyrrhiza glabra is a benefiting laxative that is generally prescribed to patients suffering from constipation. Glycyrrhizin and glycyrrhizic acid are the compounds present in Glycyrrhiza glabra. Glycyrrhizin possesses laxative properties.[19]

Glycyrrhizin -It is identical in both structure and activity same as the adrenal steroids has an anti-inflammatory activity identical to cortisone. This is due, in part, to inhibition of phospholipase A2 activity, an enzyme critical to numerous inflammatory processes. Glycyrrhizic acid- inhibits cyclooxygenase activity and prostaglandin formation (specifically prostaglandin E2), as well as indirectly inhibits platelet aggregation, all factors responsible for the inflammatory process. A flavonoid, isoliquiritigenin, from Glycyrrhiza glabra showed analgesic activity<sup>14</sup> in acetic acid-induced writhing response and hot plate test at the high dose. Therefore, the above properties of Glycyrrhiza glabra like Analgesic, Anti – inflammatory and laxative helps in the management of haemorrhoids by reducing pain associated with pain.

**Amalaki (Phyllanthus Emblica):**



**Figure 3.10**

One of the most highly regarded remedies from the school of Ayurveda, Amalaki (Indian Gooseberry) is known as a rejuvenating agent, that helps regenerate the cells. Aside from its many health advantages, including its aphrodisiac properties, amalaki also aids in gut cleaning and is used as a laxative by persons who experience constipation. Amalaki plays a significant role in both Triphala guggul and Vara churna.

May be helpful for chronic piles and constipation due to its potential laxative (facilitates bulking up and passing of stools) action.[20]



**Table 3.1:** Different Mode of action of herbs

| Plant Name  | Botanical Name     | Chemical constituent             | Action  |
|-------------|--------------------|----------------------------------|---|
| Neem        | Azadirachta indica | Epoxy, Azadiradione<br>Nimbidine | Antihemorrhagic activity, Analgesic,<br>Laxative, Purgative |
| Haritaki    | Terminalia Chebula | Galic acid, Chebulagic acid      | Digestive, Antihemorrhagic activity                         |
| Haridra     | Curcuma longa      | Curcumin                         | Antiinflammatory  |
| Yashtimadhu | Glycyrrhiza glabra | Glycyrrhizin                     | Analgesic effect  |

### 3.3 Nonsurgical Treatment Options

If at-home treatments for haemorrhoids are ineffective, more medical intervention may be required. Nonsurgical options include Trusted Source:

- Rubber band ligation: Internal haemorrhoids can be treated as an outpatient treatment by putting an elastic band at the hemorrhoid's base to cut off its blood supply. Either the hemorrhoid will get smaller or fall off.
- Sclerotherapy: An internal hemorrhoid is injected with a liquid during this operation. This results in a scar that stops the hemorrhoid's blood flow, leading it to shrink.
- Infrared photocoagulation: Internal haemorrhoids are heated when infrared light is focused on them, which leads to the formation of scar tissue. By cutting off the hemorrhoid's blood supply, this shrinks the haemorrhage.
- Electrocoagulation: To produce scarring, doctors inject a weak electric current into a hemorrhoid. The hemorrhoid shrinks as a result of the scar tissue's blockage of the blood supply.[14] These operations are typically performed by a doctor while the patient is sedated with local anaesthetic.

## IV. PREVENTION

Maintaining soft stools that pass smoothly is the greatest approach to avoid haemorrhoids.

Use the following advice to prevent haemorrhoids and lessen their symptoms:

- **Eat fiber rich foods.** Consume more whole grains, fruits, and veggies. By doing this, the stool will become softer and more voluminous, preventing the straining that might result in haemorrhoids. To avoid issues with gas, progressively incorporate more fibre into your diet.
- **Drink plenty of fluids.** Hydrate yourself well. To maintain soft stools, consume 6 to 8 glasses of water every day along with other beverages (avoid alcohol).
- **Consider fiber supplements.** The majority of people do not consume the 20 to 30 g of fiber per day that are advised. According to studies, over-the-counter fibre supplements including psyllium (Metamucil) and methylcellulose (Citrucel) can decrease hemorrhoid bleeding and general discomfort.
- Drink minimum 8 glasses of water or any other liquids each day if you take fibre supplements. Otherwise, the supplements can make you constipated or make it worse.
- **Don't strain.** Pressure in the lower rectum's veins increases when you restrict your breathing and strain to pass a stool.
- **Go as soon as you feel the urge.** Your stool may dry out and become more difficult to evacuate if you put off having a bowel movement until the desire passes.
- **Exercise.** Staying active can help prevent constipation and ease the pressure that prolonged standing or sitting can put on veins. Exercise can also assist you in losing extra weight that may be a factor in your haemorrhoids.
- **Limit your sitting time.** Long periods of sitting, especially while using the restroom, might put more strain on the anus veins.[11] [12]

**V. MARKETED PREPARATIONS FOR TREATMENT OF PILE**

Table 5.1:

|                    |  |
|--------------------|--|
| Triphala churna    |    |
| Pile harad churna  |    |
| Arsh har capsules  |    |
| Triphala guggul    |  |
| Avipattikar Churna |  |

**VI. CONCLUSION**

- For different levels of hemorrhoid sufferers, herbal treatment is preferred above other options. It explains how to treat haemorrhoids with common household items, making it one of the greatest at-home treatment options. The current review demonstrates that several herbal plant extracts have antihemorrhoidal and anti-inflammatory properties that make them useful for treating haemorrhoids. Hemorrhoid-related chronic constipation is treated by its natural laxative properties.
- Hemorrhoids are a very common anorectal condition defined as the symptomatic enlargement and distal displacement of the normal anal cushions. They are a significant medical and economical issue that affects millions of people worldwide. The etiology and other clinical contexts of hemorrhoid illness were first covered, followed by a discussion of the most recent nonsurgical and operative therapy strategies.

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