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# A COMPREHENSIVE REVIEW OF SURGICAL APPROACHES UTILIZED BY ACHARYA SUSHRUTA IN THE MANAGEMENT OF SHATAPONAKA BHAGANDARA (MULTIPLE TRACT FISTULA-INANO)

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#### **ABSTRACT**

The fistula in Ano is a track lined by granulation tissue, which connects perianal skin superficially to anal canal, anorectum or rectum deeply. Itusually occurs in a pre-existing anorectal abscess which burst spontaneously. *Acharaya Sushrut*a included *Bhagandara* in *Ashtamaharoga* and discussed it in detail based on its prevalence and difficulty in treatment. *Shatponaka Bhagandara* is one of the five varieties of *Bhagandara* that *Acharya Sushruta* has mentioned. In an effort to reduce recurrence rates and increase success rate over the past many years, numerous authors have proposed innovative procedures. However, Fistula-in-Ano is still a challenging surgical condition. In order to manage this difficult condition and create new trends in our understanding of Fistula-in-Ano, it is necessary to rediscover the old

wisdom of *Acharya Sushruta*. The objective of this study is to review and interpret the surgical approach taken by *Acharya Sushruta* in the management of *Shatponaka Bhagandara* in light of contemporary surgical literatures, which may hold the key for successful management of this disease.

**KEYWORDS:**- Fistula in ano, *Bhagandara*, Surgical disease.

# **INTRODUCTION**

In the field of Ayurveda, Fistula in Ano is known as *Bhagandara*, which affects the anorectal region. It is explained throughout classical literatures but *Acharya Sushruta*, the founder of

Indian surgery (1500–1000 B.C.) was the first Acharya, who recognise the significance of Bhagandara (~Fistula in Ano). He provides a detailed explanation of Bhagandara (~Fistula in Ano) including its Nidana (~Cause), Poorvaroopa, Roopa/Lakshana (~Clinical Feature), Samprapti (~Pathogenesis), Prakara (~Types), Upadrava (~Complication), Sadhya-asadhyata (~Prognosis) and its Chikitsa (~Management). According to the involvement of Dosha, Acharya Sushruta has characterised five different types of Bhagandara and described their clinical characteristics in detail also, viz: Shataponaka, Ushtragriva, Paristravi, Shambukavarta, Unmargi. Vata is the dominant Dosha in Shatponaka Bhadandra, it begins with a Pidika which is Arunavarna, that is accompanied by thin, frothy and abundant discharge. The pain is described as pricking (~Toda), cutting (~Bheda), hitting (~Tadana) and so on, multiple openings are found in the later stages of the disease along with the release of flatus (~Apanavata), urine (~Mootra), stool (~Pureesha) and semen (~Shukra). Fistula in Ano is a most common anorectal disease that affects millions of people worldwide.<sup>[1]</sup> According to contemporary terminology, its prevalence is second highest after Haemorrhoids.<sup>[2]</sup> Fistula in Ano is a track that lined by granulation tissue which connects superficially perianal skin to anal canal, anorectum or rectum deeply. It usually occurs in a pre- existing anorectal abscess which burst spontaneously. Fistula-in-Ano can be: cryptoglandular-90%, non- cryptoglandular (other causes)-10%. It's categorised as either "simple" or "complex." Single external opening and low anal fistulas are examples of simple fistulas. The criteria of complex fistula are, if the track crosses more than 50% of the external sphincter, anterior in females, has many tracks, recurrent, if the patient already has incontinence, local radiotherapy and Crohn's disease. Anal fistula prevalence was estimated (by real-world evidence analysis) to 1.80 and 1.83 per 10,000 patients in the United Kingdom and Europe, respectively in 2017. Furthermore, connections with other comorbidities found to be uncommon, despite the fact that almost 25% of cases looked to be linked to Crohn's disease. [3] Unfortunately, it is not quite easy to manage this disease. During and after the course of management, the surgeon faces several risks and difficulties such as-recurrence, faecal incontinence, long wound healing process, prolonged hospital stays and long course of management protocols. Even though, the various methods for the management of fistulas have evolved over time viz.- fistulotomy, fistulectomy, fibrin glue, anal fistula plugs, VAAFT, Seton, LIFT, etc. but nobody has ever been able to overcome above mentioned risks and difficulties associated with this disease. The majority of surgeons are still facing challenges in the management of fistula in Ano. [4] The ancient Indian surgeon Acharya Sushruta has mentioned the uses of Ksharasutra in the management of Bhagandara and Nadivrana.

Acharya Sushruta has not mentioned the method of preparation of the <u>Ksharasutra</u> but Acharya Chakrapani describes it in detail. In present time, simple and complex fistula can be cured by *Ksharasutra* therapy and modified *Ksharasutra* can be used in complex fistula. In this therapy, the fistulous tract is intercepted at the inter-sphincteric plane and *Ksharasutra* is applied in rest medial tract. Modified *Ksharasutra* therapy is used in multiple tract fistula.

#### Shataponka bhagandara

Acharaya Sushruta has characterised five different types of Bhagandara and described their clinical characteristics in detail, viz: Shataponaka, Ushtragriva, Paristravi, Shambukavarta, Unmargi. Vata is the dominant Dosha in Shataponaka Bhagandara, due to excessive intake of Vatavardhaka Aahara and Vihara leads Vata, to become aggravated and move towards the anus region, where it affects the Mamsa & Rakta Dhatu and produces Arunavarnapidika. This Arunavarnapidika is characterized with thin, frothy and profuse discharge associated with discomfort at anal region, that has been described as pricking (~Toda), cutting (~Bheda), hitting (~Tadana). Multiple external openings are found in the later stages of this disease along with the flow of flatus (~Apanavata), urine (~Mootra), stool (~Pureesha) and semen (~Shukra) from these openings.

## Prognosis/ Sadhya-Asadhyata

Acharya Sushruta has explained the five varieties of Bhagandara, out of them Shambukavarta (Sannipataja) and Unmargi (Aagantuja) are incurable and other three (Shataponaka, Ushtragriva, Paristravi) are curable with difficultly. Therefore, Acharya Sushruta has advised to the surgeon that before starting the management protocols of this disease, it is mandatory to explain the prognosis of disease to the patient.

#### Management of shataponaka bhagandara

Anal fistulas are usually treated surgically in modern medical science as well as Ayurveda also. In modern medical science Fistulas can be treated surgically in avariety of methods like fistulotomy, Seton techniques, Advancement flap procedure, LIFT procedure, Endoscopic ablation, Laser surgery, Fibrin glue and Bioprosthetic plug. A fistulotomy is the most popular procedure for anal fistulas. Any of these treatments can lead to disease recurrence and incontinence, none of them is entirely successful. *Ksharasutra* therapy is a significant cure for any type of *Bhagandara*, that doesn't have complications or recur. In comparison to standard therapy for Fistula in Ano, *Ksharasutra* therapy can be performed in a small setting with few tools and equipment and patients can walk throughout the entire course of treatment.

It is an easy, secure and effective therapy for anal fistulas. The CCRAS has standardized use of *Apamargaksharasutra* as a reliable procedure for the management of Fistula in Ano.

#### **Medical management**

Acharya Sushruta has mentioned that the management of Bhagandara is profoundly influenced by the ability of the surgeon to accurately identify the stages of this disease and then start the intervention for this disease. In the Pidika stage, the course of management is as follows-Apatarpana(~fasting or a limited diet) followed by Virechana (~purgation) with the goal of reversing the un-suppurative stage.

# Surgical management

Acharya Sushruta has mentioned the general operating principles for all the anal fistulas that firstly identify the tract with an *Eshani* (probe) then raise the entire cavity or receptacle of pus (sinus) and then scrape the tract out. In Shataponaka Bhagandara, due to presence of multiple external openings along with higher chances of contamination by urine and faeces managing of this type of fistula is difficult because all the tracts must be removed through a single incision and surgery may also cause incontinence. Acharya Sushruta has given a novel and inventive solution to resolve this problem by detaching the tracts one at a time through various types of incisions. In these situations, the surrounding tracts are linked together to form a single central tract with little tissue damage. This type of the strategy definitely prevents the formation of a large wound and also prevents contamination of the wound in the later stage of the management. Acharya Sushruta has mentioned many types of incisions to connect these distinct tracts. In modified Ksharasutra therapy, a single incision is made in the centre of most of the fistulas, mostly midline posterior or anterior (depends upon the internal opening of the fistulous tract) at the level of inter sphincteric plane, after that all fistulous tracts are intercepted through this newly created wound with the help of probe. [5] All the passages of the fistulous tract are scraped with the help of curette. After that, the standard Apamargaksharasutra from the newly created wound to the infected anal gland internally or internal opening of fistulous tract is applied. Then, the Ksharasutra is changed once in every week until the entire tract is cut. Generally, a tract is completely cut infour to five sittings.

### **Types of incision**

Acharya Sushruta used a variety of incisions which is-

- a) Langalaka- An incision that is equal on both sides, to connect these multiple tracts.
- b) Ardhalangalaka- An incision with one arm longer than the other is called an

Ardhalangalaka.

- c) *Saravatobhadra* This procedure involves making a cross-shaped incision near the anus and cutting a little portion of the perineum's raphe. When the tracts are not connected, like in the instance of a horse-shapedfistula, it is typically used.
- d) Gotirthaka- By inserting the scalpel from one side, it creates a longitudinal incision.

#### Don'ts

According to *Acharya Sushruta*, the patient should avoid strenuous exercise, sexual activity, animal rides and improper diet for a year even after the fistulous wound hashealed. These are the actions that can cause recurrence and pain in perianal region. <sup>[6]</sup>

#### DISCUSSION

Conventional *Ksharsutra* therapy for treatment of fistula in ano is a traditional, easy and successful therapy, which is described in *Ayurveda*. *Acharaya Sushruta* explained five types of fistulas out of them simple fistula can be treated by any surgical or para surgical method like fistulotomy, fistulectomy or laser therapy but complex fistula (like Multiple Tract Fistula in Ano) is a big problem to cure and decreases the recurrence rate so *Acharya Sushruta* told the exact line of treatment for *Satponaka Bhagandara* (Multiple Tract Fistula in Ano). In allopathy Many surgical methods have been prescribed for multiple tract fistula in ano like LIFT, Laser therapy but the success is still not very good. *Ksharsutra* has shown amazing effects on anorectal diseases.<sup>[7]</sup> The *Guggulu Apamarga Kshara Sutra* has the following ingredients: *Apamarga Kshara, Snuhi ksheera, Haridra* Powder, and *Guggulu. Apamarga kshara on Ksharasutra* therapy cauterizes the tissue of mass (fistulous tract) due to its *Ksharana guna* (corrosive properties). That's why using *Kshar Sutra* in *Shatponaka Bhagandara* (Multiple Tract Fistula in Ano) in a Modified way gives good success rate.

#### **CONCLUSION**

Though there are numerous management protocols used in modern medical science, it is extremely difficult to cure Fistula in Ano (~Bhagandara) in recent times. In Ayurveda, Ksharasutra therapy is significantly helpful for managing complex fistulas. However, using Ksharasutra for complex fistulas like multiple tract fistulas and horse shoe fistulas might be challenging in their management. Inmultiple tract Fistula in Ano, Ksharasutra should be used in different ways, the surgeon should make a new wound in one inter-sphincteric plane and connect all the fistulous tracts then apply Ksharasutra. By using the Ksharasutra as per this approach, the risk of recurrence can be minimized and the overall recovery time is also

definitely shortened. There are numerous types of *Ksharasutras* available now, all of them *Apamargaksharasutra* is most frequently used by the surgeons. Here the modified use of *Ksharasutra* can prove to be a boon for the patient suffering from multiple tract Fistula in Ano.

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