Management of *Bhagandara* W.S.R to complicated fistula-in-ano: A case report

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ABSTRACT

Bhagandara (Fistula-in-ano) is a disease which occurs in the region of anal canal described in Ayurveda literature. It is an infective condition of the anal canal usually caused by crypto glandular infection of anal crypts. There is an abnormal communication between two epithelial surfaces and track is lined by unhealthy granulation tissue. The present case study was conducted on a male patient aged 85-years-old suffering from the disease for last one and half year. Patient came to us recurrence after incision and drainage of perianal abscess. *Kśarasutra* therapy using IFTAK (Interception of fistulous tract with the application of *Khśarasutra*) technique of treatment was adopted. The daily dressing was done with *jatyaditaila*. The patient was cured completely within 8 weeks of treatment. There was no side effect or any complication after regular follow up of 2 months. The treatment technique was proved to be a very effective and convective treatment option.

Keywords: *Bhagandara, Fistula-in-ano, Jatyaditaila, Khśarasutra.*

Bhagandara is a painful condition around *guda* (anal canal) and perianal region with a discharge of pus [1]. Fistula-in-ano is an infective disease of analregion and its prevalence is around 8.6 cases per 100,000 populations [2]. The primary cause is crypto glandular infection of anal glands which is a chronic abnormal communication, usually lined by unhealthy granulation tissue, runs outwards from the anorectal lumen (the internal opening) to an external opening on the skin of the perineum or buttock or scrotum (or rarely, in women, to the vagina). The secondary cause of fistula-in-ano is associated with some specific diseases such as Crohn's disease, tuberculosis, lymphogranuloma venereum, and actinomycosis [3].

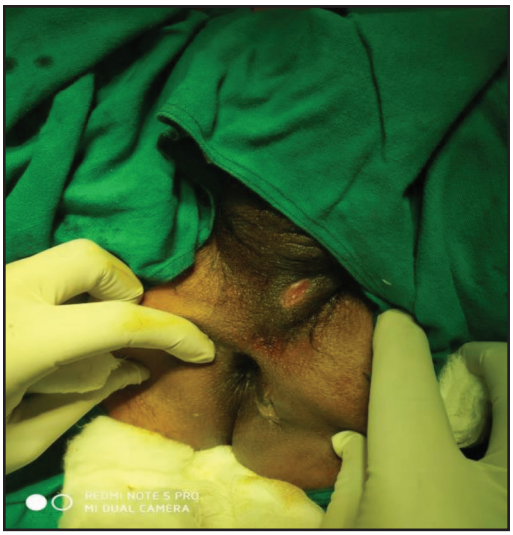

Figure 1: Clinical picture of the patient before Surgery

Khśarasutra is a medicated thread containing *snuhikśīra* (latex of *euphorbianerifolia*), *apamargakhśara* (*Achyranthes aspera*) and *haridra (curcuma longa)* powder [4]. It is a proven treatment modality in Ayurveda in many diseases especially fistula-in-ano. With the advancement in the *Khśarasutra* therapy a new technique named IFTAK (Interception of fistulous tract with the application of *Khśarasutra*) [5]. Use of *Khśarasutra* causes extensive fibrosis and favors proper healing which reduces the chances of recurrence. Although there are many surgical techniques available for the management of fistula-in-ano; there is one or other complications or high recurrence rate. In this technique (IFTAK) there is less chance of recurrence as it damages the infected track.

CASE REPORT

An average built male, age 85-years-old, reported to the Uttaranchal Ayurvedic Hospital with complaints of swelling and pus discharge around the anal canal and from sub scrotal region for last 1 and half year. The patient was not a known case of diabetes mellitus, hypertension, tuberculosis or bronchial asthma. Initially, the patient noticed discomfort and heaviness around the anal canal but he ignored the symptoms. Two months later, he felt pain and swelling in perianal region. He took conservative medication and the discharge stopped but within 2 weeks there were similar complaints. Now, the patient felt pain in the perianal region with a discharge of pus from a small opening. Then he consulted a surgeon and diagnosed as a perianal abscess. Incision and drainage were performed and he got relief. After one month,

Figure 2: Clinical picture of the patient after Surgery

again there was pus discharge from an opening just below scrotum and he came to our hospital.

On general examination, there was no systemic illness. There was no clubbing/ cyanosis/ icterus, and no lymphadenopathy was observed. At the time of examination, pulse rate was 78/ min., blood pressure was 138/84 mmHg and the temperature was 99.8^{0}F. On local examination, a scar mark of previous surgery was present having an opening at 3 O'clock position approximately 7-8 cm from the anal verge. Tenderness was present around the anal canal upto sub-scrotal region and at 6 o'clock position. There was an external opening at sub-scrotal region towards the left side approximately 10 cm from the anal verge with hypergranulation area. On the application of pressure in the perianal region, pus discharge was present anteriorly from external opening witha fibrous cord felt between external opening and scar opening upto perianal region at 6 o'clock.

Per rectal examination revealed tender area at 6 o'clock with a wide dimpling at the dentate line.On pressure at internal dimpling, the pus discharged from the previous scar at 3 o'clock (Fig 1). On syringing with normal saline mixed with hydrogen peroxide from external opening, solution effused at 6 o'clock visualized with the help of slit proctoscope. The patient was provisionally diagnosed as *Bhagandara* (Fistula in ano)

Blood investigations such as complete blood count, random blood sugar were normal and HIV I&II, and HBsAg were non-reactive. The treatment adopted for this case was *Khśarasutra* therapy using IFTAK (Interception of Fistulous track with the application of *Khśarasutra*) technique. The procedure was as follows: In the lithotomy position, after painting and draping perianal block was given and along the fistulous track. Probing of the fistulous track done which was communicating external opening at sub scrotal region to an opening created due to previous surgery was performed with a malleable copper probe. Another probing was done from scar opening to an internal opening situated at dentate line posteriorly at 6 o'clock. Then a small opening was created posteriorly at 6 o'clock approximately 3 cm from the anal verge.

The external opening was widened and primary threading done with 3 linen threads no. 20. The 1st thread was introduced between external opening to scar opening, the 2nd thread between scar opening and internal opening to achieve IFTAK technique and the 3rd thread was placed between artificial opening at 6 o'clock to internal opening (Fig 2). On the next day, *Khśarasutra* was applied into the tracks replacing all primary threading. The patient was advised hot sitz bath daily and dressing with *jatyaditaila*. Oral medication such as *Ṭriphalaguggulu* 2 tablets (250 mg) and *gandhakarasyana* 1 tablet was given twice daily for one month. After 2 days, the patient was discharged with regular follow-up and weekly *Khśarasutra* change.

As *Khśarasutra* therapy is a multistage treatment, it requires debridement during every further follow up.In 1st follow-up, pus discharge was significantly reduced. In the next follow-up, it was completely absent and pain was significantly reduced.After 3 weeks, the 2nd thread was removed and the other two *Khśarasutra* were kept in situ. The wound at 3 o'clock gradually healed. After 4 *Khśarasutra* changes which were done at the weekly interval, the track at 6 o'clock was laid open and packing of *jatyaditaila* impregnated gauze was continued. In the next follow-up after 7 days, the track between external opening and scar opening was also laid open and kept for secondary healing with the help of *jatyaditaila*. The fistula track healed in 8 weeks completely with minimum scarring. No pain and no incontinence were noted in follow-up period (Fig 3).

DISCUSSION

The symptoms and signs of *Bhagandara* can be correlated with fistula-in-ano. According to Sushruta, the disease which causes *darana* (cutting pain) in and around *bhaga* (pubic region, perineum, vaginal region, and genital area), *guda* (anal region) and *basti* (urinary bladder) is called *Bhagandara.* There are five types of *bhagandara-ṣatponaka*, *uśtragrīva*, *parisravi*, *unmargi* and *agantuja* [6]. According to Vagbhata, there are 3 more types-*Parikśepi*, *arśobhagandara* and *rijubhagandara* [7]. Fistula-in-ano has five types according to Park's classification such as Subcutaneous, intersphinteric, transsphinteric, suprasphincteric and extrasphincteric fistula-in-ano [8]

Many treatment modalities are available but almost all have recurrence rate in fistula-in-ano. Nowadays, *Khśarasutra* therapy is very much effective. It is a multistage procedure requiring minor procedures in the follow-up period. *Khśarasutra* using IFTAK technique is proving to be a convenient method of treatment in fistula-in-ano. It reduced a larger wound created in routine fistulotomy or fistulectomy or *Khśarasutra* therapy. In this technique, the proximal part of the fistulous track is intercepted at the level of external sphincter along with the application of *Khśarasutra* from the site of interception to the infected crypt in the anal canal. This is aimed at to eradicate the infected anal crypt with no or minimal damage to anal sphincters by using *Khśarasutra* (medicated seton). Healing time is also reduced.

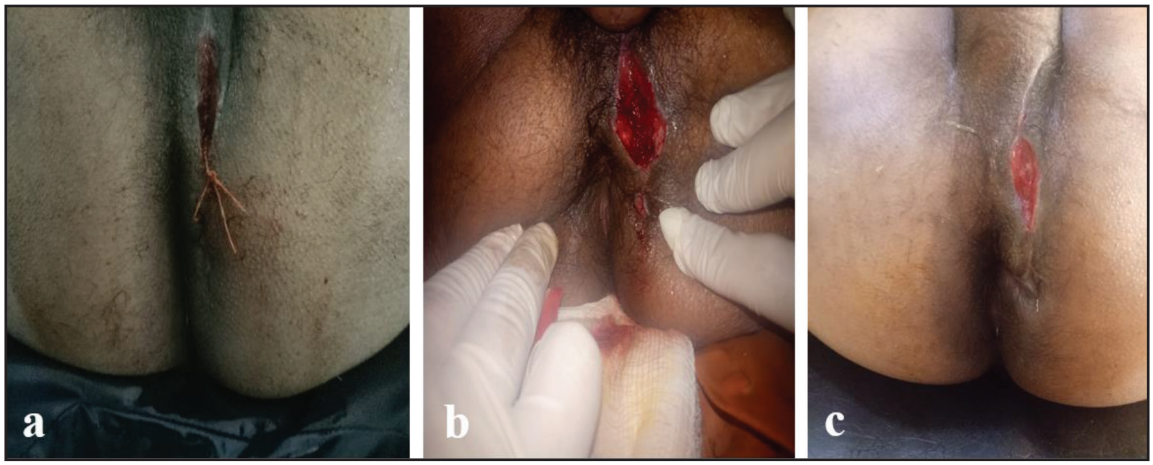

Figure 3: Follow-up of the patient (a) after 4 weeks; (b) after 6 weeks; (c) after 8 weeks

Whenever the opening of anal gland gets blocked it forms an abscess usually in the region of intersphinteric space. This abscess finds its track and may open outside in the perianal area or may travel to the rectum. The technique focused on the crypt, which was involved in the pathogenesis of fistula-in-ano. The patient returns to normal routine life quite early.In the present case, there was along curved track with an external opening at the subscrotal region and internal opening at 6 o'clock position. The pus discharge from external opening reduced after 2 weeks of surgical procedure. There as mild pus discharge from 6 o'clock opening and from interception point due to gravity. The result obtained is due to the combined effect of IFTAK technique as well asoral medications.

After 3 weeks the 2nd thread was removed which wascommunicating internal opening to interception point. It started healing as unhealthy granulation tissue was completely debrided by *Khśarasutra*. In next follow up, the 3rd *Khśarasutra* was removed by lay opening of the track. The wound was healthy with pink granulation tissue. *Jatyaditaila*, due to its efficient role in wound healing [9]; helped in good progress and desired healing. After 1 week the 1st *Khśarasutra* was also removed and laid open the small track which also having healthy granulation tissue. This *Khśarasutra* was removed last because the track had a persistent fibrous cord. After one week the wound was healing with no pain and no discharge. *Khśarasutra* helped in debridement of the fistulous track as well as the removal of infected crypt [10]. Oral medications such as *Ṭriphalaguggulu* [11-12] prevented secondary infection and acted as an adjuvant therapy along with *jatyaditaila*. There was no any side effect of the treatment. There was no damaged sphincter mechanism. The patient responded well to the treatment.

CONCLUSION

The fistula-in-ano case treated with IFTAK technique very efficiently. Multistage fistula-in-ano procedure done in the present case proves better treatment option in fistula-in-ano where there is a long curved track mostly posteriorly. As long *Khśarasutra* pacing between external and internal opening is quite difficult and there is a chance of sphincter damage. The postoperative scar is minimal in this technique.

REFERENCES

1. Shashtri A.D, Sushrut Samhita, Ayurveda Tatva Sandipika, hindi commentory, chaukhamba Sanskrit sansthan, nidansthana chapter 4:317.
2. Bailey & Love's Short Practice of Surgery, edited by Norman S. Williams, Christopher J.K. Bulstrode, P. Ro-nan O'Connell, Hodder Arnold publication, 25th Edition, Anus and Anal Canal, *Fistula-in-ano*, p1262.
3. Bailey & Love's Short Practice of Surgery, edited by Norman S. Williams, Christopher J.K. Bulstrode, P. Ro-nan O'Connell, Hodder Arnold publication, 25th Edition, Anus and Anal Canal, *Fistula-in-ano*, p1262.
4. Shankaraprasad K, Muralidhara Sharma, Rakesh RN. Comparative study of clinical effect of *ApamargaKshara Sutra* prepared by 7 and 21 coatings in *Bhagandara*. J Ayurveda Integr Med Sci. 2018;3:21-6.
5. M. Sahu. A manual on fistula-in-ano and kshara sutra therapy, published by NRC, Dept. Of Shalyatantra, IMS, BHU, first edition, 2015.
6. Shashtri A.D, Sushrut Samhita Ayurveda Tatva Sandipika hindi commentory, chaukhamba Sanskrit sansthan, nidansthana chapter 4:316.
7. Tripathi Bhraman and Astangahridyam, nirmalahindi commentary, chaukhambha Sanskrit sansthan Delhi, uttarsthan chapter-28/5,p-1092.
8. Parks AG Gordon PH, Hardcastle JD. A classification of fistula-in-ano. Br J Surg. 1976;63;1-12.
9. Available from: https://ayurmedinfo.com/2012/06/05/jatyadi-oil-benefits-how-to-use-ingredients-side-effects/. Accessed on 04/04/19.
10. Available from: https://clinicaltrials.gov/ct2/show/NCT01880398. Accessed on 15/05/2019.
11. Sumathi P, Parvathi A. Antibacterial potential of the the medicinal fruits used in Triphala: An ayurvedic formulation. J Med Plants Res. 2010;4:1682-5.
12. Naik GH, Priyadarsini KI, Bhagirathi RG, Mishra B, Mishra KP, Banavalikar MM, *et al. In vitro* antioxidant studies and free radical reactions of triphala, an ayurvedic formulation and its constituents. Phytother Res. 2005;19:582-6.

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