



ISSN NO. 2320-5407

Journal Homepage: - www.journalijar.com

INTERNATIONAL JOURNAL OF ADVANCED RESEARCH (IJAR)

Article DOI: 10.21474/IJAR01/1773
DOI URL: <http://dx.doi.org/10.21474/IJAR01/1773>



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ADVANCED RESEARCH (IJAR)
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Journal DOI: 10.21474/IJAR01

RESEARCH ARTICLE

ROLE OF NISHADI SUTRA IN RECURRENT FISTULA-IN-ANO- CASE REPORT

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Manuscript Info

Manuscript History

Received: 12 August 2016
Final Accepted: 19 September 2016
Published: October 2016

Key words:-

Bhagandhara, Nishadi Sutra,
Apamarga, Recurrent fistula-in-
ano, Kshara sutra, Unit cutting time.

Abstract

Bhagandhara (Fistula-in-ano) is a baffling disease which occurs in Anorectal region. It is second commonest disease after hemorrhoids. Standard *Apamarga Kshara sutra* is in extensive use to treat Fistula-in-ano. Due to the difficulty of availability and preservation of *Snuhi ksheera*, an alternative management was needed to encounter the problem. *Nishadi sutra* was selected keeping in view of the properties of *Vranashodana* (Wound cleansing), *Vranaropana* (Woundhealing) and *Lekhana* (Scraping). In the combination, which were very much beneficial to treat the Fistula-in-ano. Though the study is limited with 2 case reports, the results were encouraging, inviting an option for randomized controlled trials with Standard kshara sutra and Fistulectomy.

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The word fistula is derived from a Latin word a reed, pipe or flute. It is an abnormal communication between two epithelial-lined surfaces. It usually results from an ano-rectal abscess, which burst spontaneously or opened inadequately. As the wound is located in anal region which is a storehouse for faeces so it is more prone for infection, thus takes long time to heal and the condition remains difficult to cure. Various operative procedures often lead to complications like recurrences, scars and faecal incontinence. In Ayurvedic classics, *Bhagandhara* has been described as one of the *Asta Mahagada*[1] means which is difficult to cure and it has similar signs and symptoms of Fistula-in-ano. The *Kshara Sutra* therapy was practiced and used since long time with great success and negligible recurrences. As the collection and preservation of *Snuhi ksheera* is difficult and time taking process, *Nishadi sutra* is Selected as it is easily available, preservable and inherited with the properties of *Vranashodana* (Wound cleansing), *Vranaropana* (Woundhealing) and *Lekhana* (Scraping).

Fistula-in-ano is one of the most common anorectal diseases in which the chronic granulating track runs from the anal canal or rectum to the perianal skin or perineum and is associated with considerable discomfort and morbidity to the patient. Various modalities such as open surgery in the form of fistulectomy or fistulotomy, Seton treatment (chemical or cutting); chemical destruction of the tract by corrosives; application of fibrin glue or fistula plug are advocated for management of fistula-in-ano. Radical excision of the fistula track along with removal of the major portion of the surrounding tissue, which takes longer time for complete healing and formation of granulation tissue which in turn leads to frequent recurrence. To overcome the problem of recurrence and other complications like incontinence of anal sphincter, resulted from surgery, a safe and best technique was described by sushruta way back in 1000 B.C. in the name of *Kshara sutra*. conventionally *snuhi ksheera* is used to prepare *kshara sutra*. The disadvantage observed in traditional *kshara sutra* is the preservation of latex for longer period. To bypass this difficulty application of '*Nishadi sutra*' has been carried out. The drugs of *Nishadi sutra* can be preserved for long time and easily available. *Ksharasutra* was mentioned by sushruta while dealing with the disease *Nadivrana*.

Basavararaju author of an Andhra treatise '*Basavarajeeyam*', gave a emphasis on the description of *Bhagandara and varti prayoga* in it.[2].According to *Sushrutha* there are four characteristic features of *Bhagandhara* [3].

1. Primary formation of a boil which is called as *Bhagandhara pidaka* in its intact condition.
2. The boil should be within and two fingers of anal orifice and when it bursts called *Bhagandhara*.
3. The *Pidaka* must be deeply rooted one.
4. It must be associated with pain and fever.

Anatomical consideration of guda:-

The disease *Bhagandhara* is a particular variety of disease related to the *Guda pradasha* that is ano-rectal region. According to *sushrutha* '*GUDA*' is one of the organ in relation with *vasti*(urinary bladder).it is situated in the pelvic cavity.it is attached to the terminal portion of *sthulaantra*(Large intestine) and which meant to excrete flatus and faeces. It is *sadyomarakamarma* [4,5].The length is four and half inches. It includes whole of the anal canal and lower 6cms of the rectum. According to modern anatomy the rectum is approximately 12cm in length.

Etiopathology of bhagandhara:-

Charaka has mentioned the main cause of the occurrence of *bhagandhara as pidaka*, which is caused due to improper *ahara* and *vihara*. Apart from this he has mentioned *krimi-roga*,foreign body, strain during defecation, sitting in awkward position are also as causes of *bhagandhara*. [6].Before *Bhagandhara pidaka* bursts ,it undergoes the successive stages of *Amavastha*, *pachyamanavastha* and *pidakavastha* and all three *doshas* take part in this process.[7].The active vitiation of *Vata,pitta* and *kapha* combinely cause *bhagandhara* but the pathogenesis of *sopha* is limited to the stage of boil or *pidaka* only. Like any *sopha* the untreated *bhagandhara pidaka* gets deep seated and leads to suppuration, when the pus does not get away, to get out it produces *nadivrana* and results into *bhagandhara*. [8]

Aggravated *doshas* due to the basic *apana vayu vigunya* and already present predisposing factors, as a result of various conditions as mentioned cause *srothoavarodha* of *Mamsa* and *rakta* and ultimately results into the localization of the disease in the area. Therefore *Mamsa* and *Rakta* are *dushya*'s. when such a suitable site is produced , the *dosha*'s get lodged there and enter in to the fourth stage of *kriya kala* i.e '*sthanasamsraya*'.the localized disease process

Starts with the onset of symptoms which marks the fifth stage of *kriyakala* i.e '*vyakthi*'.In due course of time the symptoms becomes clearly distinct and may be differentiated according to the involvement of *dosha*'s and if the lesion is *vrana sopha* or *vidhradhi* it is likely to burst open by this time and it constitute the sixth stage '*Bheda*'. Usually *bhagandhara* reports in the stage of *bheda* .

In the modern surgery the condition of *bhagandhara* is dealt as *Fistula* –in- ano. A *fistula* is an abnormal communication between any two epithelial surfaces and it is a track lined by granulation tissue which opens deeply in the anal canal or rectum and superficially on the skin around the anus. Most of the *fistulas* occur due to the chronic infection of the anal glands.

Three principles of management are being followed presently, Non-operative, operative and para surgical. Operative and para surgical are more in practice. In operative management the track is lied open which is called *Fistulotomy* in which Recurrences are common with some reporting 8.47% of recurrence. Incontinence after *fistulotomy* is a very distressful problem both to patient and surgeon.[9,10] For *fistulae* that traverse longer distances of sphincter, such as high trans-sphincteric or more proximal, *fistulotomy* conveys high rates of postoperative incontinence and alternative surgical treatments are necessary. Another technique is *fistulectomy* which involves the excision of whole track along with surrounding unhealthy tissues. Very wide wound which if starts healing from the margin, as usual again forms a track and the *fistula* reappears. The para surgical technique involves the applications of the ligature of silk or Indian rubber band into the *fistulous* track It lays the wound open by permitting gradual healing from the base . *Sushrutha* advocated the medicated thread instead of ordinary silk or Indian rubber band.

Nishadi sutra:-

Due to the lack of availability and difficulty in preserving the *snuhiksheera*, instead of standard *ksharasutra Nishadi sutra* is selected. The preparation of *Nishadi varti* was described in the text *Basavarajeeyam*.115.*Nishadi varti* is modified as *Nishadi sutra* as *Argvadadi varti* which is said by *sushruta* and modified by *Argvadadi sutra* by

bhavamisra. Nisha(Haridra),siddhardha,saindhava lavana,guggulu,surgical linen thread no.20, Madhu,Gum acaceae were used to prepare the *Nishadi sutra*.



Photograph showing prepared Nishadi Ksharasutra.

Case Reports:-

Two patients were studied with *nishadi sutra*. Both were in the age of 55 years and 56 years, male patients with recurrence of fistula-in-ano. Detailed case history was taken. Careful clinical examination was done. Per-rectal examination was done by introducing the index finger into the anal canal to detect the internal opening. Probing was done with malleable copper probe. Probing was done to note the direction and depth of the track, the presence of any foreign body, whether the end of the probe enters a hollow viscus, fresh discharge comes out on withdrawal of the probe. Examination was also done with proctoscope to rule out pile masses, growth, ulcers and to see the condition of rectal mucosa.

Investigations done:-

CBC, Urine routine, microscopic, pus culture and sensitivity. Fistulogram.
Swadishta virechana churna 5gms was given before the day of application of ksharasutra.

Application of nishadi kshara sutra:-

The application was done with the help of a probe, with a plain thread. The thread is tied tightly. On day 3 the *Nishadisutra* is replaced. Before each change of thread, lukewarm sitz bath was given by *triphala kwatha*. 3ml of *jatyaditaila* was pushed in to the anal canal before defecation. Every 7th day the thread is changed. After complete cutting through and healing both the patients were advised to apply *jatyadi taila* externally on the wound for complete healing. The follow-up was advised after once in a month for 1 year. Both the cases were registered at the OPD of Shalya Tantra Department in December 2014 and January 2015.

Case number 1:-

Age: 55 years

Sex: male

Occupation: teacher

Complaint: pus discharge from perianal region, pain in the anal region since 20 years.

On examination, three external openings found at 7, 3, 5 o'clock position and one external opening of a lengthy sinus was found on the left lateral side of the buttock at 5 o'clock position.

Fistulogram was done which is suggestive of high anal fistula-in-ano with a track forwards the left lateral side.

Initial length of the tracks measured as

7 O'clock-----12 cms

3 O'clock-----14 cms

5 O'clock-----11 cms

5 O'clock-----16 cms.

Patient undergone fistulectomy in 2012 .

Time taken for complete cutting and healing:41/2 months.

Case number 2:-

Age: 30 years

Sex: male

Occupation: Farmer.

Complaints: pus discharge from perianal region since 2 years,pain in the anal region .On examination one external opening was found at 10 O'clock position. Fistulogram was done which is suggestive of High anal fistulous track. 10 O'clock---9 cms.

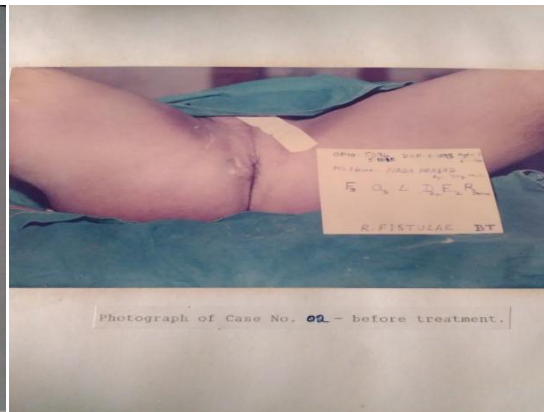
Fistulectomy was done in 2011.

During the treatment and up to 12 months follow up no complications or recurrence were observed. Analgesics were given for first 3 days for relief of pain. Appropriate antibiotic coverage was given to both of the patients.

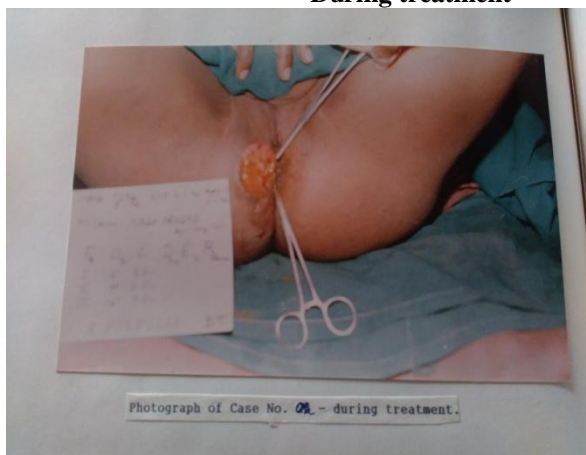
Fistulogram



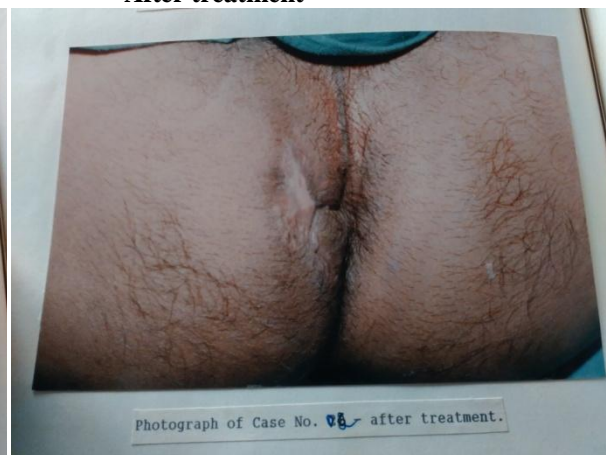
Before treatment



During treatment



After treatment



Calculation of unit cutting Time: $\frac{\text{Total No. of days taken for cut through}}{\text{Initial length of track in cms.}}$ =days/cm

Discussion:-

The incidence of recurrence in Fistula-in-ano according to various authors is ranging from 5% to 90%.The two patients who under went fistulectomy came with recurrence. The yoga Nishadi sutra simultaneously contains the drugs having anti-inflammatory property, *vrana ropana* property i.e wound healing, *lekhaneeya* i.e scrapping property .The purpose of selecting *Nishadi sutra* is to prevent recurrence. In both the patients the Fistula was High anal. It is observed that the entire track along with the pocket is completely destroyed. The maximum unitcutting time observed in the patient number 1 is 9.2 days/cm. References are indicating that unitcutting time in younger age will be comparatively less. Comparative to the patient number one who is having a sedenteray life style, patient number 2 who is a farmer recorded lesser unit cutting time.8.8 days/cm.. More mobile patients will have more

tensile strength of the thread on the track which results in quicker cutting of the track. The duration of the disease also exhibited role on the unit cutting time. Case number 1 with 20 years of history took longer time to complete the cutting in comparison with case number 2 with 3 years history. Due to the hard and thick fibrous tissue, the unit cutting time is increased in cases number 1. The Ph value of Nishadi sutra is 6.2 (Madhu 3.6 Haridra 6.2, guggulu 5.7)

Conclusion:-

Extensive surgery commonly ends up in various complications, such as sphincter incontinence, excessive tissue mutilation and recurrence.

Nishadi sutra helps in cutting, draining and healing of the fistulous track due its *vranaropana, vranasodhana and lekhaneeya* properties of the combination of drugs.

The antimicrobial action of *Haridra and madhu* controls infection.

The *Lekhaneeya* property of *Guggulu* facilitates drainage of pus from the fistulous track helps in healing by cutting through the fibrous tissue.

The small trial conducted in Recurrent fistula in ano in two patients, proved 100% resulted oriented.

Randomized controlled trials need to be conducted with Standard *kshara sutra* to come out with meticulous conclusion.

References:-

1. Susrutha sutra sthana 33/4, kaviraj kunjilal Bhishagratna, choukamba publications
2. Basavarajeeyam , chapter 21
3. Susruta nidana sthana 4/3
4. Susrutha sareera sthana 6/25
5. Susrutha sareera sthana 6/7
6. Charaka chikitsa 12/96
7. Susrutha sutra sthana 17/7
8. Susrutha sutra sthana 17/9
9. Golighar J.C. surgery of Anus , rectum and colon, 4th edi
10. Hanely P.H. conservative surgical correction of horse shoe abscess and fistula , diseases of colon and rectum, 8:364-8-1975