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Partial Fistulotomy followed by *Kshara* application and *Ksharasutra* Ligation in Fistula-in-ano - Multiple approaches in a Single Case

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ABSTRACT

Bhagandhara is one of the common ailments pertaining to *Guda* and it is mentioned under the heading of *Ashtomahagada* (eight major diseases). According to *Acharya Susahruta, 'Bhagandhara'* starts as deep-seated *pidika* (boil) surrounding *Guda* (anus) within two *Angulas*, producing fever and pain. In contemporary science it is compared to fistula-in-ano. Fistula-in-ano is a track lined by granulation tissue and communicating two epithelial lined surfaces which opens deeply in the anal canal or rectum and superficially on the skin around the anus. In modern medical science various treatment modalities has been explained but they are having its own merits and demerits. *Ksharasutra* is a medicated thread, indicated in ano-rectal disorders particularly in the management of *Bhagandhara*. In plane *Kshrasutra* the required time for cut through and healing of wound is more, so patients are mentally disturbed with this disease. Hence to minimize the required time, multiple interventions along with *Ksharasutra* is opted. In this case report, a patient of fistula- in-ano having 9cm at posterior aspect of anal canal was treated with multiple approaches which are partial fistulotomy, *Kshara* application and *Ksharasutra* ligation for remaining part of tract. Regular dressing was done with *Jatyadi Ghrita* for the partial fistulotomy wound and old *Ksharasutr*a was changed with a new one by rail-road method on every week for the remaining part of fistulous tract. The unit cutting time (UCT) was measured and noted at every week. This case was cured completely within 7 weeks. Hence study concluded that the long fistula cases can be treated with multiple interventions along with *Ksharasutra*.

Key words: *Bhagandhara, Fistula in ano, Partial fistulotomy, Apamarga Kshara, Apamaraga Kshara Sutra.*

INTRODUCTION

Bhagandhara (Fiatula in ano) is a condition which does *Darana* (splitting or discontinuity with severe pain) in *Bhaga* (Vagina), *Guda* (Rectum or Anal canal), and *Basti* (Urinary bladder). Those without opening are called *Bhagandhara Pidaka* and those with opening are called *Bhagandhara.*[1] *Acharya Sushruta* mentioned *Bhagan-dhara* in *Astamahagada* (eight major diseases) because it is difficult treat by their very nature.[2] In contemporary science it is compared to fistula-in-ano. It is an abnormal tube-like communication between two cavities or a cavity with the external surface for a cavity with other organ. It can occur in any part of the body, if fistula occurring in ano rectal region is called fistula-in-ano. Fistula-in-ano is a common ano-rectal condition prevalent in the population worldwide and its prevalence is second after Hemorrhoids. The incidence of a Fistula-in-ano, developing from an anal abscess ranges from 26-38%.[3] Sainio P. showed that the prevalence rate of Fistula-in-ano is 8.6 cases per 100,000 population. The prevalence in men is 12.3 cases per 100,000 population and in women 5.6 cases per 100,000 population. The male-to-female ratio is 1.8:1. The mean age of patients is 38.3 years.[4,5] Anal fistulas causes various symptoms including pain, swelling, discharge, itching and social embarrassment.[6] In modern surgery fistulectomy,

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fistulotomy, fibrin glue, fistula plug, video assisted anal fistula treatment (VAAFT) and Ligation of inter-sphincteric fistula tract (LIFT) are treatment modalities with their own merits and demerits.[7] In *Ayurveda* it is clearly mentioned that *Bhagandhara* can be treated with *Chedhana* (Excision), *Ksharakarma* (application of alkali), or *Ksharasuta* (medicated thread).

In this study a case of posterior fistula having external opening at 8 o' position 9cm away from anal verge was treated with partial fistulotomy followed by *Apamarga Kshara* application and *Apamarga Ksharasutra* ligation in the remaining part of fistulous tract.

Patient Information

Chief Complaints:

Patient Complaints of pus discharge and pain in perianal region since 5 years.

History of Present Illness:

Patient aged 40 years not a K/C/O DM and HTN was apparently normal 5 years back, then he gradually developed a small swelling in the perianal region which was little painful. Initially he neglected the condition. Later as the days passed the swelling changed in to a boil and ruptured spontaneously resulting in purulent discharge. He also had associated complaints of pain which is moderate in nature and of throbbing type and itching in the perianal region. Pain used to aggravate on sitting position. For these Patient took allopathic treatment from private clinic but didn't found relief. Hence he visited SJGAUH Hospital, Bangalore for further management.

Past History:

Not a K/C/O HTN, DM, TB, Thyroid disorder.

Personal History:

Patient is a non vegetarian with reduced appetite, disturbed sleep, and having frequency of micturition 5-6 per day and having history of constipation.

Surgical History:

Not underwent any surgery.

General Examination:

Patient is having blood pressure - 130/80 mmhg, Pulse rate - 75bpm, Respiratory rate - 16 cpm,

Pallor and icterus said to be absent.

Local Examination: In Lithotomy Position

Inspection:

Small External opening found at 8 o' clock position in perianal region approximately 9 cm away from the anal verge with pus discharge from external opening.

Palpation:

Tenderness on touch with indurations was felt around external opening.

Investigations:

Laboratory investigations were as follows.

Haemoglobin - 12.8%

ESR - 10mm/hr

CT - 4 mins 40 sec

BT - 2 mins 5 sec.

RBS 110 gm/dl.

And serological investigations like HIV and HBsAG were negative.

TRUS Report:

External opening at 8 0' clock position, internal opening / tract merging with anal echoes at 9 0' clock position at a depth of about 23.0mm from the anal opening.

Length of the tract is 9 cm

Width of the tract is 7.0mm

And the fistulous tract is trans sphincteric type (Figure no. 1 and 2).

Methodology

Pre- operative:

Patient was advised nil by mouth from 10:30pm in the previous day of surgery. Written inform consent was taken. The local part of patient was prepared.

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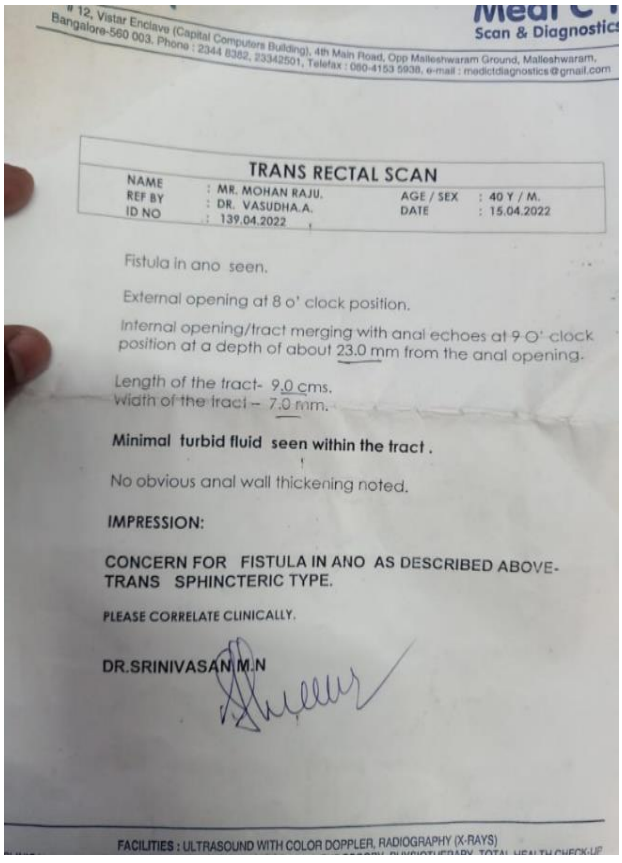
Proctolysis enema was given in early morning before procedure. Inj T.T. 0.5cc IM and sensitivity test for inj. Xylocaine 2% ID was done.

Operative:

In O.T., Patient was kept in lithotomy position. Peri-anal area was painted with betadine solution and sterile cut sheet was draped. Inj xylocaine was infiltrated around the anus and fistulous tract. Four fingers anal dilatation was performed by Lord's procedure. Betadine solution was passed through external opening to know whether the tract was patent or not. After confirming the tract was patent, the probe was passed from external opening and forwarded to internal opening and removed from anal canal. After that fistulous tract was cut opened up to 4cm from external opening followed by *Kshara* application was done (Figure -3). After one minute the tract was cleaned with *Nimbu Swarasa* then primary threading was done for rest of the fistulous tract. Hemostasis was achieved and patient shifted to ward with stable vitals.

Figure 1: TRUS Report



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TRANS RECTAL SCAN

NAME : MR. MOHAN RAJU. AGE / SEX : 40 Y / M.
REF BY : DR. VASUDHA.A. DATE : 15.04.2022
ID NO : 139.04.2022

Fistula in ano seen.

External opening at 8 o' clock position.

Internal opening/tract merging with anal echoes at 9 O' clock position at a depth of about 23.0 mm from the anal opening.

Length of the tract- 9.0 cms.
Width of the tract – 7.0 mm.

Minimal turbid fluid seen within the tract.

No obvious anal wall thickening noted.

IMPRESSION:

CONCERN FOR FISTULA IN ANO AS DESCRIBED ABOVE-TRANS SPHINCTERIC TYPE.

PLEASE CORRELATE CLINICALLY.

DR.SRINIVASAN M.N

FACILITIES : ULTRASOUND WITH COLOR DOPPLER, RADIOGRAPHY (X-RAYS)

Figure 2: TRUS Report

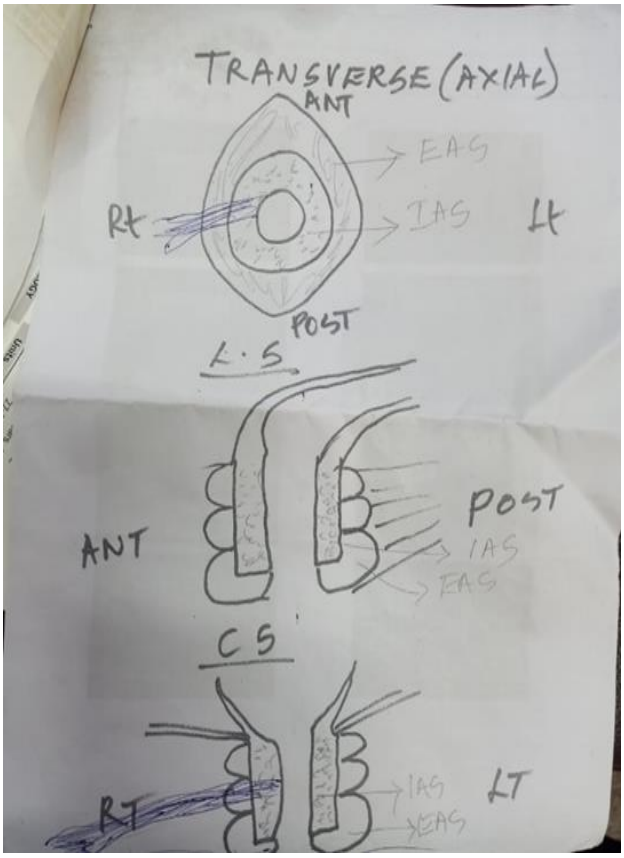

Figure 3: Partial Fistulotomy F/B *Kshara Karma* and *Kshara Sutra* Ligation

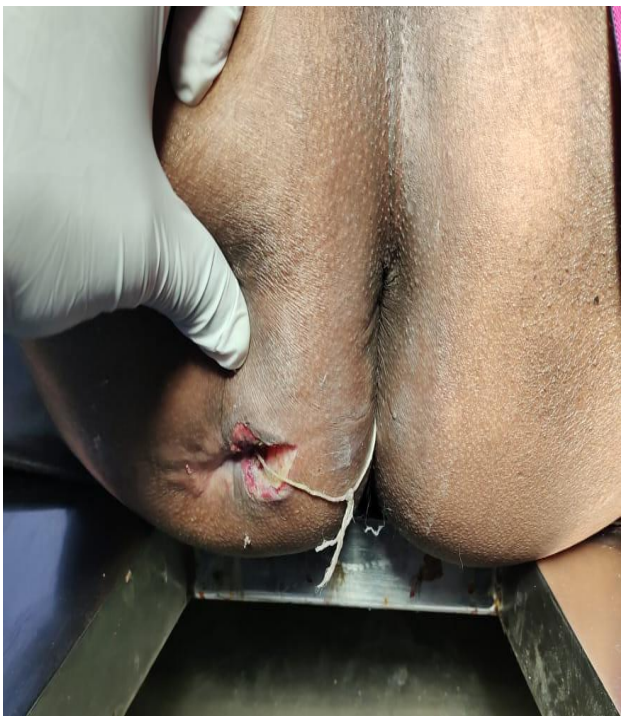

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Figure 4: Healed Scar

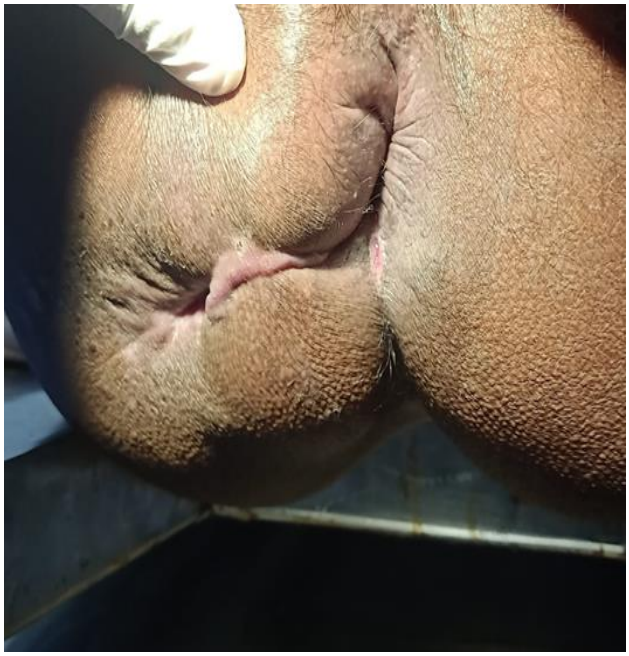
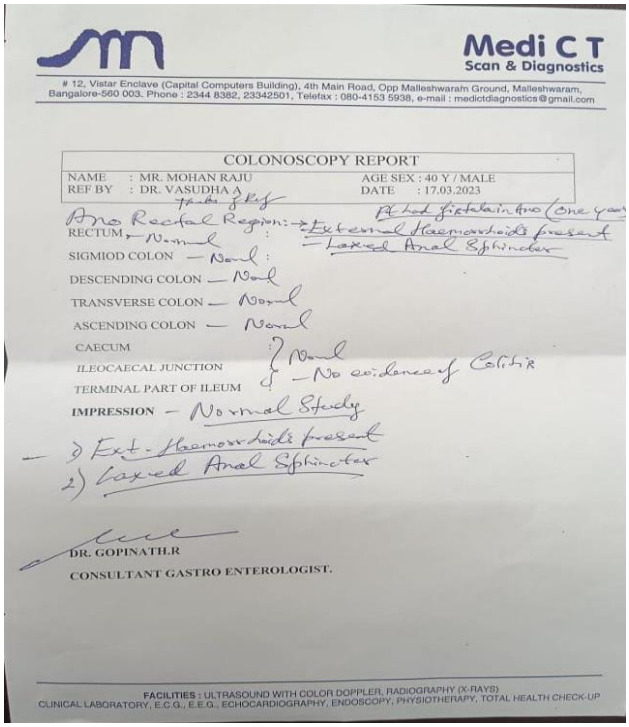


Figure 5: Colonoscopy Report



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COLONOSCOPY REPORT

NAME : MR. MOHAN RAJU AGE SEX : 40 Y / MALE
REF BY : DR. VASUDHA A DATE : 17.03.2023

RECTUM – Normal
SIGMOID COLON – Normal
DESCENDING COLON – Normal
TRANSVERSE COLON – Normal
ASCENDING COLON – Normal
CAECUM
ILEOCAECAL JUNCTION
TERMINAL PART OF ILEUM
– No evidence of Colitis
IMPRESSION – Normal Study

DR. GOPINATHLR
CONSULTANT GASTRO ENTEROLOGIST.

FACILITIES : ULTRASOUND WITH COLOR DOPPLER, RADIOGRAPHY (X-RAYS) CLINICAL LABORATORY, E.C.G., E.E.G., ECHOCARDIOGRAPHY, ENDOSCOPY, PHYSIOTHERAPY, TOTAL HEALTH CHECK-UP

Post-operative:

Cleaning and dressing the wound was done. Oral antibiotics and analgesics were given twice a day for 5 days. Along with this adjuvant medications like *Triphala Guggulu* 500mg twice a day and *Triphala Choorna* 1 tsp with warm water at bed time was prescribed. Sitzbath/*Avagaha Sweda* (Warm water + *Panchavalkala* decotion) was advised for two times a day. Diets like green vegetables, milk, fruits, and plenty of water advised to avoid constipation. Non vegetarian, spicy and oily food, junk foods, alcohol was restricted. Long sitting and travelling avoided till complete healing of tract.

Result and Discussion

On 2nd post-operative day the primary thread was in situ, wound was healthy, mild pus discharge was present. Cleaning and dressing the wound with *Jatyadi Ghrita* was done daily. On 7th post-operative day the wound was healthy, no discharge was present and the primary thread was changed with *Apamarga Kshara Sutra* after applying 2% xylocaine jelly by rail road method. On 14th post-operative day the partial fistulotomy wound was completely healed which improves the quality of life of patient. *Kshara Sutra* was changed on weekly interval with new *Ksharasutra* after applying 2% xylocaine jelly by railroad technique till complete cut through and healing of fistulous tract. The length of *Ksharasutra* thread was recorded to assess progress of cutting and healing on every change. Total 7 weeks were required for complete cutting and healing of fistulous tract. There was healed scar of partial fistulotomy wound and *Ksharasutra* applied tract (Figure - 4). The unit cutting time (UCT) of fistulous tract was 10 days per cm.

The applied *Kshara* on thread has anti-inflammatory and anti microbial activity. Alkaline nature of *Kshara* cauterizes dead tissue and facilitates cutting as well as healing.[8] Due to alkaline pH of *Ksharasutra* local infection was under control which helps to healing. The cutting is presumed by local action of *Kshara, Snuhi,* and mechanical pressure of tight *Ksharasutra* knot during initial 1-2 days of its application which fallowed by healing in rest of the 5-6 days. The turmeric (*Curcuma longa*) powder minimizes reaction of caustics and helped for healing of wound.[9] *Ksharasutra* has combined effect of all three drugs (*Apamarga Kshara, Snuhi Ksheera* and *Haridra*) and said to be unique drug formulation for cutting and healing of fistulous tract.

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Panchavalkala decoction has cleaning and wound healing properties respectively so it helped to kept wound clean and promoted healing of wound.[10,11] The contents of *Jatyadi Ghrita* has cleaning, healing, antimicrobial, anti-inflammatory properties which helps in healing of wound.[12] *Triphala Choorna* helped in regular bowel movement.

Follow Up:

Follow up was done at a regular interval of 15 days till two months, there was no recurrence noted. After the 11 months patient visited the OPD with the complaint's frequent loose stools with mucus discharge since 15 days. Colonoscopy was done which shows no evidence of internal opening (Figure - 5).

CONCLUSION

The chances of recurrence are very high in the case of conventional fistulectomy. In plane *Kshrasutra* the required time for cut through and healing of wound is more, so patients are mentally disturbed with this disease. Hence, to minimize the required time multiple interventions like partial fistulotomy fallowed by application of *Kshara* along with *Ksharasutra* threading is said to be the best option observed in this case report. This single case study of fistula in ano can be managed by partial fistulotomy fallowed by application of *Kshara* along with *Ksharasutra* threading, which revealed that the quality of life during treatment has improved in short time period. As it is a single case study so it requires more number of cases for concrete conclusion.

REFERENCES

1. Susruta Samhita, Text with English translation, Dalhana's commentary along with critical notes, Edited and translated by Priya. Vrat. Sharma, Vol., Varanasi, Chaukhambha Viswabharati, Oriental Publishers and Distributors, Chapter IV/ 1-8: 32-35.
2. Susruta Samhita, Text with English translation, Dalhana's commentary along with critical notes, Edited and translated by Priya. Vrat. Sharma, Varanasi, Chaukhambha Viswabharati, Oriental Publishers and Distributors, Sutra, I; 3/4: 316.
3. Vasilevsky CA, Gordon PH. Benign Anorectal Abscess and Fistula. In: Wolff BG, Fleshman, JW, Beck DE, Pemberton JH, Wexner SD, Eds. The ASCRS Textbook of Colon and Rectal, Surgery, Chapter 13, New York, Springer, 2007.
4. Vyas AK, Katlana A, Singh A, Thakur S, Yadav A. Incidence of Low Fistula in Ano and Results of Fistulotomy in Rural Tertiary Centre. Ann. Int. Med. Den. Res., 2017; 3(3): 28-30.
5. Sainio P. Fistula-in-ano in a defined population incidence and epidemiological aspects, Ann Chir Gynacol, 1984; 73(4): 219-24.
6. Jain SK, Kaza RCM, Pahwa M, Bansal S. (2008): Role of cyanoacrylate in the management of low fistula in ano: a prospective study. International Journal of Colorectal Disease, 23(4): 355-358.
7. Pescatori M, Ayabaca S, Caputo D. (2004): Can anal manometry predict anal incontinence after fistulectomy in males? Colorectal Disease, 6 (2): 97-102.
8. Londonkar M, Reddy VC and Abhay Ku (2011). Potential Antibacterial and Antifungal Activity of Achyranthes aspera L., Recent Research in Science and Technology. 3(4): 53-57.
9. Kohli K, Ali J, Ansari MJ, Raheman Z. (2005) Curcumin: A natural anti-inflammatory agent. Indian Journal of Pharmacology. 37(3): 141-47.
10. Khadkutkar DK, Kanthi VG (2015). A Brief Review of Research Studies Conducted on Panchavalkal Indian Journal of Ancient Medicine and Yoga. 8(2): 87-93.
11. Meena RK, Dudhamal T, Gupta SK, Mahanta V. (2015) Wound healing potential of Pañcavalkala formulations in a postfistulectomy wound. Ancient Sci Life; 35:118-21.
12. Mahesh K. (2014) Jatyadi ghrita and its use in treatin vrana (wound). Int. Res. J Pharma 5(3):128-130.

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