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A CASE REPORT OF A COMPLEX TRANSPHICTERIC FISTULA-IN ANO AND ITS MANAGEMENT THROUGH PARTIAL FISTULOTOMY FOLLOWED BY KSHARA SUTRA

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ABSTRACT

Acharya Susrutha has mentioned *Bhagandara* as one among *Asta Mahagada.*[1] *Nirukti* of *Bhagandara* is described in *gada nigraha* as "*Vrushanaasanayormadhyapradesho bhagamuchyate, tameva dhaarayettasmaadbhagandara iti smrutaha*". The *darana* of *vrushanasana madhya sthita bhaga* is *Bhagandara.*[2] *Acharya Sushruta* says "*Bhagagudabasti pradeshadaaranat cha bhagandara iti uchyante, abhinnaaha pidakaha, bhinnastu bhagandaraha*"- *Pidakas* formed at *bhaga, guda* and *basti pradesha* undergoes suppuration, bursts open and makes an opening known as *Bhagandara.*[3] *Acharya Susrutha* classifies *Bhagandara* into *Shataponaka, Ushtragreeva, Parisravi, Shambookavarta and Unmargi.*[4] In Contemprory science it is compared to Fistula-in-ano. It is an inflammatory track with external opening in the perianal skin and internal opening in the rectum or anal canal. The mean incidence of non-specific fistula in ano is 8.6 cases/1,00,000 population,12.3 for males and 5.6 for females. It usually begins from a perianal abscess caused by cryptoglandular infection. It burst spontaneously and forms Fistula-in-ano.[5]

Transphincteric fistula is a type of fistula in which it extends through both internal and external anal sphincters. Goodsall's rule a clinical tool used to predict the the course of fistula in the anus. A 42 years old male patient approached to Shalya Tantra OPD with complaints of pus discharge from the anal region and was feeling discomfort in sitting posture and was

examined thoroughly and was diagnosed as Fistula-in-ano for which partial fistulotomy followed by Kshara sutra was done and the Kshara sutra was changed once in a week and wound was healed completely.

KEYWORDS: Bhagandhara, Kshara sutra, Fistula in ano, Partial fistulotomy.

CASE REPORT

Name : ABC

Age : 42 years

Gender : Male

Occupation : Business

Marital Status : Married

Address : 338, 5th main, 3rd phase Manjunath Nagar, Rajajinagar Bangalore- 560010

OPD NO : M7952

IPD NO :1235/25

Date of admission : 9/3/2025

Date of Discharge :17/3/2025

Chief complaints : Patient complaints of pus discharge from the anus and soiling of undergarments since 7 months.

Associated complaints : Patient feels discomfort in sitting position for more than 15minutes.

History of present illness

Patient was apparently healthy 7 months ago.

He gradually noticed a swelling in the left perianal region and underwent incision and drainage for left ischiorectal abscess in august 2024.

The wound healed in 2 months.

The Patient complaints of swelling noted in the right perianal region and pus discharge from the anal region.

For the above said complaints the patient approached SKAMCH&RC for further and better management.

Previous surgical History: Incision and Drainage for Left Ischiorectal Abscess 7months ago.

Family History: All family members are said to be healthy.

Personal History: patient is not a known case of Diabetes mellitus, Hypertension, thyroid dysfunction.

General Examination

Built : Well built

Nourishment : well nourishment

Height : 165cm

Weight : 60kg

BMI : 22Kg/m^2

Pallor : Absent

Icterus : Absent

Clubbing : Absent

Cyanosis : Absent

Lymphadenopathy : Absent

Systemic Examination

CNS : Concious, oriented

CVS : S1 and S2 heard

Respiratory System : Normal vesicular breathe sounds heard

Gastrointestinal System : Normal

Vitals

BP : 130/80mmHg

Pulse : 78bpm

Spo_2 : 99% at room air

Temp : 97^0 F

Local examination

On Per Rectal Examination

INSPECTION

- External opening was noted at 10’0clock position about 3-4 cm from the anal canal.
- Previous surgical scar noted in between 1-2 ‘0clock position.
- Digital Examination: Normotonic sphincter
- Tenderness noted at 6 and 9’0 clock position.

- Internal opening at 6 and 9'0clock position.

INVESTIGATIONS

Hb : 14.3%

Wbc count : 11,700cells/cumm

ESR : 16mm/hr

RBS : 76mg/dl

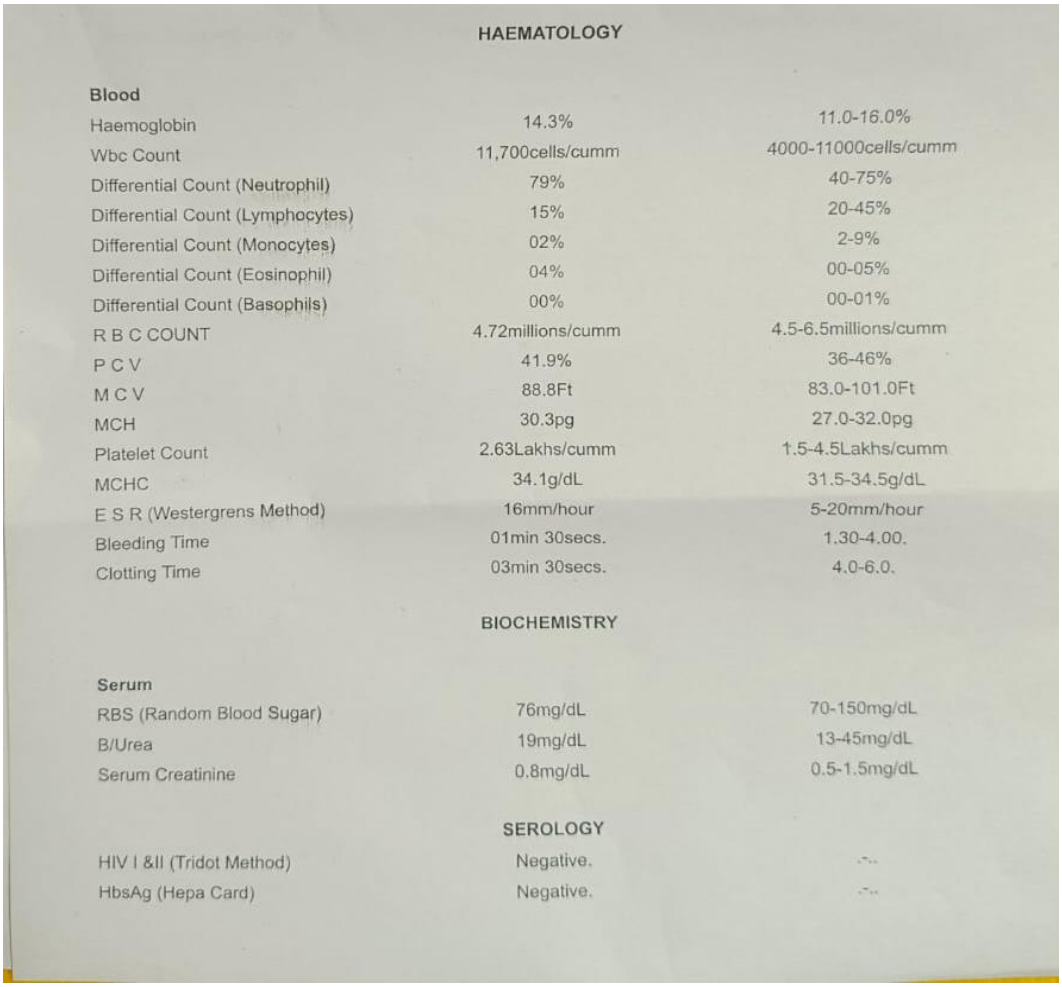
Blood urea : 19mg/dl

Serum Creatinine :0.8mg/dl

HIV1 and 2 : Negative

HbsAg : Negative

Urine Routine : Pus cells(4 to 6)



HAEMATOLOGY

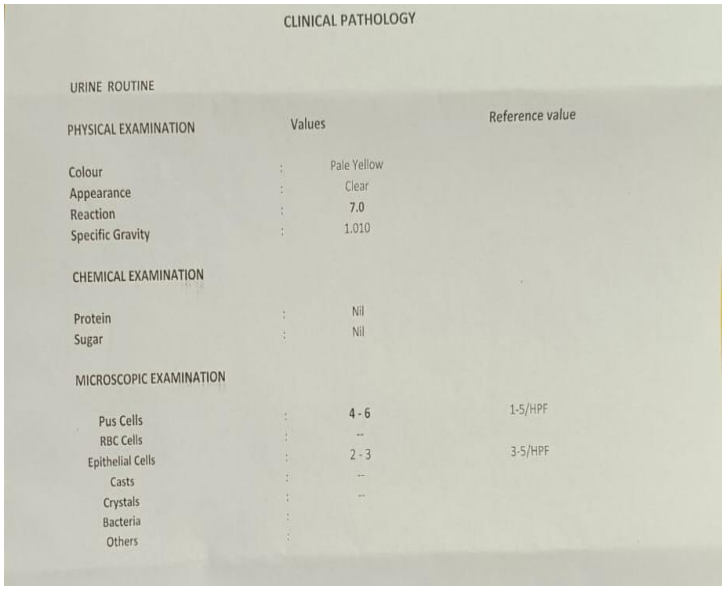
Blood		
Haemoglobin	14.3%	11.0-16.0%
Wbc Count	11,700cells/cumm	4000-11000cells/cumm
Differential Count (Neutrophil)	79%	40-75%
Differential Count (Lymphocytes)	15%	20-45%
Differential Count (Monocytes)	02%	2-9%
Differential Count (Eosinophil)	04%	00-05%
Differential Count (Basophils)	00%	00-01%
R B C COUNT	4.72millions/cumm	4.5-6.5millions/cumm
P C V	41.9%	36-46%
M C V	88.8Ft	83.0-101.0Ft
MCH	30.3pg	27.0-32.0pg
Platelet Count	2.63Lakhs/cumm	1.5-4.5Lakhs/cumm
MCHC	34.1g/dL	31.5-34.5g/dL
E S R (Westergrens Method)	16mm/hour	5-20mm/hour
Bleeding Time	01min 30secs.	1.30-4.00.
Clotting Time	03min 30secs.	4.0-6.0.

BIOCHEMISTRY

Serum		
RBS (Random Blood Sugar)	76mg/dL	70-150mg/dL
B/Urea	19mg/dL	13-45mg/dL
Serum Creatinine	0.8mg/dL	0.5-1.5mg/dL

SEROLOGY

HIV I &II (Tridot Method)	Negative.	-"-
HbsAg (Hepa Card)	Negative.	-"-



CLINICAL PATHOLOGY

URINE ROUTINE

PHYSICAL EXAMINATION	Values	Reference value
Colour	: Pale Yellow	
Appearance	: Clear	
Reaction	: 7.0	
Specific Gravity	: 1.010	
CHEMICAL EXAMINATION		
Protein	: Nil	
Sugar	: Nil	
MICROSCOPIC EXAMINATION		
Pus Cells	: 4 - 6	1-5/HPF
RBC Cells	: --	
Epithelial Cells	: 2 - 3	3-5/HPF
Casts	: --	
Crystals	: --	
Bacteria	:	
Others	:	

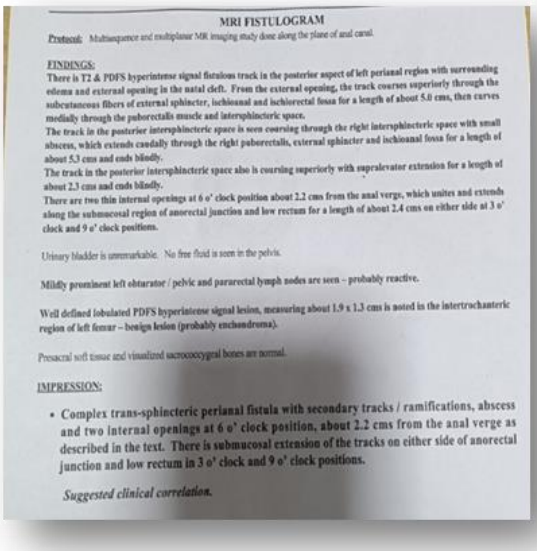
MRI FISTULOGRAM of 10/11/2024

Complex Transphicteric fistula, Abscess with ramification; 2 internal openings at 6'0clock position 2.2cm from the anal verge.

Transrectal scan of 1/3/2025

Evidence of external opening at 10'0 clock position. A fistula of 5.2cm noted extending posteromedially in subcutaneous plane upto 6'0clock position. internal opening is at 6'0clock position 2branches are seen extending posteriorly superficial one is 1.7cm and deeper one is 3.3cm

Previous scar notes at 1-2'0clock position



MRI FISTULOGRAM

Protocol: Multisequence and multiplanar MR imaging study done along the plane of anal canal.

FINDINGS:

There is T2 & PDFS hyperintense signal fistulous track in the posterior aspect of left perianal region with surrounding edema and external opening in the natal cleft. From the external opening, the track courses superiorly through the subcutaneous fibers of external sphincter, ischioanal and ischiorectal fossa for a length of about 5.0 cms, then curves medially through the puborectalis muscle and intersphincteric space.

The track in the posterior intersphincteric space is seen coursing through the right intersphincteric space with small abscess, which extends caudally through the right puborectalis, external sphincter and ischioanal fossa for a length of about 5.3 cms and ends blindly.

The track in the posterior intersphincteric space also is coursing superiorly with supralevator extension for a length of about 2.3 cms and ends blindly.

There are two thin internal openings at 6 o' clock position about 2.2 cms from the anal verge, which unites and extends along the submucosal region of anorectal junction and low rectum for a length of about 2.4 cms on either side at 3 o' clock and 9 o' clock positions.

Urinary bladder is unremarkable. No free fluid is seen in the pelvis.

Mildly prominent left obturator / pelvic and pararectal lymph nodes are seen – probably reactive.

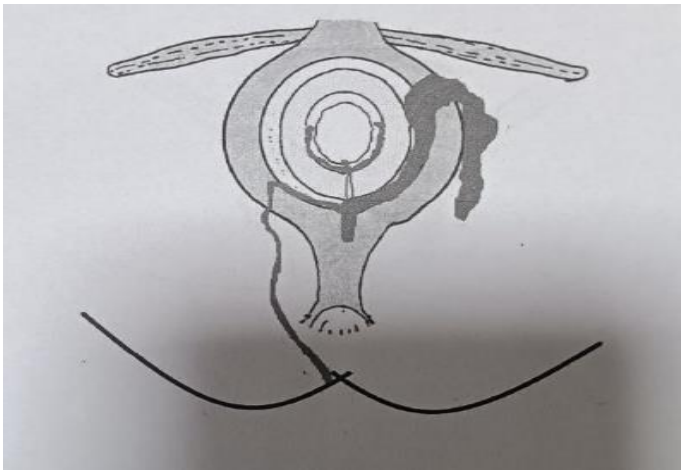
Well defined lobulated PDFS hyperintense signal lesion, measuring about 1.9 x 1.3 cms is noted in the intertrochanteric region of left femur – benign lesion (probably enchondroma).

Presacral soft tissue and visualized sacrococcygeal bones are normal.

IMPRESSION:

- Complex trans-sphincteric perianal fistula with secondary tracks / ramifications, abscess and two internal openings at 6 o' clock position, about 2.2 cms from the anal verge as described in the text. There is submucosal extension of the tracks on either side of anorectal junction and low rectum in 3 o' clock and 9 o' clock positions.

Suggested clinical correlation.



REPORT (TRANSANAL SONOGRAPHY STUDY)

Evidence of external opening is noted at 10 O'clock position.

A fistula tract measuring about 5.2cms is noted extending postero medially in the subcutaneous plane around the right lateral anal wall and through the muscular layers of retroanal fossa upto 6 O'clock position.

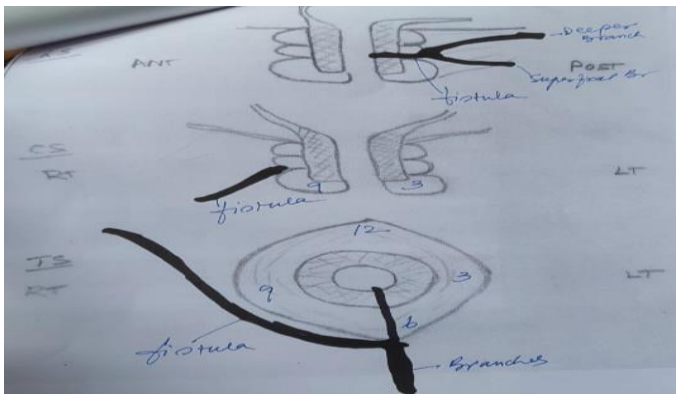
It passes through both the sphincters to communicate with the anal canal at 6 O'clock position about 1.0cms from the anal orifice.

Two branches are seen extending posteriorly in the mid line in the muscular plane, superficial one measure 1.7cms and deeper one measures 3.3cms.

Previous surgical scar is noted in the left perianal region at 1 to 2 O'clock position.

No evidence of deep collection in the perianal region or in the ischiorectal fossa.

Internal and external sphincters are well seen.



TREATMENT

Pre-operative measure

1) Nill per oral maintained for 6 hours

2) Perianal part preparation was done
3) Informed consent was taken
4) Proctoclysis enema was given
5) Inj.TT 0.5cc IM stat was given
6) Inj.Xylocaine 0.2cc S/c test dose was given.
7) Inj.Taxim 1gm IV ATD
8) Inj.Pan 40mg IV
9) Inj.Emeset 4mg IV

Partial fistulotomy followed by primary threading under Spinal Anaesthesia

1) Under Spinal Anaesthesia, patient was positioned in Lithotomy position.
2) Part painting and draping was done
3) Probing was done from the external opening at 10'0clock position to reach the internal opening at 6'0 clock position.
4) A window was created at the external opening and then Primary threading was done
5) Probing was done from the external opening to reach the internal opening at 9'0 clock position followed by primary threading was done.
6) Haemostasis achieved
7) 2 Jonac suppositories were Kept
8) The cavity was packed with Betadine solution.
9) Tight bandaging was done

Post opeartive measures

IVF → DNS
NS
RL

Inj. Taxim 1gm IV ATD
Inj.Amikacin 500mg IV
Inj.Pan 40mg IV
Inj.Pct 100ml IV
} 3 days

Inj.Tramadol 100ml in 100ml NS IV HS
Inj.Emeset 4mg IV(sos)
Daily dressing -Kshara taila

Orally

1) Tab.Amrutadi Guggulu

2 - 0 - 2

2) Tab Gandhaka Rasayana

1 – 0 - 1

3) Swadishta Virechana Choorna

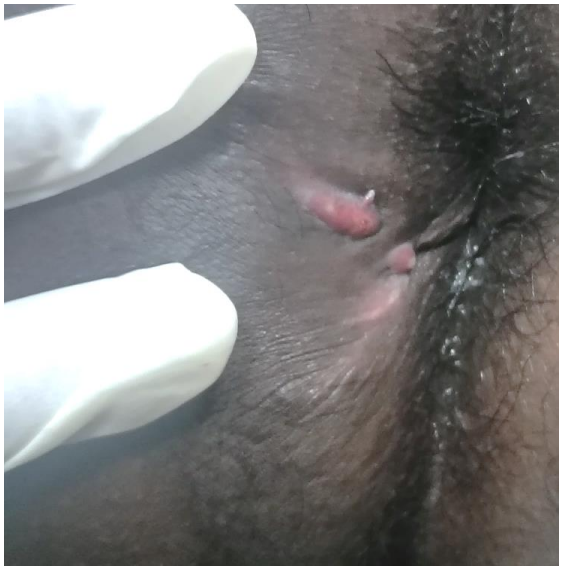
0 – 0 – 1 teaspoon with warm water

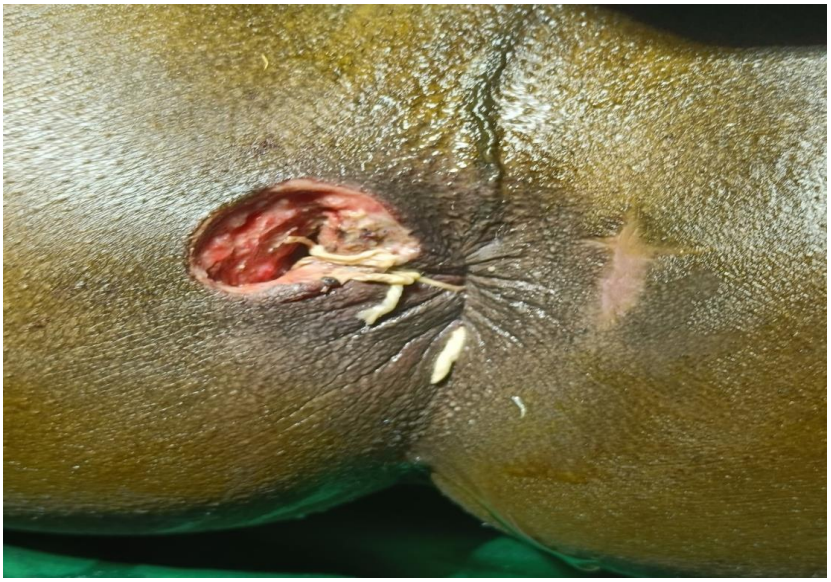
Daily dressing was done with Kshara taila;Sitz Bath with lukewarm water was adviced twice in a day.

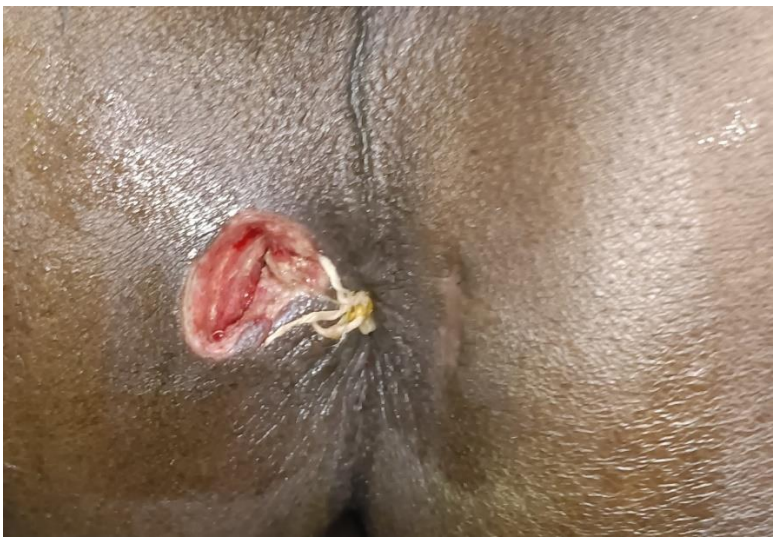
Kshara sutra was changed once in a week and length of the tract was measured

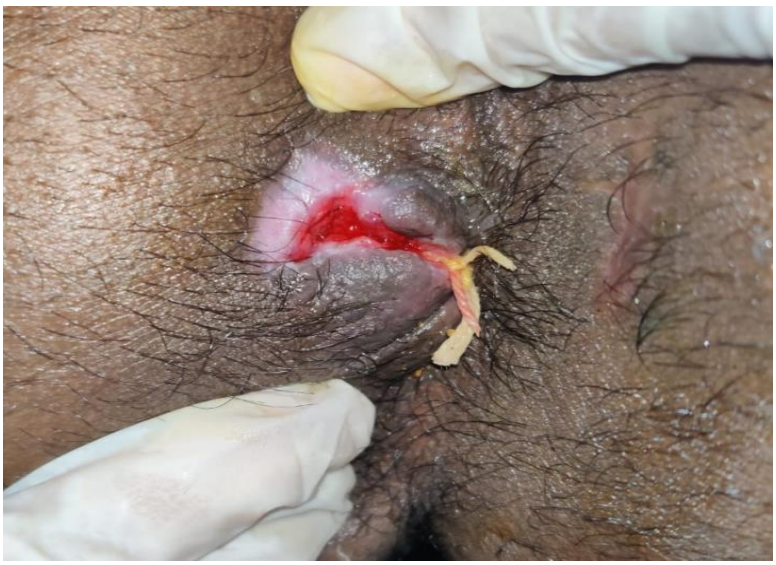
Date	Length of Kshara Sutra 1	Length of Kshara Sutra 2
15/3/25	3.5cm	2.5cm
22/3/25	3cm	2cm
29/3/25	2.5 cm	1.5cm
5/4/25	1.5 cm	1cm
12/4/25	1 cm	0.5cm
19/4/25	0.5cm	-

OBSERVATIONS









DISCUSSION

Acharya Sushrutha has explained Ekadashopakrama for Bhagandhara Pidaka and Shastra karma for the Bhagandhara when when the pidaka bursts open. Ksharasutra is the gold standard treatment for controlling Anal Fistula because it has a lower recurrence rate.

The Incidence of Bhagandhara is increasing nowadays due to sedentary life style, prolonged sitting in a same posture.

Apamarga Kshara sutra has ingridients like Snuhi Ksheera, Apamarga Kshara, Haridra Choorna. Apamarga has Katu tiktha rasa, Laghu ruksha guna, Tikshna guna, Ushna virya. Apamarga kshara has properties like Chedhana, Bhedhana, Lekhana and Tridoshagna which allows chemical curettage and healing of the tract simultaneously.

In modern medicine fistula is treated by Fistulotomy, Fistulectomy, Seton placement , these treatments has higher re-ocuurence rate.

Patial fistulotomy followed by Kshara Sutra is a very effective method in treating complex transphicteric fistula in which the duration of healing is fastened by the help of partial fistulotomy and kshara sutra application at the level of sphincters by which the fistulous tract is cutting and healing at the same time.

In this case patient had underwent previous incision and drainage for left ischioanal abscess. Due to inadequate drainage the patient developed secondary ramifications in posterior midline and a external opening was seen at 10'0clock position.

Proper Pathya and Apathya need to be adviced for this condition to prevent reoccurrence.

CONCLUSION

Bhagandhara is one among the most common anorectal conditions.

Kshara sutra procedure has been the gold standard therapy in the management of Fistula in ano with least recurrence rate and good patient compliance with the treatment modality where it overshines all other treatment modalities available in the contemporary science which has higher recurrence rate, sphincter damage, incontinence.

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