

A SINGLE CASE STUDY OF PILONIDAL SINUS MANAGED BY KSHARA SUTRA

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ABSTRACT

Pilonidal sinus is a frequent condition of the natal cleft in the sacrococcygeal area that causes weak hair buildup in the hair follicles and can be chronic or acute. The patient complains of swelling, redness, increased local temperature, discharge. Prolonged sitting, the existence of a deep birth cleft, obesity, hair irritation, and a family history of disease increase risk of disease. It is correlated to Salyajanya Nadi Vrana (pilonidal sinus), a form of Nadi Vrana (sinus). Whose etiology is addressed in Nidanasthana and therapeutic aspects in Susrutha Samhita's Chikitsasthana. Susrutha mentioned the use of Kshara (caustic alkali) and Ksharasutra (Seton) to treat Nadivrana. Despite the fact that Nadivranas claimed to be Kricchrasadhy (difficult to cure), studies suggest that Ayurvedic therapy helps to reduce recurrence rate. As a result, successful management of this disease is dependent on knowledge of pathophysiology, patient presentation, and

treatment aspects. The concept of nadi vrana w.s.r to pilonidal sinus was explained in this article in relation of ayurvedic and modern view.

➤ CASE REPORT

In the present case study, A 24 Years old male patient was apparently healthy 2 months back. Patient started experiencing pain and discomfort in the natal cleft region. Then after 1 week

condition subsided. Pt. experienced Pain and Pus discharge again after 6 weeks. Patient neglected the condition and didn't take any treatment thereafter. The pain and pus discharge was persisted. He Review with nearby clinic. There he advised for Blood Investigations & USG of intergluteal cleft, which reveled Pilonidal sinus. Hence, he has approached Shalyatantra OPD of SKAMCH & RC on 20/1/2024 for the above complaints.

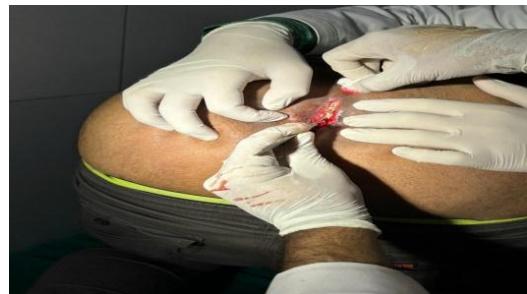
- **Aggravating Factor-** Sitting and Riding vehicle for long period.
- **Reliving Factor-** Taking Adequate rest.
- **Vyaktika Vrittanta-** Diet - Mixed, Ati katu, mamsaahaara sevana, Appetite - Good, Sleep - 6-8 hours, Diwaswapna ~1-2hour, Occasionally, Micturition-5 to 6times during day, Bowel-Regular, once/twice in a day. Habits-Smoking and Drinks /Occasionally.
- **Vyavsayika Vrittanta-** Patient is a travel agent, Nature of work includes travelling and sitting for long duration, Duration of working hours – 8-10 hours / day
- **Koutumbika Vrittanta-** All family membirts are said to be healthy.
- **Samanya Pariksha-** Built-Well built, Nourishment-Well nourished, Pallor - Absent, Icterus - Absent, Cyanosis-Absent, Clubbing – Absent, Lymphadenopathy - Absent, Edema - Absent, Tongue-Non coated, Temp - 98.6⁰ F, Pulse-74 bpm, B.P -120/80 mm of Hg,Respiratory 18 cycles / min, Height-175 cm, Weight-72kg, BMI-23.5, Gait-Normal
- **Ashta Sthana Pareeksha-** Nadi-74bpm, Mootra-5-6 times a day, Mala-Regular, once/twice in a day.Jihwa-Alipta, Shabda-Prakruta, Sparsha- Anushna sheeta, Drik-Prakruta, Akriti- Madhyama.
- **Dasha Vidha Pareeksha-** Prakruti-Vata Pittaja Vikruti, Hetu: Shalya (Roma), Aharaja: Ati katu, mamsaahaara sevana, Viharaja: Atiyana, Divaswapna, Ratrijagarana, Manasika: Chinta, Krodha, Dosha-Kapha pradhana Tridosha, Dushya-Tvak, Rakta, Desha-Sadharana, Kala - Visarga kala. Bala- Madhyama, Sara-Madhyama, Samhanana-Madhyama, Pramana-Madhyama, Satmya -Vyamishra, Satva- Madhyama, Aahara Shakti; Abhyavaharana Shakti-Madhyama, Jarana Shakti-Madhyama, Vyayama Shakti – Madhyama, Vaya-Madhyama.
- **Local Examination-On Inspection:** Position Of Sinus: Natal Cleft, Number of opening:1, Opening of sinus: Sprouting granulation tissue, Discharge: Purulent, Surrounding area: Appears Normal, No sign of induration, Thick and dense hair growth around the sinus. On palpation: Tenderness: present, Mild Thickening Present, Mobility – Present, Lump- Absent.

- **On Probing-** Direction-Downwards, Length of sinus- Approximately 2.5 cm, Discharge - Purulent discharge were noted.
- **Investigation-** Complete blood count-Hb%:- 13.4gm/dl, Total WBC Count:- 8000 cells, Differential Count, Neutrophils- 57%, Lymphocytes- 34%, Monocytes-01%, RBC Count- 4.72 million/Cmm, Platelet Count – 2.83 Lakhs/Cmm, PCV- 43%, MCV – 80.7 fl, MCH- 28.3pg, MCHC – 35.2 gm/dl, ESR – 53 mm/hr, Bleeding Time-1min 45sec, Clotting Time –2min 42 sec, RBS – 99 gm/dl, Serum Creatinine – 1.02 mg/dl, Blood Urea – 24.67 mg/dl, Serology-HIV 1&2-Negative, HbsAg – Negative.
- **USG of Intergluteal Region-**Evidence of ill defined hypoechoic collection with sinus tract measuring 8.0mm in width 20 mm in length seen in Right Gluteal region extending to intergluteal cleft Surrounding subcutaneous inflammation seen Muscular plane is normal Impression- Pilonidal Sinus Tract.
- **Roga Pareeksha-** Nidana: Aharaja: Atikatu, Mamsaahaara sevana. Viharaja: Atiyaana, Atiasana, Divaswapna, Ratrijagarana. Manasika: Chinta, Krodha. Roopa: Sopha, Sarakta Pooya srava, Toda. Upashaya: Avagaha Sweda. Anupashaya: Ati Yana, Atiasana.
- **Samprapti-** Nidana Sevana-> Due to Gharshana, Roma (Shalya) in prushta pradesha enters into the twak-> Causes sopha in prushta pradesha-> Sopha left untreated leads to formation of Nadi-> Nadi with Sarakta puya srava accompanied with nitya ruja-> Shalyaja Nadi vrana
- **Samprapti Ghataka-** Dosha: Tridosha, Dushya: Tvak, Rakta. Agni: Dhatuvagni. Ama: Dhatvagnimandyajanya. Srotas: Rasavaha, Raktavaha. Sroto Dushti Prakara: Sa nga, Ati Pravrtti, Vimargagamana. Udbhavasthana: Twak. Vyaktasthana: Prushta Pradesha. Adhisthana: Twak, Rakta. Rogamarga: Bahya. Sadhya-Asadhyata: Kruchra Sadhya
- **Chikitsa Sutra-**कृशदुर्बलभीरुणां नाडी मर्माश्रिता च याक्षारसूत्रेण तां चिछन्द्यान्न तु शस्त्रेण बुद्धिमान् ॥नाडीं तु शल्यप्रभवां विदार्य निर्हत्य शल्यं प्रविशोद्य मार्गम् । संशोधयेत् क्षौद्रघृतप्रगाढैस्तिलैस्ततो रोपणमाशु कुर्यात् ॥Su. Chi 17/26-31
- **Poorva Karma-**Oral consent obtained, Inj Xylocaine 2% test dose given and no allergic reaction were observed, Part preparation was done at the natal area.
- **Pradhana Karma-**On 05/02/2024-> Under Aseptic precaution, pt. was taken in prone position, part painting was done with betadine solution. Inj xylocaine 2% was infiltrated around the sinus tract. Probing was done through the opening towards the least path of resistance which was directed downwards in subcutaneous plane. A small incision was

given where the tip of the Probe was felt at the end of the sinus tract.Followed by Kshara sutra Ligation done.



- **Paschat Karma-Inj** T.T. 0.5cc IM Stat,Inj. Dynapar AQ IM stat,Tab. Grab 1-1-1 (A/F),Tab. Zerodol P-1 (SOS),Dressing with Jatyadi Taila Done.On 06/02/2024 dressing done with same.on 10/02/2024 Kshara sutra change followed by jatyadi taila dressing.On 13/02/2024 sinus was cut through by kshara sutra & Thuft of hair removed.Chitraka pratisaraneeya kshara applied over the wound.Jambuphala vrana noted f/b Nimbu swarasa application



▪ DISCUSSION

Ksharsutra is a minimal invasive procedure, offers significant results in the treatment of Pilonidal sinus. It reduces the complications and recurrence. It is an appropriate therapy for the patient in terms of treatment cost, degree of pain. Multiple studies have found that Ksharsutra therapy reduces both short-term and long-term recurrence of the disease, and it

should be investigated in all cases. The healing and Sodhana properties of kshar sutra are assumed to be responsible for its action and its also having properties like Chedan, Bhedana and Lekhana properties. The kshar sutra help in pus drainage. Because kshara sutra has an alkaline pH, it has desloughing properties. Kshara sutra, as a whole, functions as a simultaneous cutting and healing technique. So, the healing was successful since no collection remained at the wound site. The use of Kshara Sutra and Kshara aids in the reduction in recurrence rates. Both treatments can be performed as outpatient operations.

▪ CONCLUSION

Pilonidal sinus is a therapeutic challenge. Evidence supports both open and closed operative approaches has not much difference in recurrence rate. By doing Ksharasutra and Kshara application recurrence rate is quite reduced and all ramification adjacent to sinus track were scrapped. Kshara has anti inflammatory and antibacterial property. Local removal of hair and sitz bath plays an important role in avoiding recurrence rate as well.

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