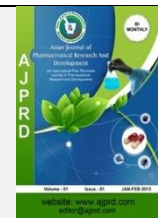


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Case Study

A Case Discussion on Pilonidal Sinus (*Nadivrana*): Case Report

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ABSTRACT

Pilus meaning hair and nidus meaning nest. A pilonidal sinus is an acquired condition. It is also termed as jeep disease. Mostly affected to males cause they have more hair growth. Hair containing cyst located just below the coccyx PNS occurs in the cleft between the buttocks. When buttocks moves and hair breaks off by friction and collect in the cleft makes local inflammation turns to sinus formation. PNS can be correlated with *Nadivrana* as per Ayurveda classic. Management of *Nadi vrana* is described by *Susruta* along with *Chedana* (excision) of the total tract (*Su. Chi-17/18*). After *Chedana karma* (excision) the big wound (6cm length*3cm width) was treated with local application of *tikshna Apamarga Kshara* and *Jatyadi Ghrita* after cleaning wound with *Panchvalkala kwath* along with internal Ayurveda medicine (*Triphala Guggulu* 1gm three times a day). **Aim:** To evaluate the efficacy of *Chedana Karma* and *Apamarg Kshara* Application in the management of *shalyaja nadivrana* w.s.r to Pilonidal Sinus. **Methodology:** here we present a case discussion of *Chedana karma* and Application of *tikshna Apamarga Kshara* in the management of *shalyaja nadivrana*. **Result:** Patient got symptomatic relief. **Conclusion:** The prevalence of *Nadivrana* increasing day by day. Ayurvedic management is effective in slow down the disease progression and breakdown the pathology.

Key words: *Nadi vrana*, Pilonidal sinus, *chedana karma*, *Apamarga kshara*.

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INTRODUCTION

Pilonidal sinus means nest of hair in Greek, that pilon comes from the word pilus which means hairs and nidus comes from nidus that means, nestⁱ. It is common in 20-30 years of age. Pilonidal sinus is characterized by opening in mid sacrococcygeal line between natal cleft 4-5 cm behind the anus. It is also known as a JEEP driver's disease. A tuft of hair with seropurulent foul discharge emerges through the opening. The entrance of the sinus tract is lined by modified cutaneous tissue. The tract enters into the cavity, which is entirely lined by granulation tissue and contains debris and hairs. Thus deeper tract and cavity of the sinus are not lined by skin tissueⁱⁱ. Infection of skin and subcutaneous tissue condition found in the natal cleft. Hairs accumulate due to vibration and friction causing shedding of hairs just like vacuum principle sucks all the broken hair

infection starts in stretched follicle convert into acute abscess then it will rupture converts to chronic abscess Pus migrating inside the tube named epithelial tube and form sinus named pilonidal sinus. Mostly occurring hairy men. The origin of PNS is not fully understood. Although Hormonal imbalance, Presence of hair, Friction and Infection are some causative factors. Most common location web spaces of hand, coccyx, umbilicus. The incidence of pilonidal sinus and other anorectal disorders such as haemorrhoid, fistula in ano, fissure in ano, proctitis, IBS, are increasing day by day in general practice due to busy, sedentary and fast lifestyle. Occupation related to continue sitting such as drivers, bankers, and computer job works, students etc. are suffering more from pilonidal sinus. In ayurveda on the basis of sign and symptoms this disease can be correlated with *Nadivrana*ⁱⁱⁱ. As in *Susruta*

Samhita the description of *shalyaja nadi vrana* is a tract where foreign body loaded inside i.e. due to presence of hair, pus, necrosed tissue etc hold to discharge and continuous pain, hence *Susruta* advised very unique, minimal invasive treatment i.e. *Kshara karma* in *nadi vrana*^{iv}. In chapter eleven of *Sushrut Samhita sutrasthana* while describing about the indications of *pratisarniya kshara*, he mentioned *nadivrana* also^v. *Kshara* is made up of several drugs, in their most concentrated and subtle form. It has *shodhana* (cleaning) properties as it has got *ushna* and *tikshna gunas* which help in desquamation of sloughs and draining of pus when used externally. *Kshara* helps in ropana or healing process in *vrana* (wound) because of their cleansing and antiseptic properties^{vi}.

MATERIALS & METHODS

Patient with classical signs and symptoms of *Nadivrana* (Pilonidal sinus) was selected from O.P.D of Department of *shalyatantra* of Akhandanand Ayurveda Hospital Ahmedabad.

The patient was thoroughly questioned and examined on the basis of the case record, sign and symptoms were carried out to confirm the diagnosis.

Case report

A 26 year old male was apparently normal before 1 year. Then gradually he noticed mild swelling at natal cleft with intermittent dull aching pain which was there for 6 days. Later he noticed foul smelling pus discharge associated with mild itching in that area. He used to feel discomfort in this region during sitting and bending. He neglected it even though it used to interfere with his daily activities. Whenever there was little injury to the area, pain and

Pre operative

bleeding was noticed for which he consulted a local physician to get rid of pain. 6 months before again he noticed mild swelling at right side of natal cleft with intermittent dull aching pain which was there for one week followed by foul smelling pus discharge. Symptoms used to aggravate by travelling on his bike and profuse sweating. When the pain and foul smelling blood mixed pus discharge increased considerably, the local physician advised him to consult to surgeon. Earlier patient consulted Modern surgeon, and advised for surgery but patient was not willing for surgery and interested in Ayurvedic management. So he approached *Shalyatantra* OPD in Govt. Akhandanand hospital.

On local examination, found a small sinus in between the buttocks (natal cleft), the patient was hairy and moderately built. The sinus was cleaned with an antiseptic solution and probing done. The track was directed from S2 level extending antero-inferiorly up to S5 level. Hence based on clinical findings & MRI was done to confirm the diagnosis. In MRI findings evidence of linear thick fluid filled partially fibrosed sinus tract in posterior midline and right paramedian region in subcutaneous tissue at level of S2 extending antero inferiorly up to S5 level appear pilonidal sinus. The case was diagnosed as *Shalyaja Nadivrana* (PNS).

METHODOLOGY

Pre operative:

Before planning this procedure other aetiologies like TB, HIV, HbSAg, DM were ruled out. Informed written consent was taken. Part Preparation was done. Proctolysis enema was given at early morning on day to be operated. Injection T.T 0.5 cc IM was given and Inj. plain lignocaine 2% was given intradermal for sensitivity test.



Figure 1:

Operative Procedure:

Patient was shifted to OT. Under all aseptic condition patient was taken in OT with normal vital data. Patient was taken on OT table in prone position after panting and drapping local anesthesia given. Reassessment of extension was done by probing and after that dye was inserted in PNS after widening of external opening. Elliptical incision was made around PNS and whole track was excised by 15 no. surgical

blade. After that *Apamarga tikshna kshara* was applied & just within 30-40 second the wound surface become cauterized and turns to blackish. The wound is irrigated with distilled water and lime juice neutralizes the *kshara action* to remove the additional *kshara*, which prevents the further damage of the tissues. Proper haemostasis was achieved, dressing done and patient was shifted in ward with normal vital data.



Figure 2: Methylene blue dye was pushed



Figure 3: Chedan karma



Figure 4: Scrapping with scoop



Figure 5: Excised track



Figure 6: operative wound

Post operative:

Patient was asked to come for dressing on alternate day. Patients was advised to cleaning with panchavalkala kwath

and apply *Apamarga Kshara plota* and dressing with *jatyadi ghrita* was done daily. *Triphala guggulu* 1gm three times per day orally was given with luke warm water after meal till complete cure.



Figure 7: 1st day after operation



Figure 8: After 4 weeks



Figure 9: After 8 weeks

DISCUSSION

In this case report case was operated by excision and lay open the tract and application of *Kshara* in the form of *Kshara plota*. The dressing with *Kshara plota* (*Apamarga Kshara* with *jatyadi ghrita*) was continued and there was complete debridement of fibrotic tissue with mild slough within five days. Dressing continue and wound became clean

and wound contraction was noted remarkable. the post operative wound was healed completely within 6 weeks. *Chedana karma* & *Apamarga Kshara* application is more practical, hygienic, and can be practiced effectively application of *Apamarga Kshara* resulted to drain the debris of the sinus and nearby the pus pockets and destroyed all the sloughed and fibrosed tissues making a clean wound by which the regeneration of tissues grew within the body

immune effects and filling up of the cavity was noted. *Apamarga Kshara* destroys all the debris, foreign body, giant cells, hemostats the bleed points, and promotes healing. It ensures for nil or negligible recurrence. Close inspection of the wound was continued to avoid the bridging of any healing and fibrosis development. It is observed that within second week wound is filled with healthy granulation tissue and complete epithelialization developed within eight weeks. The wound was healed with normal healthy tissue from all surroundings and filling from bottom level of the wound. No hyper granulation of tissue was allowed to

remain during dressing and the *Apamarga Kshara* has also effect to spoil it. After complete healing the skin surface attained its skin contraction in normal course of time.

CONCLUSION

Chedana karma and *Apamarga Kshara* application is a simple,easy economical procedure.From this case report ,it can be conclude that *Nadivrana* can be effectively managed with *Chedana Karma* and *Apamarga Kshara* application. However, further clinical research works may be needed to further authenticate the efficacy.

MRI REPORT

1.5T MRI OF PELVIS FOR PERIANAL AND SACRO-COCYGEAL REGION:

MR imaging of the pelvis and sacro-coccyx was performed on high definition 1.5T MRI and high resolution T2- weighted serial sections obtained in the sagittal and axial planes using a Phased-Array surface coil with high strength gradients. Coronal STIR images and axial fat suppressed T1W images were also obtained.

FINDINGS:

There is evidence of linear thick fluid filled partially fibrosed sinus tract in posterior midline and right para-median region in subcutaneous tissue at level of S2 extending antero-inferiorly up to S5 level and appear blind ended with linear fibrotic tracts.

No evidence of deep extension up to sacro-coccygeal bones. No evidence of loculated collection, altered marrow signal intensity or bone erosion. No intraspinal canal communication. Type I coccyx seen.

Length of tract measures 40 mm and width measures about 09 mm.

No evidence of perianal fistulous tract. Internal & external sphincter appears normal with no evident sinus tract.

Prostate: Normal. Seminal vesicles: Normal.

Urinary bladder: normal. Rectum: normal.

Lymph nodes: No evidence of significant bulky or necrotic lymphadenopathy is noted.

Bones: No evidence of altered marrow changes or focal lesion is seen.

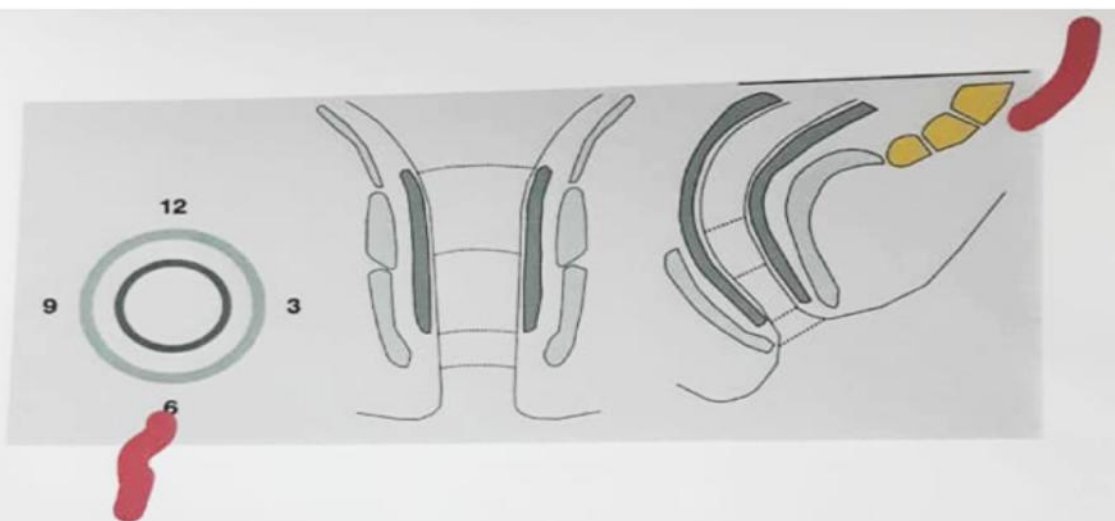
No evident ischioanal or ischiorectal fluid collection on present study.

Root of scrotum and perineal region appear normal.

IMPRESSION:

The MR findings are of:

- Evidence of linear thick fluid filled partially fibrosed sinus tract in posterior midline and right para-median region in subcutaneous tissue at level of S2 extending antero-inferiorly up to S5 level appear pilonidal sinus. No evidence of loculated collection, altered marrow signal intensity or bone erosion.
- No evident altered intensity fistula tract or fluid collection in perianal region on present study.
- No evident ischioanal or ischiorectal fluid collection on present study.



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