Case Report

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Management of Pilonidal Sinus by Ayurvedic Treatment Modalities

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Abstract

Pilonidal sinus can be correlated with *Shalyajanya Nadivrana* by *Acharya Sushruta* according to its pathophysiology and etiology. It is commonly seen in young age people in 2nd and 3rd decades and more prevalent in heavy motorvehicle drivers. Excision of Pilonidal sinus tract is the best choice of treatment for pilonidal sinus till date but the condition often reoccurs due to the failure in identifying and draining all the sinuses or residual hair in the cavity or low quality post-operative care This study includes, A case of 22 years old male patient having complaint of Pain and swelling in the lower back region (Natal cleft) along with on and off pus discharge from that swelling for the past two years, which was treated with *Chedana* (excision) of *Nadi-vrana* (*Sinus tract*) followed by proper post-operative care i.e. *Vranasodhana* with *Panchvalkal Kwath* and *Vrana Ropana* with Local application of *Yastimadhu Malhara*. The wound was completely healed within 60 days and follow up was taken for next 4 months and there was no recurrence was found during 4 months follow up periods.

Keywords: Pilonidal sinus; *Shalyajanyanadivrana; Panchvalkal Kwath; Yashtimadhu Malhara; Chedana;* Excision.

INTRODUCTION

Acharya Sushruta was known as father of Surgery. *Acharya Sushruta* explained five types of *Nadivrana* based on *Doshaj* and *Agantuja*. The etiopathogenesis and treatment of *Shalya Janya Nadivrana* was described by *Acharya Sushruta* in *Visarpanadistanaroga Nidana* and *Chikitsa Adhyaya*.[3] *Acharya* described that if any inflammation ignored during early stage of suppuration, it may result in chronic granulation tract known as *nadivrana*. The clinical features of *Shalyajanyanadivrana* were similarly correlated with Pilonidal sinus. The term Pilonidal is derived from the Latin words for hair (Pilus) and nest (nidus). Pilonidal sinus is described as a chronic sinus which containing hair and debris found in natal cleft region.[3] The cases are more commonly seen in harrier male than female and the ratio is 3:1. The risk factors for Pilonidal sinus are Obesity, continuous sitting, sedentary occupation, trauma etc. The surgical management for pilonidal sinus is incision and drainage, excision of tract with primary closure, excision followed by healing with secondary intention, excision of tract with reconstructive flap.[4] But the risk of recurrence and

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spreading the infection in wound is high. So an approach to treat Pilonidal sinus with excision of pilonidal sinus followed by daily *Vrana Prakshalana* with *Panchvalkal Kwath* and *Yastimadhu Malhara* applied locally upto complete wound healing.

Case presentation:

Age: 22 years

Gender: Male

Occupation: Rickshaw driver

Chief complaint: Painful swelling in lower back region (Intergluteal Region) for 4 months

Recurrent boil with blood mixed with pus discharge – since 4 months

History of Present illness:

Patient had no relevant complaint before 6 months. After that the patient complained of severe pain during sleeping and continuous sitting during rickshaw driving due to pressure on sacrococcygeal region. After that, patient noted painful swelling in sacro-coccygeal region along with recurrent boil and blood mixed with pus discharge from that boil since 4 months. So patient took conservative medicine for above complaints but didn't get relief. So, patient visited to the OPD of *Shalyatantra* for further management.

Past History:

H/O: Typhoid fever before 06 years.

No relevant family history, surgical history or Allergic history was found.

General examination:

Blood pressure (BP) - 124/80 mmHg, Pulse: 84/ min, Temp: 98.4 F, R.R. 20/min

There was no sign of pallor, icterus, clubbing, cyanosis or edema present.

On local examination (Intergluteal cleft):

Inspection: External opening was observed on intergluteal cleft and one at right side of intergluteal region and other on mid intergluteal cleft

Palpation:

Tenderness: present over intergluteal regioninduration present on surrounding area

Temperature: Mild raised

Peripheral skin: Reddish inflamed

On Pressure: blood mixed with pus discharge from track

On digital rectal examination: No internal opening found in anal canal

Table 1: Hematological findings before surgical procedure

Laboratory Investigations:		
Hemoglobin	:	15.5 gm%
Total R.B.C.	:	5.15 Milion/c.mm
Total W.B.C.	:	6.300/cu.mm
Differential leucocyte count:		
Polymorphs	:	66%
Lymphocytes	:	31%
Eosinophils	:	01%
Monocytes	:	02%
Basophils	:	00%
P.C.V.	:	44.5%
M.C.V.	:	86.4 femtolitre
M.C.H.	:	30.1 pg
M.C.H.C.	:	34.8%
R.D.W.	:	13.2
Total Platelet count	:	1,75,000/c.mm
RBS	:	102 gm/dl
HIV, HBsAg, VDRL, HCV	:	Negative

USG Local (intergluteal cleft):

47 mm long & 4 mm wide superficial subcutaneous pilonidal sinus is seen with external opening in intergluteal cleft and other in left gluteal region

No E/O communication with anal canal

No E/O Perianal abscess or fistula at present.

Final Diagnosis based on Local examination and USG report: *Shalyajanya Nadi Vrana (Pilonidal sinus)*

Treatment: Complete timeline regarding treatment and diagnosis protocol is mentioned in table no. 2.

Conservative treatment:

Triphala Yavkut - 10 gm twice a day for sitz bath to reduce surrounding inflammation

Triphala Guggulu – 2 tablets thrice a day after food with warm water

SURGICAL TREATMENT

Pre-Operative:

- All the routine investigations were carried out and all reports found within normal limit (Table no.1)

- Inform written consent from the patient was taken
- Inj. T.T. 0.5 ml IM & Inj. Xylocaine 2% sensitivity test 0.1 ml ID was carried out.
- Local Part preparation was done.

Operative Procedure:

- Local anaesthesia - field block given by 2% xylocaine with Adrenaline over incision area and subcutaneous area around interglutealcleft region
- In Prone position, painting and draping was done with all aseptic precautions.
- Tract patency was done with a solution of Povidone iodine and hydrogen peroxide. Then tract was identified with the help of probe.
- Complete Tract along with peripheral abnormal fibrosis was excised well with the help of 15 no. surgical blade.
- Proper haemostasis achieved and wound was packed with botroclot 0.2 CU solutions and povidone iodine 10% solution.

Post-Operative:

- All vital parameters were normal
- Antibiotics and analgesics was given for 5 days

Tab. Cefixime 200mg - 1 tablet twice a day after food

Tab. Zerodolsp 500mg - 1 tablet twice a day after food

Cap. Rabekind DSR - 1 tablet once a day before food

- Patient was advised for daily dressing upto complete wound healing.

Table 2: Timeline of Study

Date	Timeline
23/4/2022	First visit to OPD Shalya Tantra,
	Diagnosed as a Pilonidal sinus (Fig. 1.a)
24/4/2022	Pre-operative investigation carried out
25/4/2022	Excision of Pilonidal sinus
26/4/2022	Post-operative day 1 wound- unhealthy, foul smell- present wound cleaned with *Panchvalkal Kashaya*, wound packed with *Yastimadhu Malhara* (Figure 1.b)
2/5/2022	Post-operative day 7 wound- unhealthy, Adherent slough- present over wound cavity, Discharge – present
9/ 5/2022	Post-operative day 14 wound- healthy, No slough, Discharge- present
21/5/2022	Post-operative day 21 wound – healthy, No slough, mild discharge
10/6/2022	Post-operative day 45- Complete wound healing, No discharge
17/7/2022	Healed wound scar at intergluteal region, No discharge or pain at intergluteal region
8/9/2022	Healed wound scar, no recurrence, No discharge or pain present. (Figure 1.c)
20/10/2022	No fresh complaints, No recurrence



a. Pre-operative Presentation of PNS b. Post-operative scar of PNS c. Healed scar

RESULT

On daily dressing, slough was removed and Wound was washed with *Panchvalkal Kwatha* followed by *Yastimadhu Malhara* was applied locally on wound area. Dressing continued daily for one week. During 1st week of dressing Wound was apparently unhealthy, Adherent slough was present, foul smell and tenderness present over wound site. In the subsequent week, the same dressing was done on alternate days for three weeks in which pain and Foul smell gradually decrease and absent from 2nd week and slough gradually decrease and wound became healthy at the end of 3 weeks. At the end of one month, weekly once dressing was done. Complete wound healing was observed on 45th day. Complete timeline of the study is mentioned in table no. 2. The internal drugs remained same for entire two months. The patient was followed up for four months without any further recurrence of above complaints.

DISCUSSION

In this case report pilonidal sinus tract was completely excised followed by healing with secondary intention, wound *Prakshalana* was done with freshly prepared *panchvalkal* decoction ofdrugs having *Kashayarasa* and *Sodhana* and *Ropana* properties. *Panchvalkala Kwath* is a combination of five astringent drugs named *Nyagrodha* (*Ficusbengaiensis* Linn.), *Udumbara* (*Ficusglomerata* Roxb.), *Ashvatha* (*Ficusreligiosa* Linn.), *Parisha* (*Thespesiapopulenoides* L.), *Plaksha* (*Ficuslacorbuch*-Ham.) These drugs had Anti-inflammatory, analgesic and antimicrobial properties.[5] These all five drugs mainly contain Tannin.[6] Tannins are antioxidants and blood purifiers with anti-inflammatory actions along with antimicrobial properties which reduced the discharge from wound cavity. The Phytosterols and flavonoids are anti-inflammatory and analgesic which reducespain.[7] Due to the *Kashaya rasa* of the *Panchvalkal Kwath* it acts as *Sothahara*, *Peedana* and *Ropaka* properties[8] which helps to destroys the accumulated debris which might be the reason of PNS recurrence. *Yastimadhu* (Glycyrrhizaglabra) is one of the most potent drug having *Madhura* rasa and *vatapittahara, vranasothahara* properties. Glycyrrhetinic acid has proved to have anti-inflammatory effect similar to glucocorticoid and mineralcorticoids.[9] Licorise is effective against both grampositive and gramnegative bacteria.[10] Internal medication Triphala Guggulu was prescribed for reducing pain, inflammation and enhances healing process.

CONCLUSION

This case study shows *Chedana* (excision) of Pilonidal sinus followed by *Panchvalkal Kwath Prakshalan* with application of *Yastimadhu Malhara* can be useful treatment modality to cure pilonidal sinus. Further this type of cases can be studied in large population to assess the effectiveness of this Ayurvedic management on Pilonidal sinus.

DECLARATION OF PATIENT CONSENT

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient has given his consent for his clinical information to be reported in the journal. The patient understand that his name will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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REFERENCES

1. Kaviraj Shastri A.D., sushrut Samhita in Ayurveda Tatva Sandipika, Chaukhambha Sanskrit sansthan, Nidansthanam Adhyaysu. Ni.10/11-14, pg no. 348.
2. Kaviraj Shastri A.D., sushrut Samhita in Ayurveda Tatva Sandipika, Chaukhambha Sanskrit sansthan, Chikitsasthanam Adhyaysu. chi. 17, pg no 99.
3. A concise textbook of surgery, Somen Das,7th edition, p1102.
4. Devid E. Beck, steven D. Wexner, Janice F. Rafferty, Gordon and Nivatvongs' Principles and practice of surgery for the colon, Rectum, and Anus 4th edition, Page no.209-219.
5. Yogesh Badve, Review study of Potential wound healing properties of Panchvalkal, International Journal of Ayurveda and Pharma research.2019;7(8):53-57.
6. Acharya Priyavat Sharma, Dravyaguna Part I, Ed. 3rd, Chaukhambha Bharti Academy, Varansi, 2006, pg no.664-670.
7. Gajarmal et. al. UJAHM 2014,02(04): Page no

6-9.

8. K. Shobha Bhat, B.N. Vishwesh, A clinical study on the efficacy of Panchvalkal cream in Vranasodhanaw.s.r to its action on microbial load and wound infection, AYU.2014 Apr-Jun; 35(2), Page no.135-140.
9. Shobhit Kumar, Binod Bihari Dora. A critical appraisal on Phytochemical constituents and Therapuetic effect of Yashtimadhu (Glycyrrhizaglabra). Reseach & review : Journal of Medical science and technology. 2017; 6(3): 6-10p.
10. Gupta VK, Fatima A, Faridi U, et al. Antimicrobial potential of Glycyrrhizaglabra Roots.J ethnopharmacol.Mar 5, 2008; 116(2), Page no. 377-380.