

Effectiveness of *Chedana Karma* and *Teekshna Apamarga Pratisaraniya Kshara Karma* Application in the Management of *Nadivrana* (Pilonidal Sinus): A Case Study

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ABSTRACT

Kshara Karma, *Kshara Sutra* are mentioned by *Sushruta* in the management of *Nadivrana* (pilonidal sinus). **Aim and Objective:** To see the effectiveness of *Chedana Karma* followed by *Teekshna Apamarga Pratisaraniya Kshara* application in *Nadivrana* (pilonidal sinus) and to avoid recurrence. **Material and Method:** firstly under local anesthesia 2% lignocaine and adrenaline *Chedana Karma* (excision of pilonidal sinus) f/b *Teekshna Apamarga Pratisaraniya Kshara* applied over the excision site of pilonidal sinus for about 100 seconds followed by cleaning with *Nimboo Swarasa* and dressing done with *Jatyadi Taila*. **Results:** *Kshara Karma* is highly effective management of *Nadivrana* (pilonidal sinus) with very less chances of recurrence, less recovery period because healing of the wound is from the base, wound was completely healed in 45 days with daily dressing with *Jatyadi Taila*. **Conclusion:** *Teekshna Apamarga Pratisaraniya Kshara Karma* is very effective in management of the pilonidal sinus with minimal recurrence rate as compared the primary closure of the pilonidal sinus where chanced of recurrence are significantly high.

KEYWORDS: *Nadivrana*, *Pilonidal Sinus*, *Chedana Karma*, *Teekshna Apamarga Pratisaraniya Kshara*

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INTRODUCTION

The pilonidal sinus is derived from latin words *Pilus* means "hair" and *Nidus* means "nest"¹. Pilonidal sinus means nest of hairs in greek. It is also called jeep-bottom and driver's bottom because it is more common in jeep drivers² and more common in dark-haired, hirsute white men³ of age 20-30 years of age⁴. It occurs due to hair penetration in natal cleft causing infection, pustule formation contains hair and debris leading to sinus formation and end with pus discharge from the sinus opening⁵. It is typically seen on the midline of the natal cleft over the lowest part of the sacrum and coccyx with a tuft of hairs seen extruding through the sinus, it is also seen in inter-digital cleft in barber's hand, axilla, and umbilicus. In pilonidal sinus condition hair break off by friction then find

entry either through the open mouth of the sudoriferous gland or through the soften skin either by sweat or some form of dermatitis.

The patient usually presents with the complaints pain which may be from dull ache to throbbing and discharge which may varies from a little serum to a sudden gush of pus⁶. A tender swelling just above the coccyx in the midline (primary sinus), and on either sides of the midline (secondary sinus). Tuft of hairs may be seen in the sinus opening, presentation may be acute exacerbation (abscess), or chronic. It causes recurrent infection, abscess formation which burst open forming recurrent sinus with pain, discharge and discomfort. Chronic pilonidal sinus can occasionally

cause sacral osteomyelitis, necrotizing fasciitis and rarely meningitis. It can be a morbid disease because of high recurrence rate⁷.

According to *Acharaya Sushruta Nadivrana* is classified into *Vataja*, *Pittaja*, *Sleshmaja*, *Sannipataja*, *Dwandwaja*, *Agantuja*. According to *Vagbhata Nadivrana* is classified into *Vataja*, *Pittaja*, *Sleshmaja*, *Sannipataja*, *Agantuja*. *Sannipataja Nadivrana* is *Asadhya* and *Vataja*, *Pittaja*, *Sleshmaja*, *Dwandwaja*, *Agantuja* are *Sadhya*⁸.

Varti prayoga, *Ksharasutra* and *Shastra Karma* are the treatment of choice for *Nadivrana*⁹.

CASE STUDY

A male patient age of 37 years, car driver from came to Sri Dharmasthala Manjunatheshwara College of Ayurveda & Hospital, Hassan, Karnataka in Shalya Samanya OPD with the complaints, small palpable swelling above 4 cm from the anal verge associated with pus discharge from the external opening in the natal cleft since 1 year and aggravated since 2 months which was aggravated while driving car and sitting for more than 3 hours daily.

POORVA VYADHI VRITTANTA (HISTORY OF PAST ILLNESS)

- Not a known case of Hypertension, Diabetes Mellitus, Thyroid dysfunction.

VAIKTHIKA VRITTANTA (PERSONAL HISTORY)

- Diet: Mixed
- Appetite :Good
- Bowel: Regular
- Micturition: Regular
- Sleep: Adequate

SAMANAYA PAREEKSHA (GENERAL EXAMINATION)

- Built: well built
- General condition: Fair
- Nutritional status: Well nourished
- Pallor: Absent
- Icterus: Absent
- Cyanosis: Absent
- Clubbing: Absent
- Lymphadenopathy: Absent
- Oedema: Present

SAMANAYA PAREEKSHA (VITALS)

- BP: 120/80 mm of Hg
- Pulse rate: 74 bpm, Regular
- Respiratory rate: 22/min
- Temperature: 97.4 DF

SAMSTHANIKA PAREEKSHA (SYSTEMIC EXAMINATION)

- CNS: Conscious, well oriented to time, place and person
- CVS: S1 S2 heard, no murmur sound present
- RS: Equal air entry to bilateral lung fields, NVBS present, no added sounds present
- P/A: Soft, non-tender, no organomegaly present

STHANIKA PAREEKSHA (LOCAL EXAMINATION)

- Number of sinus opening – One (primary opening) is present in the natal cleft, and one more pimple swelling present 3 cm away from the primary opening.
- Site - in the natal cleft
- Size – primary opening 5-6 mm and secondary swelling around 0.5 X 0.5 cm 3 cm away from the primary opening
- Discharge –pus discharge present from the opening of sinus after applying pressure over surrounding area,
- Edges – raised and indurated.

SPARSHANA (PALPATION)

- Tenderness - Present
- Discharge – pus discharge present
- Local raise of temperature – present
- Induration – around the secondary swelling approximately 0.5 cm towards the primary opening
- Probing done from primary opening towards secondary swelling and linear track was identified, approximately 3cm in size

PRAYOGA SHALA PAREEKSHA (INVESTIGATIONS)

- Hb - 13.4 gm%
- Total count 7200 cells/CMM
- ESR - 14 mm/ hr
- RBS – 90.9 mg/dl
- HIV, Hepatitis -B surface antigen non-reactive

VYADHI VINISCHAYA (DIAGNOSIS)

- *Sleshmaja Nadivrana* (Pilonidal Sinus)

TREATMENT METHODOLOGY PRE-OPERATIVE PROCEDURE

- Pre-operative written surgical consent taken, surgical local part preparation, proctoclysis enema was given 3 hours prior to the day of operation. After proper bowel preparation, injection 2% lignocaine and adrenaline was given I/D for sensitivity test and inj. T.T 0.5 cc I/M was given.

OPERATIVE PROCEDURE

- Patient was taken in jack knife position on operation theatre table

- Proper painting and draping done.
- Local anesthesia with 2% lignocaine and adrenaline was infiltrated around the external opening in natal cleft region.
- Assessment of extension was done by probing and about 1.5 cm incision was taken from the external opening towards the natal cleft.
- There was a sinus 3 cm upward and about 2 cm downward by the incised wound in the natal cleft.
- A wide incision was given and whole track is excised.
- Then carefully examined for presence of hair or any other foreign bodies.
- *Teekshna Apamarga Pratisaraniya Kshara* applied over the wound and wait for *Shatamatra Kala* (100 seconds) followed by cleaning with *Nimboo Swarasa*.
- Hemostasis maintained throughout the procedure.

- Tight dressing was done with *Jatyadi Taila*.







POST-OPERATIVE MANAGEMENT

- Inj. Taxim 1gm IV BD given for 3 days
- Tab. *Nimbadi Guggulu* 2 BD after food
- Tab. *Gandhaka Rasayana* 2 BD after food
- *Matra Basti* with *Yesthimadhu Taila* 20 ml BD,
- Sitz bath with *Triphala Choorna* BD, daily twice
- Dressing with *Jatyadi Taila* BD.

FOLLOW UPS

- Patient asked to do daily dressing with *Jatyadi Taila* and to take daily Tab. *Nimbadi Guggulu* 2 BD after food, Tab. *Gandhaka Rasayana* 2 BD after food till wound closure, and *Matra Basti* with *Yesthimadhu Taila* 20 ml BD, sitz bath with *Triphala Choorna* BD for starting 15 days. Post-operative wound was healed within 45 days. After complete closure all medication was stopped.

OBSERVATION

		
PRE OPERATIVE	JACK KNIFE POSITION	PROBING INTRA-OPERATIVE
		
CHEDANA KARMA	APAMARGA PRATISARANIYA KSHARA APPLICATION	AFTER KSHARA KARMA



RESULTS:

- *Chedana Karma* followed by *Kshara Karma* is highly effective management of *Nadivrana* (pilonidal sinus) with very less chances of recurrence less recovery period because healing of the wound is from the base, wound was completely healed in 45 days with daily dressing with *Jatyadi Taila*.

DISCUSSION

- Pilonidal sinus is occupational disorder especially in jeep driver and hair dressers because of continue long sitting posture and profession respectively. Several conservative and surgical modalities are available for treatment of pilonidal sinus but still more recurrence chance because of their limitations.
- *Chedana karma* followed by *Teekshna Apamarga Pratisaraniya Kshara Karma* is safe, cost effective, minimal invasive parasurgical procedure with very low recurrence rate with minimum hospital stay in the management of pilonidal sinus. *Kshara* is having *Chedana Bhedhana* and *Lekhna* properties so it prevents accumulation of pus and help in continues drainage cause breaks of unhealthy granulation tissue and it will produce fibrosis simultaneously and helps in minimizing inflammatory component and help in healing.
- *Nimbadi Guggulu* is having *Tikta* and *Kashaya Rasa* which is an act as *Kapha-Vatahara* (pacify *Kapha* and *Vata*). It is having Analgesic and Anti-Inflammatory properties which help in healing of wound and ulcers.
- *Jatyadi Taila* is *Tikta* and *Kashaya Rasa Pradhana*, which is *Pitta-Kaphahara* and have *Vranashodhana*, *Vranaropana* and *Vedanasthapana* properties.
- Sitz bath with *Triphala choorna* will help in reducing the swelling, discomfort is eased and healing becomes faster.

- *Matra Basti* with *Yesthimadhu Taila* will help in reducing post-operative pain because of its *Vata-Shamaka* properties, so to minimize the use of antibiotics and analgesics use in post-operative period.

CONCLUSION

- *Chedana Karma* (excision of pilonidal sinus) f/b *Teekshna Apamarga Pratisaraniya Kshara* is very effective, safe in management of the pilonidal sinus with minimal recurrence rate.

PREVENTIVE MEASURES

1. Local hygiene with sitz bath and hair removal.
2. Diet and lifestyle modification and correction.
3. Weight maintenance.

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