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INTEGRATED APPROACH IN A CASE OF EXTENSIVE PERIANAL ABSCESS: INCISION AND DRAINAGE WITH SURGICAL DEBRIDEMENT FOLLOWED BY AYURVEDIC MANAGEMENT

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ABSTRACT **Introduction:** An Ano rectal abscess is a collection of pus in the tissues around anus or rectum, often caused by bacterial infections. It occurs due to cryptoglandular infection and may even spread to the superficial fascia of inguinal region leading to necrotising fasciitis. **Patient information:** This case report presents a 28-year-old male with complaints of painful tender swelling in the perianal region extending upto the inguinal region for 7 days associated with intermittent fever. **Therapeutic Intervention:** A combined approach of Incision and Drainage along with surgical debridement followed by regular aseptic wound irrigation with *Panchavalkala Kwatha* and *Sphatika Churna* and aseptic dressing with *Panchavalkala* Malhara along with *Varunadi Kwatha* (45mL two times a day before food), *Kanchanara Guggulu* (2 tablets once a day at morning before food in *Varunadi Kwatha*), and *Guggulu Panchapala Churna* (5 gram three times a day before food with honey) as internal medications. **Result:** Complete wound healing was achieved by day 72. The patient continues to be on regular follow-up, and no recurrence has been noted to date. **Conclusion:** This single case report highlights the positive outcome of an integrated approach, wherein Ayurvedic management following surgical drainage and debridement facilitated effective recovery in a case of extensive perianal abscess extending to the inguinal region.

KEYWORDS : Perianal abscess, Incision and Drainage, *Guggulu Panchapala Churna Panchvalkala Kwatha, Panchavalkala Malhara*, Surgical debridement

INTRODUCTION

Anorectal abscesses are defined by the anatomic space in which they develop and are more common in the perianal and ischiorectal spaces and less common in the inter-sphincteric, supralevator, and submucosal locations.[1-4]A majority of abscesses are of nonspecific cryptoglandular origin but may also be due to a variety of processes, which are primarily inflammatory or traumatic. As the inflammatory process tends to spread easily and also due to negligence, the abscess originating from perianal space can extend upto ishiorectal and supralevator space. Circumferential spread may also occur in the inter-plane or the pararectal tissue above the levator muscles.[5] Anorectal abscess, with an incidence of approximately 1 in 10,000 and annual cases ranging from 68,000 to 96,000, shows a male predominance of 3:1 due to infection of the cryptoglandular glands. It can occur at any age but is most common between 20 and 40 years.[6-7] On presentation, patients will typically complain of severe pain and tenderness associated with or without a swelling in the anal and peri-anal region, which has generally been present for several days. The diagnosis of an anorectal abscess is usually based on the patient's history and physical examination. A physical examination will frequently reveal a patch of erythematous or indurated skin overlying the abscess collection, demarcated with an area of tender fluctuance as a consequence of accumulated pus and infectious debris.[8] The primary treatment of anorectal abscess is the surgical drainage. In general, the incision should be kept as close as possible to the anal verge to minimize the length of a potential fistula, while still providing adequate drainage.[9]

PATIENT INFORMATION

A 28-year-old male presented to the outpatient department with a 7-day history of severe throbbing pain and swelling in the perianal region extending to the scrotal region, associated with intermittent fever for 3 days. Despite trying oral medications prescribed by a general surgeon for five days (Tab Amoxclav 625 one tablet three times a day after food, Tab PAN 40 one tablet once a day before food and Tab Zerodol SP one tablet two times a day after food), he got no relief. There was no relevant past history and surgical history. No current medication for any systemic disease was found. Local examination has been given in Table 1.

Table 1: Local Examination

Inspection	
Site	Left perianal region extending anteriorly towards the left inguinal region, with posterior extension crossing the midline to involve the right perianal region up to the 8 o'clock position.
Shape	Irregular
Colour	Reddish with areas of dusky and necrotic tissue
Smell	Foul-smelling
Discharge	No active purulent discharge noted
Surrounding areas	Surrounding skin appears inflamed and edematous. Evident cellulitic changes with induration and erythema extending beyond wound margins.
Palpation	
Temperature	Present
Induration	Present
Tenderness	Present
Digital Rectal Examination	
	Collection felt from 1o' clock to 7 o' clock posteriorly below dentate line.

INVESTIGATIONS

Summary of Investigations before treatment has been given in Table 2

Table 2: Investigations Before Treatment

Investigation	**Findings**
Blood Investigations (04th March 2025)	Haemoglobin: 13 g/dL Total Leukocyte Count: 18,200 cells/mm³ with marked neutrophilia (87%) and relative lymphopenia (9%) Erythrocyte Sedimentation Rate: 140 mm in the first hour (Significantly raised) Serum Creatinine: 1.0 mg/dL Random Blood Sugar: 87 mg/dL
Transrectal Ultrasonography (TRUS) (04th March 2025)	Horseshoe-shaped superficial subcutaneous abscess (78 × 41 × 39 mm) with 30 cc collection in perianal region (2 to 8 o'clock)
MR Fistulogram (08th March 2025)	Large heterogeneous abscess with multiple internal air foci involving the left perineum and scrotum; communication with inter-sphincteric collection (both anterior and posterior perianal region); suggestive of necrotising fasciitis

INTERVENTION

Emergency management involved Incision and Drainage (I &D) under local anaesthesia at the most dependent position at 3 o' clock, yielding 30ml of pus. Following routine investigations, surgical debridement was performed under spinal anaesthesia, extending to the left inguinal region. Locules were broken, and the abscess cavity was thoroughly

debrided. After achieving haemostasis, the wound was packed with Povidone iodine solution-soaked gauze. The patient remained stable throughout the procedure and post procedure.

Timeline Of The Study

Timeline of events have been summarized in Table 3.

Table 3: Time Of The Study

Date / Period	Event / Clinical Milestone	Therapeutic Intervention
08th March 2025	First visit to Shalya Tantra OPD with abscess in the left perianal region I&D under local anaesthesia	Inj. Taximax 1.5gm Intravenously,12 hourly - 3 days Inj. Ranitidine 2 ml Intravenously
10th Mar 2025	Surgical debridement under spinal anaesthesia	Inj Taximax 1.5gm Intravenously,12 hourly – 5 days Inj Gentamycin 80 mg Intravenously 8 hourly - 5 days Inj Metronidazole 100ml Intravenously, 8 hourly - 5 days Inj Rantidine 2 ml Intravenously - 5 days Inj Diclofenac 75mg Intramuscular 8 hourly
11th Mar 2025 onwards	Start of Ayurvedic interventions	Sitz bath with *Panchavalkala Kwatha* + *Sphatika Churna* *Varunadi Kwatha* 15 ml with 30 ml warm water two times a day before food *Kanchanara Guggulu* 2 tablets once a day before food with *Varunadi Kwatha* *Guggulu Panchapala Churna* 5gm two times a day before food with honey
15–19th Mar 2025	Transition to oral medications; Intra venous medications stopped	Tab Cefixime 200mg 1 tablet two times after food for five days Cap Rabekind DSR 1 tablet once before food for five days Tab Zerodol SP 1 tablet two times a day after food for five days Tab Becozyme C Forte 1 tablet at noon after food for 15 days
20th Mar 2025 onwards	Continued follow-up and wound management	Regular aseptic wound dressing and continuation of Ayurvedic medicines
20th May 2025	Wound healed completely	Advised dietary (avoid spicy oily, junk food) and lifestyle modifications (avoid sitting on hard surfaces for long period of time)

RESULTS

Figure 1: Progressive Stages Of Wound Healing

The wound demonstrated steady and progressive healing, marked by reduction in pain, swelling, and local inflammation. Healthy granulation tissue was evident by day 30, with significant wound contraction and epithelialization by day 60. Complete wound closure was achieved by day 72. (Figure 1)

Outcome And Follow Up

No signs of recurrence have been noted till date. The patient continues to remain under regular follow-up.

DISCUSSION

Ano-rectal abscesses are more common in males than females.[10] Treatment typically involves Incision and Drainage (I&D) with surgical debridement wherever necessary.[11] While perianal abscesses typically remain confined to the ischio-anal fossa, rare cases may exhibit atypical spread to adjacent regions such as the inguinal area. Early diagnosis and timely intervention are essential to prevent serious complications like necrotizing fasciitis or Fournier's gangrene. In this case, the patient had initially consulted a surgeon and was prescribed oral antibiotics; however, the condition failed to improve and progressed further, extending into the inguinal region. Incision and drainage were performed under local anaesthesia, followed by surgical debridement. Subsequently, Ayurvedic wound healing treatments were initiated alongside ongoing oral antibiotic therapy. Given the complexity and extent of the condition, an integrated approach was adopted, combining surgical and Ayurvedic modalities for effective management.

Guda Vidradhi (Peri anal or perirectal abscess) has been given under the classification of *Antar-Vidradhi* in Ayurveda, which occurs at *Guda Pradesha* (anal region) and characterized by obstruction of flatus along with other symptoms of *Vidradhi* (abscess). *Acharya* Sushruta has suggested *Bhedana Karma* in all kinds of *Vidradhi*. In the case of *Guda Vidradhi* (Peri anal or perirectal abscess), patient suffers from severe pain and become restless due to the pus collection at anal region.[12]

Guggulu Panchapala Churna is indicated in *Ashtanghridaya Bhagandara* (Fistula-in-ano) *Chikitsa.* [13] It is composed of herbs known for their anti-inflammatory, antimicrobial, and wound healing properties. A preliminary study demonstrated the potent antioxidant activity of *Guggulu Panchapala Churna*, particularly in its methanolic extract, which effectively mitigates oxidative stress during infection and plays a significant role in enhancing tissue repair and wound healing.[14]

Panchavalkala Kwatha has anti-inflammatory, antibacterial, antiseptic, and antimicrobial properties that enhances wound healing.[15] The chemical composition of *Panchavalkala Kwatha*, like tannins, phytosterols, and flavonoids, have anti-inflammatory properties; hence, they prevent the prolongation of the initial inflammatory phase, promote wound contraction by increasing collagen formation and ultimately improve wound healing.[16]

Varunadi Kwatha has *Kaphahara* (alleviates or reduces vitiated *Kapha dosha*) and *Medonashaka* (eliminates vitiated *Medo Dhatu* which is responsible for abscess formation) properties.[17]Vitiated *Kapha* and *Medo* (adipose tissue) are the key factors in *Vidradhi Vikara Prakriti*(abscess).[17]Ultimately, properties of *Varunadi Kwatha* helps to break the *Samprapti* (Pathogenesis) and helps to remove *Kleda* (watery waste or excessive moisture of the body) from *Srotas* (structural or functional channels). It helped control wound exudates too.[17]

Antibacterial activity of alcoholic and aqueous extract of *Kanchnara Guguulu* tablet were evaluated against pathogenic E. coli, S. aureus for antimicrobial activity which found more effective in such microorganisms.[18] *Kanchnar Guggulu* also has antiproliferative and antimitotic properties that may help to prevent the recurrence of fistula-in-ano.[18,19]

Panchavalkala Malhara was used for aseptic wound dressing. Owing to its *Vatahara* action (alleviates *Vata*), attributed to its *Guru* (heavy) *Guna*, it contributed significantly to pain reduction. The formulation's ingredients possess anti-inflammatory and antimicrobial properties, which helped alleviate pain, tenderness, redness, and swelling, thereby supporting effective infection control and promoting wound healing.[20]

CONCLUSION

Perianal abscesses extending to the inguinal region present significant

management challenges due to their complexity and risk of recurrence. In this case, effective control was achieved through incision and drainage (I&D) followed by surgical debridement, and post-operative Ayurvedic wound management using *Panchavalkala Malhara* for dressing and appropriate oral medications. The integration of Ayurvedic *Shaman Chikitsa* proved beneficial in the management of Peri-anal abscess, offering encouraging clinical outcomes. This integrative approach demonstrated safety, cost-effectiveness, and minimal side effects, highlighting its potential as a supportive modality alongside conventional surgical care.

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