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Exploring the therapeutic potential of woundhealing activity of Guggulu tiktaka ghrita in postoperative abscess- A case report

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Abstract

Introduction: Ati dushita rakta leads to vidradhi formation, correlating with an abscess in this case. Vranashotha symptoms, indicative of Gudavidradhi (anal abscess), emphasize the importance of timely intervention. Bhedana Karma is pivotal in the management of abhyantara vidhradhi. Patient Information: An 18-year-old female presented with pain and pus discharge during defecation, prompting initial incision and drainage(Bhedana) followed by fistulotomy due to persistent symptoms. As there was recurrence of pus discharge, administration of Guggulu tiktaka ghrita was planned, as mentioned under the management of vrana shotha. Results: There was 80-90% reduction symptoms. Discussion: Despite initial drainage, recurrent pus formation led to Guggulu tiktaka ghrita administration. Its key ingredients, including Guggulu and Tikta dravya, contribute to anti-inflammatory, antimicrobial, and collagen-promoting properties crucial for wound healing. Conclusion: Guggulu Tiktaka Ghrita, with its Anabhishyandi guna, emerges as a promising agent for wound care. The study highlights the potential integration of Ayurvedic principles into modern practices, emphasizing the need for further research to validate its mechanisms and applications in wound healing.

Keywords

Gudavidradhi, Guggulu tiktaka ghrita, Perianal abscess, Wound healing

Introduction

Dushta rakta in ati matra forms vidradhi, which facilitates faster suppuration¹. Based on Nidana panchaka and Lakshana, it can be correlated as an Abscess, as it is vritta (round), mahamoola (deep-seated), and ruja (pain)². The symptoms of Vranashotha (inflammation), such as acute pain and a tendency towards early suppuration, are associated with gudavidradhi (anal abscess), one of the eight adhisthana for abhyantara vidradhi³. An anal abscess can be caused by a variety of factors, including blood-borne infections, weakened immunity, and an infection or blockage of the anal gland⁴. Both Ayurveda and modern science recommend the same treatment for pus, with Bhedan Karma (incision) being performed at the most conspicuous part for dosha expulsion. Bhedanakarma is crucial to prevent suppuration formation in abhyantara vidhradhi⁵. Acharya Sushruta places high value on thorough treatment for all surgical wounds, but advises tikta rasa, shodhaka, and ropaka durgs for the management of the vranashotha. As gudavidradhi is the main cause of fistula in ano. If not treated, it may convert into bhagandara. The patient had already undergone bhedana karma, but recurrent pus discharge led to the planning of guggulu tiktaka ghrita⁶ prayoga for shodhana and ropana karma.

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Patient information

An 18-year-old female, came with the complaints of pain and pus discharge during defecation since 15 days. The pain, initially continuous, later became on-and-off, suggesting a dynamic nature of the discomfort. The patient reported irregular bowel habits. Due to the persistence of symptoms, an initial intervention of incision and drainage was performed to address the issue. Subsequently, a fistulotomy was conducted, suggesting the presence of a fistula or an abscess that required surgical management.

Clinical findings

Per Rectal examination-

Tenderness present

Internal opening at 1'o clock position

Abscess was present 12 to 3'o clock position

Timeline

Date	Intervention	Signs and Symptoms
27/5/2022	Admitted	Presented with the complaints
28/5/2022	I&D under local anaesthesia with aseptic precautions	281
01/6/2022	On discharge, Cap Grab 1-1-1 Avipattikara churna 1tsf B/F Jatyadi taila dressing Sitz bath with Pentabark kashaya	No pus discharge No pain
15/6/2022	Follow up	Complained of Pus discharge from the operated site

Diagnostic assessment

USG Trans-perineal (26/05/2022)

Well defined hetero echoic (0.69*2.5*3.1cm), volume-2.9 ml seen in left perianal region, situated between 12:30 to 3'o clock position involving left ischio-anal fossa – perianal abscess.

Left perianal abscess with fistula

Therapeutic intervention

15/6/2022	Guggulu tiktaka kashaya 3 tsf BD B/F Cap Grab 1-1-1	
03/7/2022	Guggulu tiktaka kashaya 3 tsf BD B/F Nimbadi Guggulu 1-1-1	Pus discharge got reduced upto 70%
15/7/2022	Gugulu tiktaka ghrita 1tsf BD B/F	No complaints

Follow up and outcomes

Patient was asked to follow up after 1 month of administration of guggulu tiktaka ghrita. On 18/8/2022, when the patient visited the hospital, there was no pus discharge, would was healed for about 80-90%. No fresh complaints.

Discussion

Vidradhi, pitta pradhanya vyadhi, the main treatment plan suggested is to incise and drain vidradhi (Bhedana) completel .It is important to note that in the case of a cryptoglandular infection, recurrence may occur if the causative organism is resistant to antibiotics and proper drainage is not performed. Therefore, it is crucial to follow the recommended treatment plan and ensure proper drainage to minimize the risk of recurrence. In this case, despite the drainage, recurrent pus formation occurred. Therefore, Guggulu tiktaka ghrita was administered, taking into account its shodhana and ropana karma as the main factors. The key ingredient of guggulu tiktaka ghrita being Guggulu, can pacify Vata and Kapha dosha, which makes it an excellent choice for wound healing. Additionally, the Tikta dravya like Nimba, amruta, patola, kantakari act as shodhaka as well as pitta shamaka. Guggulu Tiktaka Ghrita, with its Ropana karma, is considered effective in promoting tissue repair and regeneration. The Tikta dravya contribute to the formulation's Shothahara action, which helps in reducing inflammation and swelling around the wound, creating a conducive environment for healing. Based on the drugs in Guggulu Tiktaka Ghrita, it is considered to be anabhishyandi in nature. The concept of Anabhishyandi Ghrita emphasizes the importance of marga shodhana. This is particularly relevant in wound healing, where the unimpeded bodily functions flow is crucial for optimal recovery. As per modern perspective, it is believed that the anti-inflammatory effects of Guggulu Tiktaka Ghrita can be associated with the reduction of pro-inflammatory mediators, which contribute to a controlled inflammatory response during the initial stages of wound healing. This controlled inflammatory response is essential for proper healing, as it helps to remove damaged tissue and debris, and stimulates the production of new tissue. In addition to its anti-inflammatory effects, Guggulu Tiktaka Ghrita also has antimicrobial properties, which align with the contemporary understanding of preventing and managing infections, a critical aspect of the wound-healing process. Nimba, Vidanga and other tikta dravya in Guggulu Tiktaka Ghrita, are also known for their potent antimicrobial properties. Guggulu, a key component of Guggulu Tiktaka Ghrita, is known for promoting collagen synthesis, making it relevant in the context of modern wound care. Collagen is a crucial extracellular matrix component, providing structural support for tissue repair and regeneration. By promoting collagen synthesis, Guggulu helps to accelerate the healing process and improve the quality of new tissue.

Conclusion

Overall, the wound-healing activity of Guggulu Tiktaka Ghrita, with special emphasis of its Anabhishyandi guna (ability to prevent the accumulation of pus), along with its multi-faceted actions, including anti-inflammatory, antimicrobial, and tissue-regenerating properties, make it a promising candidate for further exploration and potential integration into modern wound care and post-operative practices. Continued research and clinical studies are essential to validate and expand our understanding of its mechanisms and applications in wound healing.

Patient perspective

As the patient was young, she was hesitant to undergo surgical procedure again. Hence, the Patient was happy with the outcome of the treatment planned with just the internal medications.

Informed consent

Taken

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