Section: Surgery

Original Research Article

A COMPREHENSIVE CASE STUDY ON THE SUCCESSFUL TREATMENT OF HIGH ANAL FISTULA

A. Selvaraja Kumar[1]

[1]General and Advanced Laproscopic Surgeon and Senior Consultant, Aakash Hospital, Chennai, Tamilnadu, India.

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Corresponding Author:
Dr. A.Selvaraja Kumar,
Email: drsrkayyadurai@gmail.com

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ABSTRACT

Background: This case study shows how a high anal fistula was diagnosed, treated and then recovered. Local examination revealed Trans sphincteric fistula with external opening placed at 3 o clock position. The treatment method used methylene blue infiltration to verify the internal aperture and then metal probe probing of the tract from the exterior to internal opening. Fistulectomy was carried out successfully. This case study is presented to discuss the diagnostic challenges, surgical management, and post-operative care highlighting the importance of individualised treatment approaches for the better outcomes. **Materials and Methods:** This is a single patient case report. The study describes the clinical presentation, diagnostic evaluation, operative management and post operative follow up of a patient diagnosed with high anal fistula. **Result:** Post operative period was uneventful, No fecal incontinence noted, wound healing achieved by few weeks., No secondary tract formation., Patient reported complete resolution of symptoms.

INTRODUCTION

Anal fistulas tend to occur more frequently in adults. A fistula is a crooked tunnel that connects an internal organ to the skin's surface. Complex anal fistulas were defined as trans-sphincteric fistulas involving > 30% of the external anal sphincter, suprasphincteric fistulas, horseshoe fistulas, anterolateral trans-perineal complex fistulas in female patients, and fistulas with combined inflammatory bowel disease, radiation enteritis, malignant tumors, anal incompetence, chronic diarrhea. Due to the fistula that was found here connecting the anal canal to the skin around the anus, the patient may endure severe pain and suffering. This case study offers an in-depth investigation of the strategies used to manage a high anal fistula and offers helpful advice on how to identify and treat one. It adds to the body of medical knowledge and may provide helpful guidance for medical professionals encountering situations similar to this in the future. Better treatment strategies might result from the research, which would hasten recovery and greatly improve the quality of life for people who suffer from this condition.

CASE REPORT

Clinical Findings

Results of the physical examination

A 44 year old female presented with complaints of painful defecation, discomfort and pain associated with swelling around the perianal region and perianal discharge on and off. These physical symptoms supported the need for a thorough diagnostic evaluation

Discussion of the Use of Methylene Blue Infiltration: Methylene blue is frequently utilised, especially when it's challenging to find the internal hole, to view and confirm the entire tract of a fistula. Methylene blue entered this situation through the external apertures. The internal opening at 12 o'clock was seen when the dye followed the fistula's route. The diagnosis and treatment plan were both confirmed using this dual verification technique. The methylene blue infiltration helped to map the path of the fistula and confirmed the location of the internal opening, providing a clear roadmap for the upcoming surgical surgery.

Procedure steps involving in fistulectomy:

1. Under SAP, Under spinal anaesthesia patient in lithotomy position with parts painted and drapped.
2. Using fistula probe fistulectomy tract identified.

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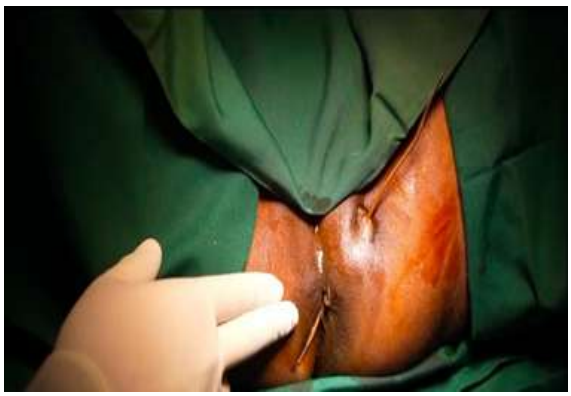

Figure 1: probing of the fistula

3. Entire fistula tract was excised using cautery.

Figure 2: Fistula Excision Using Cautery

4. Fistulectomy was done and complete hemostasis achieved.

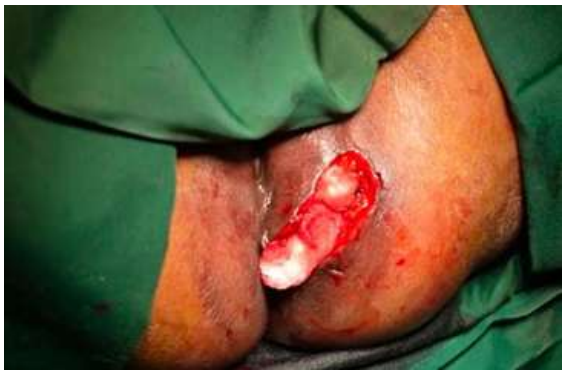

Figure 3: Wound Condition After Completion Of Surgery

Figure 4: suture applied to promote wound healing

Various practices from common to advanced leevel approaches in fistula treatment includes:

1. Fistulotomy: Opening and draining the fistula, suitable for simple fistulas
2. Seton placement: Placing a seton to drain and promote healing, often used for complex fistulas
3. Ligation of Intersphincteric Fistula Tract (LIFT): Closing the fistula tract between sphincter muscles (success rate: 60-90%)
4. Video-Assisted Anal Fistula Treatment (VAAFT): Minimally invasive, using a camera to visualize and treat the fistula (healing rate: 71-85%)
5. Fistula Laser Closure (FiLaC): Using laser energy to seal the fistula tract (success rate: 64-81%)
6. Endorectal Advancement Flap: Covering the internal opening with a tissue flap (healing rate: 66-87%)

Steps for Common Procedures

- Fistulotomy:

- Identify and probe the fistula tract
- Open and drain the tract
- Curette and marsupialize the wound

- LIFT:

- Identify the intersphincteric tract
- Ligate and divide the tract
- Curette and close the wound

Steps for Advanced Procedures

- VAAFT: Diagnostic and operative phases, using a fistuloscope to visualize and treat the fistula
- FiLaC: Inserting a laser fiber to seal the fistula tract

Treatment Response and Clinical Outcome:

Response to Treatment:

This patient responded very positively when the treatment strategy was used. The fistula was treated by partial fistulotomy, infiltration of methylene blue, and excision of fistula. In the days that followed the treatment, the patient's symptoms started to get better. Regular check-ups revealed a constant decrease in the pain and perianal discharge, demonstrating the efficacy of the therapeutic strategy.

Figure 5: wound healing of the patient 5 days after the surgery

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Clinical Outcome

The fistula was started to heal as shown by the results of the follow-up exams. [Figure 5]

Post-Treatment Findings

Following up after therapy was essential to monitor the patient's progress and spot any potential problems. During the follow-up time in this case, no problems were discovered. This demonstrated the efficacy of the therapeutic approach and the ongoing healing of the fistula.

Long-Term Prognosis

Given the fistula's full healing and the lack of problems following therapy, the patient's long-term prognosis seems promising. To maintain the patient's health and assure the early identification of any potential recurrence, the nature of the ailment calls for constant monitoring and routine checkups. It is anticipated that the patient would have a regular, healthy life with the right treatment and supervision.

DISCUSSION

The treatment of complex anal fistulas is a major challenge for surgeons because the complexity of fistulae travel can lead to difficult surgery, a high rate of postoperative recurrence, and a tendency to impair anal function. If anal incontinence occurs, it will seriously affect the quality of life of the patient, who may even suffer from depression and social isolation. There are 3 basic principles for the surgical treatment of anal fistulae, including accurate identification of the fistula and fistulae internal opening, removal of the fistula and preservation of anal sphincter function. Therefore, preoperative diagnosis and anatomic identification of the fistula is particularly important. Therefore, preoperative diagnosis and anatomic identification of anal fistulas are particularly important. The procedure requires a high degree of preoperative anatomical familiarity. If the location of the fistula is incorrectly estimated, not only will the main lesion remain, leading to postoperative recurrence, but there is also the possibility of irreversible damage to the anal sphincter caused by the enlarged incision and even the occurrence of anal incontinence. The preoperative proctoscopic examination of the fistula gives us a clearer visualization of fistula anatomy in relation to the sphincter complex, and helps us to choose the most appropriate type of surgery for the patient, reducing tissue damage and bleeding, while allowing us to shorten the operation time.

To maintain the patient's health and assure the early identification of any potential recurrence, the nature of the ailment calls for constant monitoring and routine checkups. It is anticipated that the patient would have a regular, healthy life with the right treatment and supervision (Figure 6).

CONCLUSION

In this case study, a complicated transphincteric anal fistula in a 44 year female is treated successfully. The instance emphasises the importance of a thorough diagnostic evaluation, individualised treatment programmes, and frequent follow-ups in effectively managing such illnesses. It makes a substantial contribution to the body of knowledge in the field of proctologic procedures and provides insightful advice for handling cases like these in the future. Studies looking at patients' quality of life and long-term outcomes can also give a thorough picture of the illness and its effects.

Hereby i am attaching the video glimpse of surgery proceeded:
https://drive.google.com/file/d/1xw_9nimM50n-NcL4nOSSGhmQjAOEB19u/view?usp=drivesdk

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