

Management of Anal Fistulas: Experience of the General Surgery Department at the Avicenne Military Hospital of Marrakech

Mohammed Es-Said Ramraoui^{1*}, M. Ramraoui¹, F. Mouhafid¹, B. Jouabri¹, H. Ajram¹, A. Ghanmi¹, MJ. Fassi fihri¹, H. Baba¹, M. Lahkim¹, A. Khader¹, R. Barni¹

¹Department of General Surgery, Avicenne Military Hospital, Marrakech, Morocco

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*Corresponding author: Mohammed Es-Said Ramraoui

Department of General Surgery, Avicenne Military Hospital, Marrakech, Morocco

Abstract

Original Research Article

Introduction: Anal fistula is a common condition of the anal canal, often resulting from cryptoglandular infection of the Hermann and Desfosses glands. Although benign, it significantly affects quality of life and poses therapeutic challenges due to recurrence and continence disorders. **Objective:** To describe the management of anal fistulas in the General Surgery Department of the Avicenne Military Hospital of Marrakech, highlighting epidemiological, clinical, and therapeutic aspects as well as surgical outcomes. **Methods:** A retrospective descriptive study was conducted on 109 patients operated on for anal fistula between January 2021 and December 2024. Data were collected from hospitalization records and operative reports. **Results:** A clear male predominance was observed (86% men, 14% women; sex ratio = 6.7). The mean age was 45.5 years (range 15–69), with the most affected group being 36–45 years (25.9%). Previous anal surgery was common, including fistulectomy in 23% and abscess drainage in 12.8%. The main symptoms were perianal discharge (86.2%) and anal pain (66%). Surgical management was dominated by fistulectomy with slow sphincterotomy using an elastic seton (69%), followed by abscess drainage (14%). Early postoperative complications included acute urinary retention (20%) and transient gas incontinence (21%). Long-term outcomes showed 20% recurrence and 15% delayed healing. **Conclusion:** Surgical treatment remains the cornerstone of anal fistula management. The gradual sphincterotomy technique using an elastic seton provides effective healing while preserving continence and minimizing recurrence. Careful exploration and close postoperative follow-up are essential for optimal outcomes.

Keywords: Anal fistula, Fistulectomy, Slow sphincterotomy, Elastic seton, Proctologic surgery.

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INTRODUCTION

Anal fistula is a chronic infectious condition of the anal canal, resulting from the suppurative of the Hermann and Desfosses glands. It represents the chronic stage of an anal abscess, both conditions being part of the same cryptoglandular process. Although benign, anal fistulas markedly impair social and professional life due to pain, discharge, and recurrence risk.

Diagnosis is primarily clinical, aided by endoanal ultrasound or MRI for complex cases. Treatment is surgical, aiming at drainage of the infection, eradication of the fistulous tract, and preservation of anal continence. The purpose of this study was to report the experience of the General Surgery Department of the Avicenne Military Hospital of Marrakech in the surgical management of anal fistulas, focusing on epidemiological, clinical, therapeutic, and outcome data.

PATIENTS AND METHODS

A retrospective descriptive study was conducted at the Department of General Surgery, Avicenne Military Hospital of Marrakech, over a four-year period (January 2021– December 2024).

Study population: All patients operated on for anal fistula during the study period were included. Incomplete or missing files were excluded.

Data collection: Information was obtained from hospitalization files, operative registers, and histopathology reports. Data included demographics, clinical presentation, imaging, surgical procedure, and postoperative outcomes.

Ethical considerations: Patient anonymity and confidentiality were maintained.

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RESULTS

A total of 109 patients were included.

Sex: 94 men (86%) and 15 women (14%), sex ratio 6.7.

Age: Mean 45.5 years (range 15–69), most affected age group 36–45 years (25.9%).

Medical and surgical history:

Diabetes (3.7%), hypertension (1.8%), tuberculosis (0.9%), Behçet's disease (0.9%). Proctologic history: fistulectomy (23%), abscess drainage (12.8%), fissurectomy (0.9%). Smoking: 23%.

Clinical findings:

Mean consultation delay 1.17 years. Main symptoms: perianal discharge (86.2%), anal pain (66%), pruritus (53.2%), swelling (28.4%), bowel disorders (36.7%). Onset gradual in 80.7%. Infectious syndrome in 11%.

Paraclinical assessment: MRI performed in 12 patients (11.3%), showing 6 complex horseshoe fistulas. Fistulography in one case. No endoanal ultrasound or serology.

Operative data: Spinal anesthesia in all cases. Fistula types: Simple (91%) trans-sphincteric low (40%), high (24%), intersphincteric (11%), supra-sphincteric (1.8%). Complex (9%) horseshoe (5.5%), Y-shaped (2.7%), double (0.9%).

Surgical techniques: Fistulectomy with elastic seton 75 cases (69%), one-stage fistulotomy 12 cases (11%), abscess drainage 16 cases (14%), seton for Crohn's 1, fistulectomy + fissurectomy 1, fistulectomy + condyloma resection 4. Mean hospital stay 2.5 days.

Postoperative outcomes: Short-term (<1 month): headache 10%, urinary retention 20%, transient gas incontinence 21%. Long-term (2–6 months): recurrence 20%, delayed healing 15%, persistent pain 5%, no anal pruritus or fecal incontinence.

Histopathology: 93 cases analyzed—non-specific 90, giant cell reaction 2, granulomatous inflammation 1.

DISCUSSION

Our findings confirm a marked male predominance and a peak incidence in middle age, consistent with the literature. Common risk factors included smoking and a history of perianal abscess.

The predominance of trans-sphincteric fistulas (64%) aligns with the Parks classification. The

fistulectomy with slow sphincterotomy using an elastic seton was the main procedure in our series, allowing progressive division of sphincter fibers while preserving continence. Rojanasakul *et al.*, (2009) reported 95% healing with less than 5% incontinence.

Our recurrence rate (20%) is consistent with international data (15–25%, Hanley *et al.*, 2018). Early complications were minor and self-limited. Absence of long-term incontinence supports the reliability of this technique.

MRI remains crucial for complex tracts, though its limited use in our context reflects resource constraints. Standardized surgical techniques and better postoperative follow-up could further improve outcomes.

CONCLUSION

Anal fistula is a frequent and potentially recurrent anorectal condition. Surgical management remains the gold standard, aiming for complete healing and preservation of continence.

Our experience confirms that fistulectomy with slow sphincterotomy using an elastic seton is a safe, effective, and reproducible technique suitable for most cases. Accurate diagnosis, meticulous surgical technique, and regular follow-up are essential to achieve optimal results.

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