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Obstetric Rectovaginal Fistulas: A 10-Year Retrospective Study at HMA Marrakech

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Abstract

Background: Rectovaginal fistulas (RVFs) are abnormal, epithelialized communications between the posterior vaginal wall and the anterior rectal wall, most commonly resulting from obstetric trauma. They can lead to significant physical and psychological morbidity. ***Objective:*** To describe the clinical presentation, management strategies, outcomes, and preventive measures in patients with obstetric RVFs treated at HMA Hospital, Marrakech. ***Methods:*** A retrospective study of 10 patients with obstetric RVFs managed over a one-year period (November 2023 – November 2024). Data collected included patient demographics, obstetric history, clinical features, diagnostic findings, surgical techniques, and postoperative outcomes. All patients underwent transperineal repair using Musset's technique, with colostomy performed when indicated. ***Results:*** Obstetric RVFs accounted for 66.6% of all RVFs operated on in the department. Mean patient age was 29 years; six patients were primiparous. Deliveries occurred at home (3), in maternity centers (3), and hospitals (4). Surgical repair was performed in all patients using Musset's technique; nine patients received a left iliac colostomy. Postoperative recovery was uneventful in nine patients. One recurrence occurred in a patient who initially refused colostomy; she was successfully reoperated. ***Conclusion:*** Obstetric RVFs predominantly affect the lower two-thirds of the vagina. Surgical repair is highly effective, preventing major complications and facilitating patient reintegration. Prevention through patient education, prenatal care, and improved obstetric services remains essential.

Keywords: Rectovaginal fistula, obstetric trauma, Musset's technique, surgical repair, prevention, obstetric complications.

INTRODUCTION

Rectovaginal fistula (RVF) is defined as a pathological, epithelialized communication between the posterior vaginal wall and the anterior rectal wall, traversing the rectovaginal septum. It typically involves the posterior wall of the middle and lower vaginal segments and the subperitoneal posterior rectal wall [1]. RVFs are most commonly post-obstetric, although they can also arise from Crohn's disease or radiation therapy. This study reports 10 cases of rectovaginal fistulas managed at the Department of General Surgery, HMA Marrakech, over a 10-year period (November 1, 2014 – November 1, 2024). We aim to analyze the circumstances of fistula occurrence, management strategies, clinical outcomes, and emphasize preventive measures.

MATERIALS AND METHODS

A retrospective review was conducted on 10 cases of obstetric rectovaginal fistulas managed at the Department of General Surgery, HMA Marrakech, over a one-year period (November 1, 2023 – November 1, 2024). Patient demographics, obstetric history, clinical presentation, surgical management, and postoperative outcomes were recorded and analyzed.

RESULTS

Obstetric RVFs accounted for 66.6% of all rectovaginal fistulas operated in our department. The mean patient age was 29 years; six were primiparous, and four were multiparous. Three deliveries occurred at home, three in maternity clinics, and four in hospital settings. Three patients had spontaneous vaginal deliveries, four underwent episiotomy, two had dystocic deliveries, and one delivered via vacuum extraction.

Four cases of perineal tears were reported. The mean delay to consultation was 18 months. The primary presenting symptom was passage of fecal matter through the vagina. Combined rectal and vaginal examinations allowed identification of fistula openings and tract. All patients underwent transperineal surgical repair using Musset's technique. A left iliac colostomy was performed in nine patients at the end of the procedure. Postoperative recovery was uneventful in nine cases, with restoration of digestive continuity after three months. One patient experienced recurrence after initially refusing temporary colostomy; she was reoperated three months later using Musset's technique with colostomy, resulting in favorable outcomes.

DISCUSSION

Globally, an estimated 2 million women live with fistulas, according to the World Health Organization. Systematic reviews report an incidence ranging from 0 to 4.1 per 1,000 deliveries and prevalence between 0 and 81 per 100 women [2]. Sub-Saharan Africa and South Asia are the most affected regions [3], while obstetric fistulas are rare in industrialized countries [4]. Mean patient age varies between 25 and 38 years across studies [5–9]. Primiparity is consistently identified as a major risk factor [5,7,10,11], with additional risks including prolonged labor [6,12], home or maternity clinic deliveries [13,14], instrumental deliveries [13], and perineal tears [15–17]. Mean consultation delays ranged from 5 to 11 months in previous studies [5,9]. Diagnosis is straightforward when fecal matter or gas passes through the vagina. More subtle presentations include chronic or recurrent vaginitis, purulent vaginal discharge, recurrent urinary infections, or symptoms masked by anal incontinence [18]. Clinical examination (vaginal, rectal, and speculum assessment) confirms the diagnosis and informs surgical planning, including fistula size, location relative to the anal sphincter, and associated lesions [19–21].

Various surgical techniques are available for RVF repair. Simple fistulas may be managed with excision of the tract and closure of vaginal and rectal openings [7]. Musset's technique, involving longitudinal perineoproctotomy with immediate or delayed repair, remains the reference method [5,6,22]. Alternative approaches include rectal advancement flaps (without sphincter involvement) [23–25] and tissue interposition procedures (26,27). Low post-obstetric RVFs generally have an excellent prognosis, with reported healing rates of 90–100% [9,15,22,28]. Nonetheless, prevention through patient education, adequate pregnancy follow-up, and quality obstetric care remains paramount [29–31].

CONCLUSION

Post-obstetric rectovaginal fistulas are typically simple, involving the lower two-thirds of the vagina. Their incidence correlates with socioeconomic development and literacy levels. Surgical repair effectively prevents major psychological sequelae and facilitates social reintegration. However, prevention remains the cornerstone of management.

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