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# **Surgical Treatment of Anal Incontinence after Cure of a Post-Partum Recto Vaginal Fistula: A Case Report from the "A" Surgery Department of the IBN Sina Hospital in Rabat, Morocco**

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## **Authors' contributions**

*This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.*

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**Case Report**

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## ABSTRACT

Anal incontinence is defined as the repeated involuntary loss of rectal contents (solid or liquid faeces, gas or mucus and phlegm) in patients over the age of 3 years who have been incontinent for at least 1 month. In women, the most common cause is obstetric trauma. Diagnosis is based on endoanal ultrasound and anorectal manometry.

We report the case of a 48-year-old woman who underwent surgery for a recurrent rectovaginal fistula and developed postoperative anal incontinence. The diagnosis was made by endorectal manometry. We performed anterior sphincterography, which was enhanced by bringing the anal sphincter muscles closer together, with a simple post-operative follow-up. Despite the fact that this condition is considered shameful, it is still necessary to consult a specialist in order to obtain the best possible treatment and a better quality of life.

*Keywords: Anal incontinence; postpartum; a taboo subject; manometry; sphincterorrhaphy.*

## 1. INTRODUCTION

Anal incontinence is defined as the inability to voluntarily delay the passage of bowel contents through the anus until it is possible and/or socially acceptable to do so [1].

One study shows that it leads to isolation, loss of self-esteem, loss of confidence and depression [2].

When gas emissions are frequent, isolated incontinence affects patients' quality of life and requires treatment equivalent to that for total faecal incontinence [3,4].

The main causes are anatomical defects of the sphincter, obstetric and pelvic trauma, and iatrogenic lesions (lateral sphincterotomy, fistulotomy, haemorrhoidectomy and anal dilatation manoeuvres).

Diagnosis is based on endoanal ultrasound and anorectal manometry.

Four surgical techniques are used in most patients after medical and rehabilitation methods have failed: sphincterorrhaphy, sacral root neuromodulation and the two replacement techniques, artificial sphincter and dynamised graciloplasty. Direct sphincter repair is the most commonly used technique in the surgical treatment of anal incontinence caused by sphincter injury [5].

## 2. CASE PRESENTATION

We report the case of a 48-year-old patient who underwent surgery in 2017 for a recurrent postpartum recto-vaginal fistula and difficulty containing gas, and who presented with postoperative anal incontinence with a Jorge and Wexner score of 11.

Her history dates back 6 years, when she presented a recto-vaginal fistula after a dystocia at her 4th delivery, which had been treated twice. After 3 months, the patient noticed incontinence with gas, then with stools, which she was



**Fig. 1. Transverse incision of the perineum (ano-vulvar space)**



**Fig. 1. Identification of both ends of the levator ani muscles**



**Figure 3. Final aspect of the surgical procedure**

embarrassed to talk about and didn't consult a doctor for several months. Finally, with the help of her husband, she decided to seek treatment.

Physical examination revealed an anal gap and a reduction in the anovaginal space. On rectal examination, particularly endorectal manometry, there was a loss of sphincter tone both at rest and when the sphincter was contracted.

A standard biological work-up (CBC, haemostasis and ionogram) was performed and was almost normal.

The patient was scheduled for reconstructive surgery and underwent anterior sphincterography, which was enhanced by bringing the anal lifting muscles closer together.

### **3. DISCUSSION**

Several epidemiological studies have shown that the prevalence of anal incontinence is high.

A review of the literature has shown that the prevalence rate of anal incontinence varies from 3% to 17% in different countries, with large variations mainly due to the definition of incontinence (which may or may not exclude simple gas incontinence), the type of population studied and the method of data collection [6].

A French regional study published in 1992 by Ph. Denis et al [7] found that in a sample of 1100 people aged over 45, 11% suffered from faecal and/or gas incontinence (18% had at least one episode of faecal incontinence per week). This rate rose to 33% when the same study was

carried out on 10,157 elderly people living in retirement or nursing homes. Our patient, aged 48, fell into this age group and presented with anal incontinence. However, we believe that the incidence of anal incontinence in the population is underestimated because it is considered a taboo subject by most patients who develop it.

The prevalence of postpartum anal incontinence varied between studies from 4% (primiparous) to 39% (multiparous) at 6 weeks postpartum, while faecal incontinence could reach 8-12% at 6 years postpartum [8]. The original St Mark's Hospital study [9] prospectively analysed a cohort of 79 primiparous and 48 multiparous women who had given birth vaginally. These data corroborate our case report of a multiparous woman in her fourth parity of four pregnancies with a dystocia vaginal delivery resulting in rectovaginal fistula and subsequent anal incontinence.

Primiparous and multiparous women developed new incontinence in 13 and 6% of cases respectively. The first birth is considered to be the most traumatic for the perineum [10]. Contrary to what these authors claim, our patient was in her fourth delivery, which was the most traumatic because of the presence of a large fetus, causing a recto-vaginal fistula, which, due to its repair (recurrence), was complicated by anal incontinence, the sphincters having already been weakened by this delivery, with difficulty in containing gas. The most commonly used questionnaires and scores in studies to assess anal incontinence are: the Wexner score [11], the Pescatori score [12], the Saint Mark's Hospital score [13], the Rockwood score [14] and the Osterberg score [15].

In our study, we used the Wexner score [11] to assess anal incontinence using the simple questions proposed by Villot A. et al [8]: "Have you had at least one episode of gas leakage or stool loss in the last 4 weeks? The majority of authors considered anal incontinence to be present if an episode was reported in the previous 4 weeks.

#### 4. CONCLUSION

Anal incontinence remains a taboo subject and is considered degrading.

In women, the most common cause is sphincter injury due to obstetric trauma, in which case direct sphincter repair is the most commonly used technique.

Whatever the cause, it is always advisable to discuss the problem with a specialist so that the best possible treatment can be given to improve quality of life.

#### ETHICAL APPROVAL

As per international standard or university standard written ethical approval has been collected and preserved by the author(s).

#### CONSENT

As per international standard or university standard, patient(s) written consent has been collected and preserved by the author(s).

#### COMPETING INTERESTS

Authors have declared that no competing interests exist.

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