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Case Report

Iatrogenic Vaginal Diaphragm: A Case Report

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Abstract

Background: Few articles in the literature describe iatrogenic vaginal strictures. May be of radiation origin following pelvic radiotherapy or of caustic origin in sub-Saharan Africa with the advent of traditional medicine, it can also be a complication of vaginal surgery. Irrespective of the etiology, vaginal stenosis can pose serious therapeutic concerns including delicate surgical management with variable results.

Case Report: We hereby report the unusual case of a 23-year-old patient, gravida 1 para 1 with one live child. The vaginal delivery was complicated by postpartum hemorrhage due to deep anterior cervical lesions that were sutured during valve examination. She had no other pathological history. The examination found a non-individualized cervix with no anterior or posterior or lateral vaginal sac; on the other hand, a fibrotic plate closing the upper part of the vagina and the presence of a punctiform orifice of 5 mm of the anterior wall of the vagina were noticed. She was invited to our structure to undergo surgery. The operation consisted on dissection of the vaginal septum to separate it into 2 parts: upper and lower. The suture of the banks was then realized. Surgical results were optimal with no complications of rectal or bladder injury.

Discussion: Iatrogenic vaginal lesions modify the vaginal canal as well in its length as its width and may lead to serious complications. Its management vary from simple manual lysis of adhesions to an extreme surgical revision including the use of grafts. Authors have evaluated four different surgical techniques: Z-plasty, incision of vaginal ring or ridge, vaginal advancement flap and finally the free skin graft. They concluded that the choice of the best approach depends on the site and extent of the vaginal constriction, the state of the surrounding tissue, and the overall length and calibre of the vagina.

Keywords: Congenital vaginal atresia; Hematometrocolpos; Vaginoplasty

Background

Few articles in the literature describe iatrogenic vaginal strictures. May be of radiation origin following pelvic radiotherapy or of caustic origin in sub-Saharan Africa with the advent of traditional medicine, it can also be a complication of vaginal surgery. Irrespective of the etiology, vaginal stenosis can pose serious therapeutic concerns including delicate surgical management with variable results. The exchange of experience through case reports takes then all its interest.

Case Presentation

We hereby report the unusual case of a 23-year-old patient, gravida 1 para 1 with one live child. The vaginal delivery was complicated by postpartum hemorrhage due to deep anterior cervical lesions that were sutured during valve examination. She had no other pathological history. She consulted in our structure one year after delivery for dyspareunia and oligomenorrhea with no other associated sign. The speculum examination found a non-individualized cervix with no anterior or posterior or lateral vaginal sac; on the other hand, a fibrotic plate closing the upper part of the vagina and the presence of a punctiform orifice of 5 mm of the anterior wall of the vagina were noticed (Figure 1). The

internal examination was blocked 5 cm from the vaginal opening by an obstacle. The rest of the examination was normal.

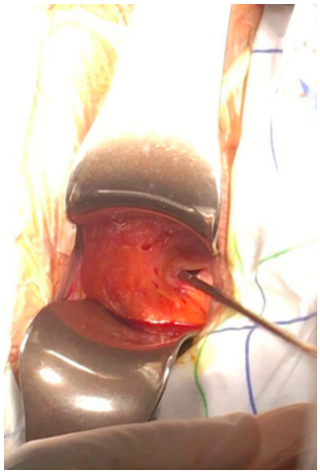

Figure 1: Preoperative aspect of the constricted vagina with a 5 mm orifice on the lateral left part of the upper vaginal wall.

Pelvic ultrasound and preoperative blood tests were normal. She was then invited to our structure to undergo surgery. Spinal anesthesia was chosen for the comfort of both the patient and the surgeon. Surgical procedure began with the introduction of the hysterometer to confirm the emptiness of the cavity upstream, followed by a dissection of the vaginal septum to separate it into 2 parts: upper and lower. The suture of the banks was then realized with vicryl 1. The suture of the anterior bank was delicate since carried out flush with the bladder (Figures 2 and 3). The operative time was 113 minutes and blood loss was minimal. Surgical results were optimal with no complications of rectal or bladder injury. Follow-up at 2 weeks, 3 months and 1 year revealed no recurrence or complication.

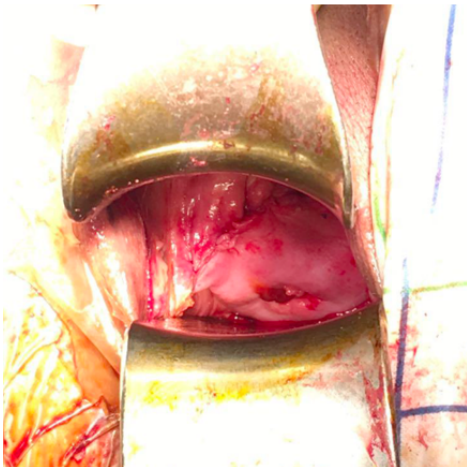

Figure 2: Postoperative aspect of the vagina showing the fixation of the anterior vaginal wall.

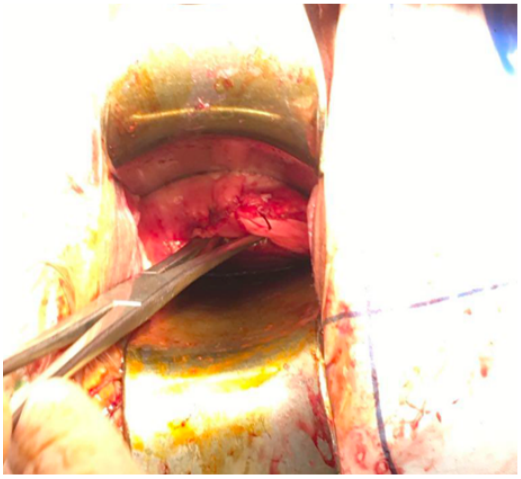

Figure 3: Postoperative aspect showing the restructured vaginal conduct.

Discussion

Iatrogenic vaginal lesions are of variable origin, whether surgical, radiation or caustic. They modify the vaginal canal as well in its length as its width and may lead to serious complications. For instance, Verma et al. reported the case of hematocolpos secondary to acquired vaginal scarring after radiation therapy for colorectal carcinoma [1]. But they can also remain asymptomatic because of the existence of a sluice, which will allow the flow of menstruation like in our case. In the retrospective study by Séni et al., vaginal retraction accounted for 66% of the reasons for consultation followed by secondary amenorrhea (14.3%) and pelvic pain (9.5%) [2]. However, the author notes that the retrospective nature of this study did not allow to collect the information on the sexual impact but the nature of the lesions has no doubt about the limitation of the sexual activities. Arowojolu et al. place dyspareunia as the leading cause of consultation in his study [3].

The diagnosis is easy thanks to speculum examination and internal examination but it represents a crucial stage of treatment, as this is to identify anatomical landmarks that will guide the selection of the particular corrective procedure. In fact, management of iatrogenic vaginal lesions vary from simple manual lysis of adhesions to an extreme surgical revision including the use of grafts. An 8-year prospective study evaluated four different surgical techniques and concluded that the choice of the best approach depends on the site and extent of the vaginal constriction, the state of the surrounding tissue, and the overall length and calibre of the vagina [4].

According to the authors' recommendations: Z-plasty should be employed to treat patients with well-circumscribed constriction rings and stenotic vaginal canals to increase vaginal diameter; incision of vaginal ring or ridge was selected if extensive scarring

prevented the use of a Z-plasty or if concern for vaginal length due to amount of scarring or location of the stricture excluded the use of an advancement flap; vaginal advancement flap was chosen if the stricture was more distal, as tissue mobilization was less likely to compromise vaginal calibre; finally the free skin graft was limited to patients in whom very extensive scarring and/or previously compromised vaginal length and caliber prevented the use of one of the simpler operations already described.

In this study, Vassallo et al. described their results with 20 patients with varying types of constriction followed to 17 months [4]. They noted an 85% cure rate with 75% of the women reporting complete resolution of their primary symptoms of dyspareunia or apareunia. After surgery Amankwah et al. recommend dilatation or sexual intercourse with or without the nightly use of vaginal oestrogen to optimize the healing [5]. Gebhart et al. recommend a postoperative examination within the first 2 months to identify adhesions and simple contractions that can often be released in the office with a lubricated examining finger [6].

Conclusions

Acquired stenosis of the vagina have multiple origins and are more frequent than it seems, constituting a public health problem. Health education and the establishment of expert centers with exchanges of experiences thanks to clinical cases should be able to improve outcomes.

Declarations

Guarantor of Submission

The corresponding author is the guarantor of submission.

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Availability of Data and Materials

Supporting material is available if further analysis is needed.

Competing Interests

The authors declare that they have no competing interests.

Consent for Publication

Written informed consent was obtained from the patient for publication of this case report and any accompanying images. A copy of the written consent is available for review by the Editor-in-Chief of this journal.

Ethics Approval and Consent to Participate

Ethics approval has been obtained to proceed with the current study. Written informed consent was obtained from the patient for participation in this publication.

References

1. Verma SK, Baltarowich OH, Lev-Toaff AS, Mitchell DG, Verma M, et al. (2009) Hematocolpos Secondary to Acquired Vaginal Scarring After Radiation Therapy for Colorectal Carcinoma. Journal of Ultrasound in Medicine 28: 949-953.
2. Séni K, Horo AG, Koffi A, Aka KE, Fomba M, et al. (2016) Rétrécissements du vagin d'origine caustique. À propos de 21 plasties. Gynécologie Obstétrique & Fertilité 44: 141-145.
3. Arowojolu AO, Okunlola MA, Adekunle AO, Ilesanmi AO (2001) Three decades of acquired gynaetresia in Ibadan. Clincal presentation and management. Obstet Gynaecol 21: 375-378.
4. Vassallo BJ and Karram MM (2003) Management of iatrogenic vaginal constriction. Obstet Gynecol 101: 512-520.
5. Amankwah YA, Haefner HK, Brincat CA (2010) Management of Vulvovaginal Strictures/Shortened Vagina. Clinical Obstetrics and Gynecology 53: 125-133.
6. Gebhart JB and Schmitt JJ (2016) Surgical Management of the Constricted or Obliterated Vagina. Obstetrics & Gynecology 128: 284-291.