



## Case Study

### Coital laceration resulting in recto-vaginal fistula: A case report

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#### ABSTRACT

#### Keywords

Coital laceration, rectovaginal fistula

Although coitus is quiet pleasurable, it may sometimes be risky especially in nulliparous woman with little or no foreplay. Most cases of RVF are caused by obstetric injuries, surgical complications, infections and may follow normal consensual coital acts. In present case of coital injury that resulted in rectovaginal fistula in a twenty four year old woman. She sustained the injury following her first sexual relationship. She noticed that she was passing watery stool through the vagina five days after the intercourse. She reported to two general and several private hospitals where she was reassured. The problem of leakage of faeces per vagina persisted for over four years and only sought for further help when the husband noticed a formed stool on his genital following intercourse. She was managed successfully. Prompt intervention and thorough examination of the woman is required when clinicians are faced with coital injuries to exclude rectovaginal fistulae.

#### Introduction

Rectovaginal fistulas are abnormal epithelial-lined connections between the rectum and vagina (Teresa and Jaime, 2010). They can be quite worrying to both the patient and the surgeon due to their irritating and embarrassing symptoms (Onsrud *et al.*, 2008). There are several causes of rectovaginal fistula (RVF) (Teresa and Jaime, 2010).

Perineal lacerations during childbirth, especially those due to episiotomy, predispose patients to RVFs. Perineal lacerations are more common in primigravidas and precipitous births, or following instrumental vaginal deliveries.

Failure to recognize and correctly repair perineal lacerations, or secondary infection of perineal lacerations, further increases the chance of RVF. Prolonged labor with pressure on the rectovaginal septum can produce necrosis and result in RVF. Traumatic injury (penetrating or blunt) and forceful coitus also have resulted in RVF (Omo-Aghoja *et al.*, 2009). Although trauma at sexual intercourse remains an everyday occurrence, most are minor and manifest as self-limiting injuries with minimal vaginal bleeding, requiring no medical attention (Omo-Aghoja *et al.*, 2009).

Nulliparity, low levels of education, non-

consensual and premarital sex with little or no foreplay were strongly correlated with the risk of coital trauma (Sally *et al.*, 2001). Women with significant coital injuries may present late. This delay may be due to fear of stigmatisation or spousal rejection.

## Case Report

A 24-year old multiparous woman, with low educational level presented to the gynaecology clinic with complaint of leakage of stool through the vagina for four years and eight months. Her last child birth was four months prior to presentation. The problem started five days after her marriage, when she realised that she was passing watery stool through the vagina. Her first sexual relationship was associated with serious pain and vaginal bleeding which was profuse and associated with dizziness. It was however celebrated by her relatives as a sign of virginity and was managed with hot water, herbal medications and high protein diet. She went to several hospitals without improvement in her symptoms and decided to resort to traditional medications. The problem of faeces leakage persisted throughout her three deliveries and only reported to the hospital four months after her third delivery when they noticed a formed stool on the husband penile organ.

General examination was unremarkable. Her pulse rate was 80 beats per minute and blood pressure was 110/70 mmHg. The chest and abdominal examination were normal. Pelvic examination revealed normal external genitalia with widened introitus and evidence of anterior uterine wall prolapsed. A rectovaginal examination confirms the presence of a dimple on the posterior vaginal wall about 2 cm away from the perineal body. Speculum examination confirms the dimples which allow passage of size 3mm Hager's dilator (Figure 1). The

results of full blood count electrolytes and urea were normal. A diagnosis of low/small size (<0.5cm in diameter) recto vaginal fistula was made. She was counseled and consented for repair.

She was placed on low residue diet and oral neomycin 500 mg 6 hourly for five days. She was operated under spinal Anaesthesia. She had transvaginal repair in which the vaginal mucosa was circumferentially elevated, exposing the fistula. Two concentric purse string sutures were used to invert the fistula into the rectal lumen using vicryl suture no 2/0. The vaginal mucosa was then re-approximated.

The vagina was packed with three pieces of gauze and intra cervical catheter was inserted. She was continued on intravenous fluid 1 litre 8 hourly, intravenous antibiotics and analgesics and was also given a stool softener, and was subsequently transferred to the ward

She was reviewed six hours after the surgery and was found to be fully ambulant. She had no fresh complaints and her vital signs were stable. The vaginal pack and intra cervical catheter were removed. She was changed to oral medications and continued on low residue diet, liberal fluid intake and stool softeners. She continues to open her bowels normally with no evidence of faecal incontinence, and discharged on the fifth day. She was reviewed six weeks later and with no fresh complaints before finally discharged from the clinic.

## Discussion

Rectal injuries following intercourse are quiet rare (Ijaiya *et al.*, 2009; Hembah-Hilekaan and Pam, 2011), unlike coital injuries affecting the vagina which are more frequent. The true incidence of coital injury

is difficult to ascertain especially because of non-disclosure of the true nature of the injury arising from fear of stigmatisation (Umoru *et al.*, 2003). It was reported to be 0.34% in Maiduguri (Omo-Aghoja *et al.*, 2009) and 0.7/100 of gynaecological emergencies in Abkara and Calabar (Abasiattai *et al.*, 2005; Kriplani *et al.*, 2007). Dakar, Senegal and USA reported 32 and 30 cases of coital Vaginal injuries per year, respectively (Michael *et al.*, 2003; Jana *et al.*, 2008).

Non obstetric vaginal lacerations differ significantly from lacerations sustained during childbirth and are generally classified into two types. The first type is relatively minor and is associated with normal sexual intercourse or the first experience of sexual debut. These lacerations usually resolve with minimal or no treatment. The second type of laceration is deeper and more extensive, often resulting in copious vaginal bleeding. This condition can be life threatening and requires immediate intervention (Ahmed *et al.*, 2006).

Various presentations of coital injuries require careful evaluation, correct diagnosis and management for a successful outcome with minimal morbidity (Rahman *et al.*, 2003). A quick and efficient diagnosis will require a high index of suspicion by all attending physicians followed by prompt and good physical examination including examination under anaesthesia (EUA) under adequate lightening (Umoru *et al.*, 2003).

Other sites of coital injuries include right and left fornices and lower vagina with occasional involvement of the posterior vaginal wall. The common predisposing factors to coital injuries include frenzy coitus, first sexual intercourse as in this case, peno-vaginal disproportion seen premenarchially and after menopause, use of aphrodisiacs, puerperium and inadequate

emotional and physical preparation of women for sexual intercourse (Ijaiya *et al.*, 2009; Hembah-Hilekaan and Pam, 2011).

The transvaginal approach of the repairing rectovaginal fistulas was used in this case because the results are generally better. Rahman *et al.* (2003) reported 39 patients undergoing transvaginal repair for low rectovaginal fistulas with 100% success rate using this approach (Nisa, 2013). Similar study reported a success rate of 88% in patients with no previous repair, 85% success rate in those with one previous repair and 55% success rate in those with two previous repairs (Uzoigwe and Orazulike, 2008).

Bleeding can be profuse, leading to hemorrhagic shock, and these injuries may require transfusion of blood products and surgical repair in some cases. This patient did not suffer any of these complications. Other complications may include hemoperitoneum, pneumoperitoneum and retroperitoneal hematoma even in the absence of complete vaginal perforation (Jeng and Wang, 2007). Coital injury causing severe vaginal laceration is not uncommon during first coitus. However, hemorrhagic shock during consensual sexual intercourse is quite rare (Eke, 2002). Major risk factors included peno-vaginal disproportion, excessive force at coitus, urethral coitus, fellatio and anal intercourse. Urethral injuries were the commonest complications. The treatment includes cold compress and anti-inflammatory agents in contusions, repairs of lacerations, closure of fistulae and urethral and vaginal reconstruction. The results of treatment were essentially good. Recurrent penile fractures were reported (Toshiyasu *et al.*, 2011; Yu-Sheng Cheng *et al.*, 2006).

## Conclusion

Rectovaginal fistula is a rare complication of post coital injury. An early diagnosis requires a high index of suspicion followed by prompt and good physical examination including examination under anaesthesia (EUA) to exclude the presence of rectovaginal fistula.

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