Scientific Research Publishing

Case Reports in Clinical Medicine, 2024, 13, 269-274
https://www.scirp.org/journal/crcm
ISSN Online: 2325-7083
ISSN Print: 2325-7075

Sex Sent Me to the ER: Case Series on Postcoital Laceration

Zubaida Abubakar-Aliyu, Peter Thabet, Eziaha Ogbuagu

Department of Obstetrics and Gynaecology, Homerton Healthcare NHS Foundation Trust, London, England
Email: zubinabu@yahoo.co.uk

How to cite this paper: Abubakar-Aliyu, Z., Thabet, P. and Ogbuagu, E. (2024) Sex Sent Me to the ER: Case Series on Postcoital Laceration. *Case Reports in Clinical Medicine*, **13**, 269-274.
https://doi.org/10.4236/crcm.2024.138031

Received: May 11, 2024
Accepted: August 9, 2024
Published: August 12, 2024

Abstract

Background: Sexual intercourse may be associated with serious complications and morbidities which may not be commonly experienced in clinical practice. One such complication is severe vaginal bleeding. **Aim:** To report a case series of postcoital vaginal lacerations in three women of various age groups with no prior surgical history who complained of acute onset, severe vaginal pain and bleeding after consensual intercourse. **Case presentation:** This case series describes the clinical features and management of women who required an examination under anaesthesia and surgical repair of vaginal injuries following consensual intercourse. The Post-operative recovery period was uneventful. **Conclusion:** A postcoital laceration is a rare emergency that may be complicated by excessive blood loss, which is increased if there is a delay in seeking care and or diagnosis. Prompt treatment should be instituted in such cases to minimise complications.

Keywords

Coitus, Vaginal Laceration, Haemorrhage

1. Introduction

Vaginal lacerations during penile intercourse are not uncommon and are usually self-resolving [1]. However, vaginal perforation from intercourse is a rare entity, accounting for less than 1% of non-obstetric genital tract injuries [2] [3]. During coitus, the posterior vaginal fornix is most susceptible to direct trauma as the upper vagina lengthens and the lower vagina contracts, which causes tension on the endopelvic fascia in the posterior fornix, thus weakening that layer [4]. Previously described risk factors for vaginal injuries include nonconsensual intercourse, first coitus or coitus after a long period of abstinence, insertion of foreign objects, fisting during sexual activity, congenital vaginal abnormalities, coital

positions that allow for deep penetration, and coitus in association with drug and alcohol use [5].

The complications could be minimal or self-limiting; however, they may sometimes result in severe morbidities and could even be life-threatening. Some uncommon complications from coital laceration include peritonitis, bowel evisceration, hemoperitoneum, rectovaginal fistula and hypovolaemic shock [6].

We present three cases of postcoital lacerations that required surgical repair in the theatre. None of the cases involved a laparotomy, laparoscopy, colpotomy or visceral damage.

2. Case

2.1. Case 1

A 39 yo, P1-1 Previous term delivery via caesarean section. She presented to the emergency department with heavy vaginal bleeding for an hour duration. She described the bleeding as sudden onset heavy PV bleeding, going through 15 - 20x maternity pads at home and soaking through with flooding into the toilet. Her Last Menstrual Period was 2 weeks earlier. She initially denied any trauma/injury. She had associated generalised lower abdominal pain throughout her abdomen and into her lower back. She had no fevers and no preceding symptoms. She reports not being sexually active for over 8 years.

She reports? History of fibroids previously but never had any treatment. No history of menorrhagia or pain. Her periods were regular, last 5 - 7 days, no dysmenorrhoea.

On examination, her heart rate was 115, her Blood Pressure was 104/71 mmhg, and she was afebrile.

Her abdomen was soft but tender throughout her lower abdomen. There were no masses palpable.

A Speculum examination was performed with consent in the presence of a chaperone.

There were difficult views as the patient was in pain and bleeding++, pooling with blood.

A Bimanual examination was performed.

She was tender on palpation on the Left adnexa and cervix.

The views were restricted but able to see traumatic laceration to probably the upper lip of the cervix extending into the upper left anterior vaginal wall with active bleeding noted.

Approximately 500 ml blood + clots with ongoing bleeding.

The findings were explained to the patient, laceration was visualised in the vagina with ongoing bleeding.

The patient became very tearful and explained has not had intercourse for more than 8 years but today had sex with a new partner after which bleeding started.

She had a vaginal pack put in to compress the bleeding area and then taken to

the theatre to examine under anaesthesia and repair the trauma.

Her laboratory investigations revealed a Haemoglobin of 92, a White cell count of 22 and lactate of 1. Her pregnancy test was negative.

The intraoperative findings were normal vulva, deep right lateral vagina tear to the posterior fornix, small non-deep graze posterior left vaginal wall.

The apex of the tear was identified and secured with Vicryl rapid 2/0 continuous suturing. Haemostasis was achieved and there was no active bleeding.

She was discharged home after an overnight stay and pain relief for analgesia. She remained clinically stable.

2.2. Case 2

An 18yo P0, sexually active. She presented to the emergency department with heavy vaginal bleeding following consensual unprotected vaginal penetrative sex in the morning 2 hours earlier.

She reported bleeding heavily vaginally with clots ++ and flooding.

She had one regular sexual partner, and she was not on contraception. Her last menstrual period was 6 days earlier. Her periods were usually normal. She felt faint. She had no headaches or palpitations. She had no abdominal pain, no fevers, no urinary symptoms, and no previous cervical operations/ procedures. She denied the use of any sexual objects/ instruments or any form of trauma or fall.

She did insert a tampon afterward to try and stop bleeding, however, that was expelled with the bleeding and clots.

The estimated blood loss at home before the presentation was probably 1 litre.

On examination, she was alert and responsive, her heart rate was 109 beats per minute, SP02 96% on room air, and her blood pressure was 104/57 mmhg.

Her Pregnancy test was negative. She had x2 pads soaked through since her arrival to ED.

A speculum examination with verbal consent and chaperone presence-heavy bleeding with clots was noted with difficulty identifying the source of bleeding.

About a further 350 mls of blood loss.

Her urgent haemoglobin level was 90.

An impression of post-coital bleeding secondary to genital tract laceration was made.

She was admitted for examination under anaesthesia and repair of laceration.

She underwent EUA and repair of post-coital vaginal laceration.

The findings were normal vulva, the cervix exposed using Sim's speculum-appears normal and healthy. There was an annular/crescentic posterior vaginal wall tear just inferior to the cervix, about 5 - 6 cm long, bleeding ++.

There were no other vaginal tears identified. A rectal examination was done, and no tears were felt in the rectum.

The apex of the tear was identified, and repair commenced with continuous vicryl 2/0 suture.

An additional figure of 8 haemostatic sutures to the mid portion for haemostasis. Haemostasis was achieved.

A rectal examination was done after the procedure; no suture was felt in the rectum.

Total estimated blood loss of 2000 mls.

She recovered clinically well and was discharged home after overnight admission. She received a blood transfusion for the correction of anaemia.

2.3. Case 3

A G4P2+2 (18-year-old, 5-year-old, 2 previous TOP) lady, presented to the Emergency department with a history of vaginal bleeding.

At approximately 4 am while having sexual intercourse with partner, initially penetrating vaginal, consensual, followed by digital intercourse by her partner.

She immediately started having PV bleeding—a mix of fresh blood and clots-large +++.

There was associated abdominal pain. Her periods have been regular.

On examination, her abdomen was soft and non-tender.

Her pregnancy test was negative. Her observations were normal.

She was counselled and consented to Examination under anaesthesia in the theatre. She requested hormonal coil insertion for contraception.

Examination under anaesthesia revealed a 3 cm left lateral wall tear. This was repaired using 3-0 vicryl continuous suturing.

The Levosert Hormonal coil was inserted as per the manufacturer's instructions.

She remained clinically well and was discharged home on the same day in the evening.

3. Discussion

Postcoital bleeding is a common gynaecological symptom affecting up to 9% of women [1].

Postcoital bleeding is defined as non-menstrual bleeding or spotting occurring immediately after sexual intercourse [1] [2].

The vagina becomes lubricated with transudate and increases in dimensions of length and width, as part of the sexual excitement. The uterus and cervix also elevate within the pelvic cavity [3]. Sexual intercourse that occurs without this physiologic preparation of the vagina is more likely to lead to a vaginal injury [1] [3].

The management of the patient should include performing an abdominal examination, inspecting the vulval skin, a speculum examination, and a rectal examination [7].

Some of the risk factors that predispose to postcoital laceration include, Postmenopausal, first-time intercourse, and intercourse with a new partner. In extremes of age, this is usually due to a small pre-pubertal and atrophic postmen-

opausal vagina. Other risk factors include infections, sexual position-dorsal decubitus, rape, use of foreign objects/Sex toys, abstinence, use of drugs/alcohol, congenital anomalies, increased vascularity of the pregnant uterus, vigorous intercourse, Vaginismus and genital disproportion [1] [5] [6] [8].

Some patients may give a pseudohistory due to perceived social embarrassment therefore a confidential sensitive empathetic approach should be employed in managing these women. All the patients presented were premenopausal, however, one of the patients had not had intercourse for a long time and this was with a new partner, however, she was initially reluctant to avail of this information. Digital intercourse/fingering especially with long fingernails can predispose to injury as seen in the 3rd case presented above.

In the presence of a retroverted uterus, this could predispose to trauma, as it guides penile thrusting to the posterior fornix, increasing the risk of vaginal injury in this site, especially in the supine position with the hips in a hyper-flexed position [5] [6].

It is important to exclude pregnancy in any woman of reproductive age presenting with abnormal bleeding. All the women presented had a negative pregnancy test.

The options of treatment include the use of vaginal packing as a treatment for superficial lacerations with minimal bleeding or as a tamponade in patients who are being resuscitated for haemorrhage [2] [4].

Surgical repair is the standard of care. This could be via vaginal, Laparoscopic, Laparotomy, or Combined approach [7] [8].

All the patients presented required EUA in theatre and repair of tears in theatre. One of the women did have a vaginal pack for tamponade while en route to the theatre.

Some of the complications that could result include significant bleeding, vaginal evisceration of intraabdominal organs [1] [4] [6].

The patient in case 2 required a blood transfusion for symptomatic anaemia secondary to massive haemorrhage, none of the women suffered evisceration of intraabdominal organs or needed a laparotomy/laparoscopy.

Pathophysiology usually involves trauma to the posterior fornix. This could occur as a result of direct injury during intercourse. The posterior fornix has a weaker endopelvic fascia layer, making it more vulnerable to injury [5] [6].

During sexual intercourse, the lower third of the vaginal wall contracts while the upper part expands and lengthens, this places the endopelvic fascia of the posterior fornix under tension, which predisposes to injury. During forceful penile-vaginal intercourse, there is an increase in the pressure within the vagina, hence in situations such as rape, vaginal trauma may likely occur [4] [5].

Intra-abdominal contents may herniate into the vaginal canal if there is disruption of the peritoneum from the resultant trauma.

The care during the post-operative period includes a period of abstinence to allow wound healing, avoid potentially risky sexual behaviours and psychological support if needed.

4. Conclusion

Vaginal postcoital injuries are a rare occurrence, nevertheless, they may involve significant blood loss and therefore require prompt evaluation and treatment. As demonstrated in the case series presented, women of all age groups could be affected. After the patient is hemodynamically stable, psychosexual assessment and support should be offered to the patient and her partner if applicable. This could be via signposting for self-referral options or psychosexual specialists.

As part of ethical considerations, informed consent was obtained from all the patients and confidentiality was maintained.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

References

[1] Fletcher, H., Bambury, I. and Williams, M. (2013) Post-Coital Posterior Fornix Perforation with Peritonitis and Haemoperitoneum. *International Journal of Surgery Case Reports*, **4**, 153-155. https://doi.org/10.1016/j.ijscr.2012.11.008

[2] Jeng, C.-J. and Wang, L.-R. (2007) Vaginal Laceration and Hemorrhagic Shock during Consensual Sexual Intercourse. *Journal of Sex & Marital Therapy*, **33**, 249-253. https://doi.org/10.1080/00926230701267910

[3] Ernest, A., Emmanuel, M. and Gregory, K. (2014) Post-Coital Posterior Fornix Perforation with Vaginal Evisceration. *BMC Women's Health*, **14**, Article No. 141. https://doi.org/10.1186/s12905-014-0141-6

[4] Lal, P., Mohan, P., Sharma, R., Sehgal, A. and Aggarwal, A. (2001) Postcoital Vaginal Laceration in a Patient Presenting with Signs of Small Bowel Perforation: Report of a Case. *Surgery Today*, **31**, 466-467. https://doi.org/10.1007/s005950170143

[5] Austin, J.M., Cooksey, C.M., Minikel, L.L. and Zaritsky, E.F. (2013) Postcoital Vaginal Rupture in a Young Woman with No Prior Pelvic Surgery. *The Journal of Sexual Medicine*, **10**, 2121-2124. https://doi.org/10.1111/j.1743-6109.2012.02682.x

[6] Padoa, A., Glick Fishman, N., Tsviban, A. and Smorgick, N. (2020) Vaginal Postcoital Injuries Requiring Surgical Intervention: A Case Series and Literature Review. *International Journal of Impotence Research*, **33**, 110-117. https://doi.org/10.1038/s41443-020-0234-8

[7] Sinha, S., Singh, J., Agarwal, M. and Prasad, I. (2023) Postcoital Vaginal Laceration in a Nursing Mother: A Rarely Reported Entity. *Cureus*, **15**, e47252. https://doi.org/10.7759/cureus.47252

[8] Nnadi, D.C., Nwobodo, E., Adamu, A. and Yusuf, S. (2010) Post-Coital Vaginal Laceration with Life Threatening Haemorrhage: A Case Report. *Sahel Medical Journal*, **12**, 20-21. https://doi.org/10.4314/smj2.v12i1.58194