Provisionally accepted for publication

CASE REPORT

Vaginal laceration after consensual practice of vaginal fisting: case report and brief overview of the literature

Vaginal fisting and laceration

Davide **Dealberti** [1], David **Bosoni** [1], Carla **Pisani** [1], Martina **Garassino** [2], Erika **Mainolfi** [2], Marco **Canestrelli** [1], Guglielmo **Stabile** [3,*], Rossella Elena **Nappi** [4]

[1] Department of Gynecology and Obstetrics, Azienda Ospedaliero-Universitaria SS. Antonio e Biagio e Cesare Arrigo, Alessandria, Italy.

[2] Department of Gynecology and Obstetrics, University Hospital Maggiore Della Carità, School of Gynecology and Obstetrics, University of Eastern Piedmont, Novara, Italy.

[3] Department of Medical and Surgical Sciences, Institute of Obstetrics and Gynecology, University of Foggia, Foggia, Italy.

[4] Department of Clinical, Surgical, Diagnostic and Pediatric Sciences, Research Center for Reproductive Medicine, Unit of Gynecological Endocrinology and Menopause, IRCCS Policlinico San Matteo Foundation, University of Pavia, Pavia, Italy.

[*]**Corresponding author**: Guglielmo **Stabile** M.D., PhD. Department of Medical and Surgical Sciences, Institute of Obstetrics and Gynecology, University of Foggia, Viale Luigi Pinto 11, 71121 Foggia, Italy.

Email: guglielmost@gmail.com.

Orcid: 0000-0001-9266-3896.

Doi: 10.36129/jog.2025.197

ABSTRACT

Background. The term “fisting” refers to an uncommon sexual practice whereby the hand or the forearm is inserted into the vagina, anus, or both. The practice of consensual vaginal fisting may be under the umbrella term of “rough sex”

Case presentation. We herein present a case of vaginal laceration in a 37-year-old woman during an uncommon sexual practice, the so-called “vaginal fisting”. The patient presented at the General Emergency Department complaining of abnormal vaginal bleeding after sexual activity. She was immediately referred to the Gynecological Department for consultation: objective examination showed a bilateral lesion of the posterior vaginal fornix (1 cm in the right side, 5 cm in the left side). Upon interview, the

patient admitted she was practicing vaginal fisting for the first time with her partner. Due to her massive ongoing bleeding, the doctor in charge of emergency transferred the patient to the surgery room and a surgical repair was performed with no further complications. She was discharged on the first postoperative day. At the 30 days follow-up visit, her vaginal examination was completely negative, and she successfully resumed her sexual life.

Conclusions. Consensual vaginal fisting is an uncommon yet potentially dangerous sexual practice, and it seems of paramount importance to explore its frequency and to analyze its potential complications and their treatments.

Keywords

Fisting; uncommon sexual behavior; vaginal fisting; vaginal laceration.

Introduction

The term “fisting”, also known as “handballing”, “fist-fucking”, “brachiovaginal or brachioproctic insertion”, refers to an uncommon sexual practice whereby the hand (fist) or the forearm is inserted into the vagina, anus, or both [1,2].

The first description about this uncommon sexual practice appeared in 1968 [3], and in the subsequent years several Authors published studies regarding consensual anal fisting, whereas vaginal or anal nonconsensual fisting was often object of discussion in Forensics Medicine literature [2].

The practice of consensual vaginal fisting may be included in the number of sexual activities in which pleasure and pain are intertwined [2], and under the umbrella term of “rough sex”, used to identify sexual practices involving physical aggression, as biting, bondage, double penetration, hair pulling, scratching and spanking [4].

Even if not all cases result in injuries, the rate of medical and surgical complications of this practice have been increased [2]. However, at present, no conclusive data about the incidence of consensual vaginal fisting are available, and no gold standard treatment for its complications (i.e., vaginal lacerations) is established.

Case presentation

Our patient was a 37-year-old heterosexual woman. From a medical point of view, she had no general health issues, she did not take any medication, and she never underwent any surgical operation. Her height, weight and body mass index were 167 cm, 59 Kg and 21.6 Kg/m^2 respectively. She delivered a healthy baby ten years ago, with a spontaneous vaginal delivery (male, 3.150 Kg birth weight), the second stage of labor lasted 65 minutes, and she suffered from a first-degree obstetric perineal laceration, repaired without any complication. She did not report any genitourinary symptom after the delivery and in the next years. Sexual history revealed that her husband died five years apart, and in the last six month she has been dating a new sexual younger male partner (30 years old), with whom she was consensually exploring new uncommon sexual practices.

The woman presented at the General Emergency Department (Azienda Ospedaliero-Universitaria SS. Antonio e Biagio e Cesare Arrigo, Alessandria, Italy) complaining of

abnormal vaginal bleeding after intercourse. She was immediately referred to the Gynecological Department for consultation. Objective examination showed a bilateral lesion of the posterior vaginal fornix (1 cm in the right side, 5 cm in the left side). The rectal examination was negative. Upon interview, the patient admitted she was practicing vaginal fisting for the first time with her partner. At admission, the patient's temperature was 36.6° C, heart rate was 100 bpm, respiratory rate was 17 breaths per minute, blood pressure was 110/70 mmHg and oxygen saturation in air was 99%; the vital parameters remained always stable. She had no abdominal pain and only complained of vaginal bleeding and vaginal pain. Blood analysis displayed normal values of hemoglobin (14.3 g/dL), normal leukocytes and platelets count, and normal prothrombin, partial thromboplastin times, antithrombin, fibrinogen levels. The electrocardiogram result was also normal.

Since the massive ongoing bleeding, the patient was transferred to the surgery room for immediate operative treatment; intravenous liquids, antibiotic prophylaxis with a cephalosporin and tranexamic acid were administered. The vaginal lacerations were repaired under general anesthesia in a single layer using absorbable multifilament material (polyglactin 910, Vicryl^{TM} 0) with an interrupted technique. The surgical operation lasted 22 minutes. Intraoperative estimated blood loss was 1000 mL.

Postoperative course was uneventful, and she was discharged from the hospital on the first postoperative day (Figure 1 and Figure 2 show the outcome the day after the surgical repair); due to the impressive bleeding, her hemoglobin levels decreased to 8.7 g/dL. Then, oral iron therapy was prescribed until the 30 days follow-up visit. At examination, her vaginal tissues showed a complete healing; hemoglobin levels increased to 11.8 g/dL. She successfully resumed her sexual life, and function and distress measured by Female Sexual Function Index (FSFI) and Female Sexual Function Distress-revised (FSDS-R) questionnaires, respectively, was completely normal (> 26.55 and > 11 scores, respectively) after two months.

Written informed consent with guarantees of confidentiality was obtained from the subject, and the principles of the Helsinki Declaration were followed.

Discussion

The first description about fisting as an uncommon sexual practice appeared in 1968 by Metsälä et al., who described the incidence and types of traumatic lesions of the vagina by searching records from 1931 to 1965 of the I and II Clinics of Obstetrics and Gynaecology, Helsinki University Central Hospital [3].

In the subsequent years, several Authors published studies regarding anal fisting (especially regarding sexual activities between MSM individuals), whereas vaginal or anal nonconsensual fisting was often object of discussion in Forensics Medicine literature [2].

By analyzing only those papers in which the practice of vaginal fisting was consensual (or at least was not specified that it has not been consensual), we found only two other manuscripts [5,6]. In, 1989 Fain et al. [5] published the first case report of death after vaginal fisting: a young girl died as the result of extensive hemorrhage due to vaginal laceration caused by the insertion of a clenched hand and forearm inside her vagina. In 1997, Cerqui et al [6] published a case series of three heterosexual women who presented at the emergency department for bleeding caused by vaginal lacerations

after vaginal fisting, alerting to the potential dangers of this form of sexual practice in the heterosexual community.

Vogels et al. [4] included vaginal fisting under the umbrella term of “rough sex”, used to identify sexual practices involving physical aggression; other examples are biting, bondage, double penetration, hair pulling, scratching, spanking. However, among all those different rough sex practices, fisting appears to be one of the less desired and practiced.

The most common mechanism of female genital tract tears, besides obstetric injury, is sexual intercourse [7]. Consensual intercourse is usually associated with minor sexual trauma, although rare cases of extensive vaginal rupture are reported in literature [8]. The risk of vaginal laceration is higher during first sexual experiences and in patients with atrophic vaginal tissue, such as women in the late postmenopausal age [9,10]. Injuries seem more frequent with penetration with finger/s and possible pre-existing genital infection [11,12]. Vaginal injury presents a diagnostic challenge considering that many patients are very embarrassed and can report an incomplete or misleading history. For this reason, the physicians should be carrying out the examination without the presence of family or partners. A careful medical history is also necessary to understand whether the patient has been a victim of sexual violence. Furthermore, a complete vaginal examination with the use of the speculum and a rectal examination helps us in the diagnosis and in the most correct management.

Some studies have observed deep vaginal tears to occur with a right-side predominance [13,14], and it has been suggested that the retroversion of the uterus may guide penetration to the posterior fornix which, given the relative weakness in its endopelvic fascia support, may be more vulnerable to tears [14,15]. Furthermore, other reasons for the prevalence of lacerations on the right side could be the anatomical position of the rectus-sigma posteriorly on the left side and by the generally anteversion and dextro-rotation of the uterus [16]. However, a recently published case series with literature review suggested that there is no site predominance between vaginal fornix or mid-vagina and between right and left side [10].

A gold standard treatment for these injuries that often need a surgical repair to control the bleeding is not established. In literature the packing may be used as treatment for superficial lacerations with minimal bleeding. For deeper lacerations and major bleeding, suturing is required. Different suturing techniques have been reported: delayed-absorbable polyglactin single-layer suturing [17], continuous locking or nonlocking suture or interrupted sutures using absorbable multifilament material such as polyglactin 910 or rapidly absorbable polyglactin 910 [10].

The broad accessibility of online Sexually Explicit Material (SEM) exposes viewers to a wide range of uncommon sexual practice and behaviors, and viewing rough sexual practices positively correlates with desire and participation in those behaviours [4]. Even if fisting appears to be one of the less desired practices [4], at present we are totally missing data concerning the frequency of consensual vaginal fisting practice in the general population, and the variability of genital injuries that can occur. It seems therefore interesting to analyze frequency of such practice in the general population in order to investigate the variability of the genital lesions associated with consensual vaginal fisting practice. Indeed, the lack of data prevent from standardizing treatment and implementing education and empowering women’s strategies.

Conclusions

In women with a history of recent sexual intercourse presenting with vaginal bleeding it is important to record a detailed anamnesis without the presence of relatives or partners, to reduce the patient embarrassment and, most important, to understand if the patient has been a sexual victim. Also the visit should be performed without relatives or partner and should include the use of a speculum and a rectal examination. The physician must check the patient's vital signs and proceed to a rapid intervention. We also suggest a period of sexual abstinence of approximately 30 days to promote complete healing of the wound, also in order to reduce the fear and trauma that can occur in patients who have suffered a major vaginal laceration. Could be useful for patients provide instructions about the necessity to avoid potentially risky sexual behaviors, giving psychological support to women who need it. Only an adequate differential diagnosis will be able to avoid severe further complications in patients who experience this type of trauma.

Compliance with Ethical Standards

Written informed consent with guarantees of confidentiality was obtained from the subject, and the principles of the Helsinki Declaration were followed.

Authors contribution: Conceptualization D.D., D.B., R.E.N., Data curation D.B., C.P., M.G., Formal Analysis E.M., M.C., D.D., Investigation D.B., C.P., M.C., Methodology E.M., M.G., Project administration D.D., Resources D.B., Software C.P., Supervision R.E.N., G.S., Validation D.D., R.E.N., Visualization G.S., Writing – original draft D.D., D.B., Writing – review & editing G.S.

Funding

The authors declare that they did not receive any funding for this research

Disclosures of interest

Davide Dealberti serves as Member of the Board of the Italian Society of Minimally Invasive Surgery in Gynecology (SICMIG).

Rossella Elena Nappi has financial relationships (Lecturer, Member of Advisory Board and/or Consultant) with Abbott, Astellas, Bayer HealthCare AG, Exeltis, Fidia, Gedeon Richter, HRA Pharma, Merck Sharpe & Dohme, Novo Nordisk, Organon & Co, Theramex, Viatris. She serves as President Elect of the International Menopause Society (IMS) and as President of the Italian Association of Academic Gynecologists (AGUI – Associazione Ginecologi Universitari Italiani).

All other Authors declare no Conflict of Interests for this article.

Informed consent

Informed consent was obtained from all subjects involved in the study.

Data sharing

The authors confirm that the data supporting the findings of this study are available within the article.

References

1. Shook LL, Whittle R, Rose EF. Rectal fist insertion. An unusual form of sexual behavior. *Am J Forensic Med Pathol* 1985; 6(4): 319-324.

2. Cappelletti S, Aromatario M, Bottoni E, Fiore PA, Fineschi V, di Luca NM et al. Variability in findings of anogenital injury in consensual and non-consensual fisting intercourse: A systematic review. J Forensic Leg Med. 2016 Nov;44:58-62. doi: 10.1016/j.jflm.2016.08.013.

3. Metsälä P, Nieminen U. Traumatic lesions of the vagina. *Acta Obstet Gynecol Scand* 1968; 47(4): 482-488.

4. Vogels EA, O'Sullivan LF. The Relationship Among Online Sexually Explicit Material Exposure to, Desire for, and Participation in Rough Sex. Arch Sex Behav. 2019 Feb;48(2):653-665. doi: 10.1007/s10508-018-1290-8.

5. Fain DB, McCormick GM. Vaginal "fisting" as a cause of death. *Am J Forensic Med Pathol* 1989; 10(1): 73-75.

6. Cerqui AJ, Haylen BT. "Fisting" as a cause of vaginal bleeding. Med J Aust. 1998 Sep 7;169(5):288. doi: 10.5694/j.1326-5377.1998.tb140273.x.

7. Fallat ME, Weaver JM, Hertweck SP, Miller FB. Late follow-up and functional outcome after traumatic reproductive tract injuries in women. Am Surg. 1998 Sep;64(9):858-61.

8. Symeonidis N, Ballas K, Micha A, Psarras K, Pavlidis T. Consensual intercourse resulting in an extensive rectovaginal tear: an extremely rare occurrence. J Sex Med. 2015 Feb;12(2):572-5. doi: 10.1111/jsm.12754.

9. Frioux SM, Blinman T, Christian CW. Vaginal lacerations from consensual intercourse in adolescents. Child Abuse Negl. 2011 Jan;35(1):69-73. doi: 10.1016/j.chiabu.2010.08.006.

10. Padoa A, Glick Fishman N, Tsviban A, Smorgick N. Vaginal postcoital injuries requiring surgical intervention: a case series and literature review. Int J Impot Res. 2021 Jan;33(1):110-117. doi: 10.1038/s41443-020-0234-8.

11. Lincoln C, Perera R, Jacobs I, Ward A. Macroscopically detected female genital injury after consensual and non-consensual vaginal penetration: a prospective comparison study. J Forensic Leg Med. 2013 Oct;20(7):884-901. doi: 10.1016/j.jflm.2013.06.025.

12. De Seta F, Banco R, Turrisi A, Airoud M, De Leo R, Stabile G et al. Pelvic inflammatory disease (PID) from Chlamydia trachomatis versus PID from Neisseria gonorrhea: from clinical suspicion to therapy. G Ital Dermatol Venereol. 2012 Oct;147(5):423-30.

13. Wilson F, Swartz DP. Coital injuries of the vagina. *Obstet Gynecol* 1972; 39: 182–184.

14. Sau AK, Dhar KK, Dhall GI. Nonobstetric lower genital tract trauma. Aust N Z J Obstet Gynaecol. 1993 Nov;33(4):433-5. doi: 10.1111/j.1479-828x.1993.tb02132.x.

15. Sloin MM, Karimian M, Ilbeigi P. Nonobstetric lacerations of the vagina. J Am Osteopath Assoc. 2006 May;106(5):271-3.

16. Stabile G, Mordeglia D, Romano F, Carlucci S, Mangino FP, Nappi L, Sorrentino F, De Manzini N, Ricci G. Postcoital Vaginal Perforation and Evisceration in Women with No Prior Pelvic Surgery: Laparoscopic Management and Systematic Review of the Literature. Int J Environ Res Public Health. 2021 Sep 16;18(18):9746. doi: 10.3390/ijerph18189746.

17. Tchounzou R, Chichom-Mefire A. Retrospective Analysis of Clinical Features, Treatment and Outcome of Coital Injuries of the Female Genital Tract Consecutive to Consensual Sexual Intercourse in the Limbe Regional Hospital. Sex Med. 2015 Oct 7;3(4):256-60. doi: 10.1002/sm2.94.

Figure 1: vaginal laceration of the right side of the posterior fornix after surgical repair.

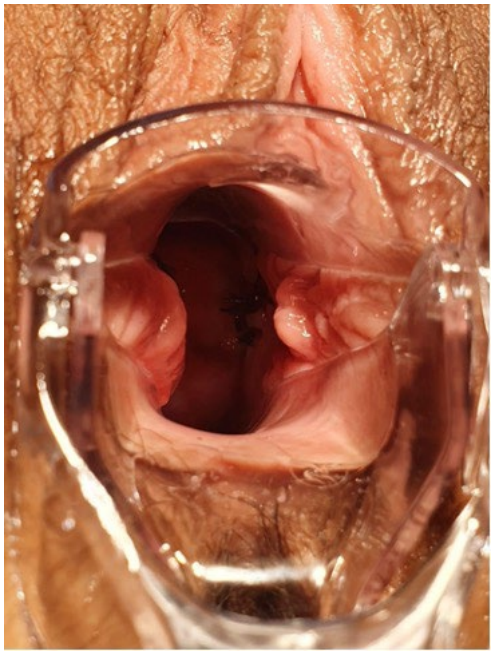

Figure 2: vaginal laceration of the left side of the posterior fornix after surgical repair.