CONSENSUAL COITAL LACERATION OF THE POSTERIOR VAGINAL FORNIX WITH HEMORRHAGIC SHOCK IN A TEENAGE GIRL: DIAGNOSTIC AND MANAGEMENT CHALLENGES.

Eze I. O[1],Salihu M.J[2] Innoeze C. U[3], Elegbua C. O[1], Afolayan S.T[1], Adaji J.A[4] Meremikwu C. A[1]

ABSTRACT

INTRODUCTION

Life threatening injuries can result from consensual coitus. In most parts of Africa where children are raised without adequate sex education, and sex is seen as shameful topic and taboo in extreme cases, coital injuries are unlikely to be reported or may be misdiagnosed and mismanaged. This may result in morbidities and mortalities. Scarcity of data on this subject underscores the need for this case report to create awareness and add to the body of knowledge.

Case report: Patient was 17-year old student who presented with hemorrhagic shock to the emergency unit of a reference hospital in Southern Nigeria with a 4 hour history of torrential vaginal bleeding and 2 fainting episodes following consensual coitus. History was misleading as patient, initially, denied any history of sexual activity. However, with a more tactful and empathic approach, the patient admitted having consensual coitus prior to symptoms. On examination, she was found to have sustained lacerations of the posterior vaginal fornix. She was promptly resuscitated and a repair under anesthesia was done in the theatre. She was transfused with 2 units of blood and discharged in good condition after 48 hours on admission.

CONCLUSION

Consensual coital injuries could be life threatening, yet may be misdiagnosed and poorly managed due to shame and stigma associated with it in our environment. Lack of awareness, low index of suspicion, poor approach to history and management could lead to poor outcome. High index of suspicion, tact, privacy, empathy, good clinical judgment and multidisciplinary approach to care are essential to early diagnosis and good management of coital injuries.

KEY WORDS

coital injuries, consensual coitus, sex, laceration.

Cite This Article As: *Eze I O, Salihu MJ Innoeze C U, Elegbua C O, Afolayan ST, Adaji JA, Meremikwu C A.* Consensual coital laceration of the posterior vaginal fornix with hemorrhagic shock in a teenage girl: diagnostic and management challenges. Afrimedic Journal 2022; 8(1): 34-37.

INTRODUCTION

Consensual coitus, an ordinarily pleasurable activity, could result in injuries ranging from negligible self-limiting bruises to life threatening tears/perforations. Without timely diagnosis and prompt management, some consensual coital injuries may lead to serious morbidities including hemorrhage, shock and eventual death [1-2] Vaginal injuries due to consensual coitus are relatively frequent in our practice, yet data on this are relatively scarce.[3] Existing data report mostly injuries following civil or sexual violence [3]Reported incidence of coital injuries ranges from 0.34% by Umaru et al in Maiduguri, Northern Nigeria to 0.7% of all gynecological cases within the study period as reported by Abasiatta and Omo-Aghoja respectively in Calabar and Benin, southern Nigeria.[4, 9- 11]

The contribution of coitus to non-obstetric traumatic lesions of the female genital tract has been estimated to be around 32%.[5] Most female genital tract injuries consecutive to coitus are minor injuries following "normal" sexual intercourse, frequently during the first sexual experience in the female patient.[6] This type of injury usually resolve with no or minor treatment.[7]

It could be assumed that, because of shame and stigma associated with sex in our environment, consensual coital injuries are most likely under-reported especially when the injury is minor. However, most major and life threatening consensual coital injuries as in our case do present to the hospital for care, but early diagnosis and prompt management may be challenging due to cultural factors and limited experiences by care givers. A high index of suspicion, tactful, confidential and empathic approach are required for early diagnosis and good management.

We report a case of teenage girl that presented to the emergency unit of our hospital in hemorrhagic shock in guise of "heavy menstruation" following consensual coital laceration of the posterior vaginal fornix. Consent was obtained from patient's parents and approval gotten from the institution ethical committee to report this case.

[1]Dept of O&G Nigerian Navy Reference Hospital, Calabar
[2]Dept of Behavioural medicine Nigerian Navy Reference Hospital, Calabar
[3]Dept of Psychological medicine University of Nigeria Teaching Hospital, Enugu
[4]Dept of O&G Nigerian Navy Reference Hospital, Ojo
Corresponding Author: docinnoie@yahoo.com +2348143377937

CASE SUMMARY

Patient was a 17-year old student who presented with hemorrhagic shock to the emergency unit of a reference hospital in Southern Nigeria with a 4 hour history of torrential vaginal bleeding and 2 fainting episodes prior to presentation. In the presence of her parents, she insisted she was having a "heavy menstrual flow", and denied any sexual activity. A pregnancy test carried out was negative and her pelvic ultrasound scan ruled out any pregnancy complications. A more tactful, confidential and empathic approach to history taking, done in the absence of parents and chaperone revealed that her presenting symptoms were preceded by consensual coitus.

According to the patient, it was her first experience with vaginal sex with her boyfriend which was unplanned and unprotected but consensual. She experienced a sudden gush of blood from her vagina following a deep penile penetration and forceful thrust in dorsal "missionary" position. She reported lack of adequate foreplay before penetration due to anxiety. There was no ejaculation. The bleeding was massive and came in clots. She tried managing the bleeding at home with her partner until she fainted. Her family was then contacted and she was rushed to the emergency unit.

At presentation, she was conscious but drowsy, sweating with cold extremities, pale looking (urgent PCV was 18%), pulse rate was 120 per minute moderate volume, blood pressure 70/40mmHg, she had 20 breaths per minute, and SPO2 at room air was 95%. Abdominal findings were essentially normal.

Vaginal examination revealed fully soaked vulva pad with clots plugging the external vaginal orifice. There was a laceration of the posterior fornix from 4 through 5 to 6'O clock position. There was also a laceration on left angle of the upper 1/3 of the vaginal wall. Vulva and cervix were grossly normal. A diagnosis of consensual coital laceration of the vagina with hemorrhagic shock in teenage girl was made.

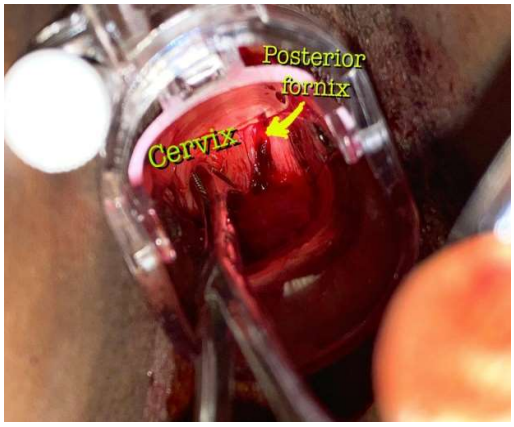

Fig 1. Laceration of the posterior vaginal fornix.

Fig 2. Massive hemorrhage with clots

MANAGEMENT

Resuscitation was started with normal saline infusion and grouping and cross matching of blood was requested. Parenteral antibiotics was also commenced. Patient and parents were counseled for examination and repair under anesthesia, and consent was given.

Procedure was done in lithotomy position under general anesthesia without endotracheal intubation. Vaginal lacerations were identified and repaired with vicryl-0 sutures in a continuous non-interlocking fashion, and good hemostasis achieved. Digital rectal examination was done to rule out rectal involvement

in the injury and repair. Vagina was packed with 2 pieces of gauze soaked in diluted adrenaline solution for capillary hemostasis. A unit of compatible blood was transfused in the theater, and another unit in the ward. Post transfusion PCV was 28%. Antibiotics and analgesics were continued. Patient did well and was discharged after 48 hours to report to gynecology clinic a week after. In the follow up clinic, patient had no complain. She was given sexual education including contraceptive options. Parents were also counseled. She was screened for HIV which was negative, and was asked to come for a follow up screening in 3 months. Patient was also referred to the behavioral medicine unit for further attention.

DISCUSSION

Consensual coitus could result in injuries ranging from negligible self-limiting bruises to life threatening tears/perforations that may lead to serious morbidities or hemorrhage, shock and eventual death without timely diagnosis and prompt management.[1-2] Most minor consensual coital injuries may go unreported due to privacy, shame, and stigma that may be associated with such in our environment. However serious coital injuries and those due to alleged rape may likely present to the hospital for care.

Hemoperitoneum, peritonitis and shock necessitating laparotomy, and recto-vaginal fistula due to coital injuries have been reported.[3,4, 5, 9]

Vaginal Coital injuries mostly occur in the lower vagina and the posterior fornix. The lower vagina including the fourchette and the introitus can easily be injured during forceful penile penetration especially in rape and non-consensual coitus.[3, 4, 5 6] Posterior vaginal fornix was the commonest site of vaginal coital injuries in studies done in Benin and Ilorin [11,12] all in south west Nigeria, and in the 2 case reports in Jamaica due to illicit sex,[11] and the 2nd commonest site in Maiduguri north east Nigeria.[9] The posterior fornix is the part of the vaginal that receives the penile thrust during intercourse. This type of injury is more likely during consensual sex in missionary position, as was the case in our report.

Coital injuries which commonly results from rape or non-consensual intercourse could also arise from consensual sex. The predisposing factors to consensual coital injuries include first sexual intercourse (as the case with our patient) nulliparity, prolonged abstinence, positions such as dorsal position, rough coitus, fragile vagina due to extremes of age (pre-menarche and post-menopause), peno-vaginal disproportion, use of aphrodisiacs as vaginal lubricant and inadequate emotional and physical preparation of women for sexual intercourse [3-10, 12-14]

Early diagnosis requires high index of suspicion, tact, privacy and empathy. History may be initially misleading especially in adolescents in the presence of parents and third party as in our case or in adults involved in extra - conjugal sex. [9]

Approach to history should be friendly and non-judgmental. Unstable patients should be quickly resuscitated alongside relevant history and laboratory investigations. Management is multidisciplinary, and treatment should be based on the extent of injury, complications, available skills and facility. Resuscitation and hemostasis are life-saving in all severe cases, while antibiotic prophylaxis and screening for STI and further referral may be necessary to prevent morbidities.

Sex education including contraceptive advice should be offered especially in adolescents. Follow up counseling with the clinical psychologist may be helpful especially in teenagers and cases of alleged rape. This is because physical and/or psychological trauma resulting from coital injuries in this age group could result in short or long term complications.[3, 11-14] These may include but not limited to sexual aversion and disharmony, and relationship failure in adult life. To avert this, our index patient was followed up by the behavioral medicine unit.

CONCLUSION

This case report draws attention to the possibility of life threatening genital injuries resulting from consensual coitus. The case highlights the challenges to diagnosis and management peculiar to our environment due to cultural factors and ignorance. It emphasizes the need for high index of suspicion, tact, privacy, empathy and good clinical judgment for early diagnosis and prompt management. The multidisciplinary approach to care including counseling and psychological follow up especially in teenagers was also addressed.

REFERENCES

1. Jeng CJ, Wang LR Vaginal laceration and haemorrhagic shock during consensual sexual intercourse. J Sex Marital Ther (2007) 33(3): 249-253.

2. Oseni TIA, Fuh NF, Eromon PE. Consensual Coital lacarations A Case Series, Gynecol Obstet Case Rep. 2017, 3:

3. 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.

4. Abasiatta AM, Etuk SJ, Bassey EA, Asuquo EE (2005) Vaginal injuries during coitus in Calabar, a 10-year review. Niger Postgrad Med J 12(2):140-144. 10.

5. Jana N, Santra D, Das D, Das AK, Dasgupta S. Non-obstetric lower genital tract injuries in rural India. *Int J Gynaecol Obstet* 2008;103:26–29

6. 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;20:884–901

7. Muyshondt C, Monforte M, Droupy S. Sex-related injuries. *Prog Urol* 2013;23:771–779

8. 7 Ijaiya AM, Mai AP, Aboyeji V, Kumanda MO, Abiodun HO (2009) Rectovaginal fistula following sexual intercourse. A case report. Ann Afr Med 8(1):59

9. Umaru I, Babagana B, Abdulkarim GM, Ado DG (2013) Coital trauma as seen at the University of Maiduguri Teaching Hospital, Maiduguri. Bo Med J 10(1):25-29

10. Fawole AO, Awonuga DO (2007) Gynaecological emergencies in the tropics: Recent advances in management. Ann Ib Postgrad Med 5(1):12-20.

11. Omo-Aghoja LO, Ovbagbedia O, Feyi-Waboso P, Okonofua FE (2009) Coitally related traumatic injury of the female genital tract in a Nigerian urban setting; A 5-year review. Niger Postgrad Med J16 (1):59-63. 9

12. Anate M, Vaginal Trauma at sexual intercourse in Ilorin, Nigeria. An analysis of 36 cases. West Afr. JMed, 1989, 8(3) 217-222.

13. Fletcher H, Bambury I, Williams M. Post-coital posterior fornix perforation with peritonitis and haemoperitoneum. Int J Surg Case Rep. 2013;4(2):153–155.

14. Ezechi OC, Fasubaa OB, Dare FO. Vaginal injury during coitus at Ile Ife: A 16-year review. Nig J Med. 2000;9 (1):16–18.