

## **VULVA HAEMATOMA FOLLOWING STRADDLE INJURY IN PREGNANCY**

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### **ABSTRACT**

**Background:** The incidence of vulva injuries in pregnancy in our environment following non-obstetric causes may be underreported. This may be because injuries of this nature are often misconstrued to be of a sexual nature and so such patients may be viewed as “immoral”.

**Report:** A 24year old primipara in her third trimester who fell astride a plastic kettle and sustained a laceration to the vulva with haematoma that was surgically evacuated on presentation. She was placed on sitz baths, antibiotics, analgesics and subsequent counselling to have a supervised delivery in the hospital. She did so 11days later and had spontaneous vertex delivery to a live female weighing 2.6kg with good APGAR scores with the aid of an elective episiotomy.

**Conclusion:** The management of such should be meticulous and treatment tailored to the patient's need for future parturition and sexual gratification.

**Keywords:** Vulva, haematoma, trauma, pregnancy

### **INTRODUCTION**

The vulva is highly protected from injuries due to the reflex adduction of the thighs<sup>1</sup>. This is more so in pregnancy. Vulva injuries often follow childbirth and can occur as a result of an episiotomy or tears following poorly managed 2<sup>nd</sup> stage of labour in the delivery of large babies or the use of forceps or vacuum<sup>1</sup>. Though rare there are also those resulting from accidental injuries and can be caused by burns, pelvic fractures or high -pressure liquid injection as those from water or jet skiing, falls from bicycles, fall on perineum following an attempt to cross a ditch, straddle injuries and boot bindings on snowboards when these are left up with one foot taken out, typically when dismounting from a chairlift<sup>2</sup>. Injuries related to sex or assault are due to rough sex without adequate foreplay, unusual positions during sex, having sex for the first time, sexual abuse, rape and physical abuse or assault such as foreign object

forcibly placed into the vagina or anus. Perineal traumas have also been reported following both accidental and intentional kicks out of rage or domestic violence either from relatives or during communal clashes<sup>3,4</sup>. A rare case was reported following a tooth-bite and a few are spontaneous<sup>4,5,6</sup>. Accidental injuries occur in less than 10% of all pregnant women with foetal mortality ranging from 40-70% in the United States<sup>7</sup>. Maternal injuries of this nature are underreported in our environment as expectant mothers are reluctant to present to the hospital to the sensitive nature of the region

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involved.

These types of injuries can present in a variety of ways depending on the extent and severity of the force producing the injury and may include abdominal pains, pain inside or outside the vagina, haemorrhage, swelling and redness in the vagina, painful urination, urinary retention, foul smelling discharge, an object embedded in the vagina, dizziness, bite marks in the genitals, shock, bruising of the vulva, haematoma and alteration in the shape of the labia, vulva or other areas<sup>7</sup>.

Diagnosis often follows a gentle but meticulous history-taking, physical examination which may be under anaesthesia with some investigations which may include a haemogram, cytology, anoscopy, colonoscopy, laparoscopy, vaginoscopy and exploratory laparotomy.

Treatment can be conservative or radical depending on the extent of the injury and other co-morbid conditions and may include use of ice packs, pressure dressing, bed rest, draining of haematomas, suturing of lacerations, use of antibiotics, oestrogen creams, urethral catheterisation and counselling especially after sexual abuse<sup>4,5</sup>.

Complications that may follow this infection, shock, scarring which may lead to tears in subsequent vaginal deliveries, vesico-vaginal fistula, gynetresias, psychological problems like nightmares, sleep disorders, depression or thoughts of suicide especially after sexual abuse<sup>1,2,5</sup>. Data on this subject is limited and so necessitated the report which follows.

## **CASE REPORT**

Mrs SM, was a 24year old Hausa Muslim housewife. A G3Para 1+1, 1 alive, her last child birth was 2½years ago. She was unsure of her last menstrual period but said to be about 9months ago. She presented to the accident and emergency unit with a history of trauma to the vulva after accidentally

falling astride a plastic kettle. It was associated with severe dull pain limiting movement and vaginal bleeding. There was passage of clots staining her under-wears and wrappers and could not be quantified. There was body weakness and dizziness but no syncope. There was no bleeding from other orifices. There was no history of reduction in foetal movements, liquor drainage or prolapse of foetal parts. The index pregnancy was desired and achieved spontaneously. She began her antenatal care at a peripheral hospital which was uneventful. Her first pregnancy was 2½years ago. It was supervised but had a home delivery to a live female baby who cried immediately after birth. The pregnancy, delivery and puerperium were uneventful. The gynaecological history was not contributory.

She was not a known hypertensive, diabetic, asthmatic or sickle cell disease patient. There was no history of surgeries or blood transfusion. She was married to a 37year old driver in a monogamous non-consanguineous family setting. She neither smoked cigarettes nor took alcohol. She had no drug allergies. On examination she was a young woman in painful distress, mildly pale, anicteric, no pedal oedema and afebrile. Her pulse rate was 70/minute with a blood pressure of 100/60mmHg. Her chest was clinically clear. The abdomen was uniformly enlarged with stretch marks and lineanigra extending from the hypogastric to the epigastric regions. There was also visible foetal movements. The liver, spleen and both kidneys were not palpably enlarged. The symphysis-fundal height was 36centimetres which is consistent with 36weeks gestation. The foetus was in longitudinal lie and in cephalic presentation. The descent was 5/5ths palpable per abdomen and the foetal heart rate was 134/minute, good tone and regular. There was no palpable uterine contraction in 10minutes. Vaginal examination revealed a blood-stained vulva with swollen and shiny labia majus (8 by 8cm transversely) and minus on the right, tense

and tender with a longitudinal slit at the posterior fourchette about 1cm in length and blood clot at the opening. The left was also swollen but not as much as on the right. There was red-brownish discoloration of the surface. The vagina was essentially normal. The cervix was closed, 2centimetres long and central. (The haematoma was digitally evacuated about 200mls and the edges of the wound under-run with delayed absorbable 2/0 sutures).

She was admitted in the maternity ward on 20.2.15 after counselling and had an urgent packed cell volume which came out as 20%. An urgent serum urea and electrolyte was also done. It was normal. An obstetric scan showed a singleton foetus in longitudinal lie and cephalic presentation. Gestational age was estimated at 36weeks, (expected date of delivery was 24.3.15) the liquor volume was adequate and the placenta was posterior-fundal. There was no gross foetal anomaly.

She was commenced on intravenous metronidazole 500mg thrice daily and intravenous ceftriaxone 1g daily. She had a unit of blood transfused daily for three days and was also placed on tabs ferrous sulphate 200mg thrice daily and tabs folate 5mg daily. She also had twice daily sitz baths.

She went into spontaneous labour 11days later and delivered of a live female baby via spontaneous vertex delivery with aid of an elective episiotomy which was primarily repaired. The baby weighed 2.6kg with good APGAR scores. The postpartum blood loss was 300mls. She continued twice daily sitz baths and analgesics and was discharged to see at the postnatal clinic in two weeks. She did so without any complaints. The baby had gained weight and adequately immunised for age.

**Figure 1:** The Perineum Showing Haematoma On The Right Labia Minus And Majus



## DISCUSSION

Perineal trauma in the obstetric patient has been commonly associated with complications following the second stage of labour<sup>1,2,6</sup>. However, the patient under review is one of the few cases of trauma not related to delivery<sup>5</sup>. This incidence an accidental fall astride a plastic kettle leading to perineal laceration with subsequent vulva haematoma. The management of this case poses a challenge considering the fact that she was also pregnant and so caution to the growing foetus needs to be exercised as this could have led to foetal injuries and even death. An emergency caesarean delivery may have been offered in the presence of the haematoma and any other obstetric indication such as foetal distress. Another factor that favoured expectant management in this patient was that she did not go into labour immediately but presented in this centre after 11days which had given some time for healing to take place to some degree. Also, there was no need to have commenced foetal lung maturation with steroids and the use of

tocolytics as she was close to term and did not have significant preterm contractions. The absence of comorbid medical conditions like diabetes, prompt evacuation of the haematoma, sitz baths, commencement of broad spectrum antibiotics and adequate nutrition, favoured wound healing. Hypertensive disorders if present may have favoured the development of abruptio placentae and subsequent foetal distress and loss. This patient had an elective episiotomy on the contralateral side of the previous repair in labour which was primarily repaired. Giving her a uterine scar may ultimately alter her obstetric carrier.

Vulva injuries can be prevented by taking the following steps but not limited to proper keeping of objects from sitting areas, provision of adequate illumination especially at nights, good construction of houses, use of non-slippery flooring materials, use of appropriate foot wears and clothing, avoidance of alcohol and drug abuse, prompt treatment of such injuries to minimise complications, rehabilitation and blood transfusion. In severe cases, a plastic and reconstructive surgeon may be helpful.

Management of such conditions involves taking a good history and detailed examination of the perineum, prompt evacuation of the haematoma and securing of any bleeding site as was done in the index case<sup>5</sup>. In more severe cases the use of word catheter and more recently various forms of interventional radiology may be required to arrest further bleeding<sup>8</sup>. In the absence of a large haematoma, expectant management may suffice.

## REFERENCES

1. Lesley AS, Natalia P, Vanessa S, Ethel EB. Incidence of and risk factors for perineal trauma: a prospective observational study. *BMC Pregnancy and childbirth*. 2015, 13:59. Doi:10.1186/1471-2393-13-59.
2. Akpa M, Oguntayo AO. Vulva haematoma.

*Arch IntSurg* 2012; 2: 37-8.

3. Schneiderman H. Traumatic vulvar haematoma in a teenaged girl, anatomic fine points and the diversity of causes of vulvar haematomas. *CONSULTANT*. 2010; 50:131-133.
4. Dash S, Vorghese J, Nicami DJ, Awasthi RT, Jaishi S, Sunil M. Severe haematoma of the vulva: A report of two cases and a clinical review. *Kathmandu University medical journal*. 2006; 4: 228-231.
5. Ajay KP, Arun KJ, Swapnil M, Vishru V, Sakshamnahar, Saurabhkhalu. Trauma and sharp tooth induced labial vestibule haematoma in a patient with elevated international normalized ratio. *IOSR Journal of Dental and medical sciences*. 2014, 13(9): 45-48.
6. Maitri RK, Prashant J, Shilpa MN. Spontaneous vulva haematoma in pregnancy. *International Journal of recent trends in science and technology*. 2014, 10(2): 226-228.
7. Desjardis G. Management of the injure patient. Accessed on line on 3.12.15 by 9pm a t <http://www.trauma.org/archive/resus/pregnancytrauma.html>

Mok-Lin EY, Laufer MR. Management of vulvar haematomas: Use of word catheter. *J PediatrAdolesc Gynecol*. 2009, 22(5):e156-8.