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Massive Postpartum Vulvar Haematoma Complicated by Haemorrhagic Shock Following Vaginal Delivery at a Primary Health Care Facility: A Case Report

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KEYWORDS:

Postpartum hemorrhage; vulvar hematoma; hemorrhagic shock; vaginal delivery; blood transfusion; emergency obstetric care. Delivery at a primary health care facility.

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ABSTRACT

Background: Postpartum vulvar hematoma is an uncommon but potentially life-threatening complication of vaginal delivery that can result in significant blood loss, hemorrhagic shock, and maternal morbidity. Prompt recognition and appropriate intervention are essential for a favorable outcome.

We report the case of a prim gravida who developed a massive vulvar hematoma following vaginal delivery at a primary healthcare facility. She was referred to a tertiary healthcare facility in hemorrhagic shock. Clinical assessment revealed severe anemia, with a packed cell volume of 14%. Emergency resuscitation was initiated, followed by surgical exploration of the hematoma and blood transfusion. The patient responded favorably to treatment and was discharged home on the fourth day of admission.

Conclusion: Massive postpartum vulvar hematoma can cause life-threatening hemorrhage following vaginal delivery. Early recognition, prompt referral, adequate resuscitation, blood transfusion, and timely surgical intervention are essential to achieving favorable maternal outcomes.

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INTRODUCTION

Postpartum vulvar hematoma is an uncommon but potentially life-threatening complication of vaginal delivery, arising from injury to blood vessels within the vulvar and paravaginal tissues. Although the incidence is low, substantial concealed blood loss may occur, resulting in severe anemia, hemodynamic instability and maternal death if diagnosis and treatment are delayed [1–3]. Predisposing factors include genital tract trauma, episiotomy, instrumental delivery and spontaneous vascular injury during childbirth [2, 4].

Clinical presentation varies according to the size and location of the hematoma and may include severe perineal pain, vulvar swelling, urinary retention and features of hemorrhagic shock [1, 3]. Management depends on the hematoma's size, progression and associated hemodynamic compromise. Small, non-expanding hematomas may be managed conservatively, whereas large, expanding hematomas or those associated with hemodynamic instability generally require urgent surgical exploration, evacuation of clots and hemostasis [1, 5, and 6]. Selective arterial embolization is an alternative where available, particularly when bleeding persists despite surgery [5, 7].

Early recognition, prompt resuscitation and timely referral are essential, particularly in resource-limited settings where definitive obstetric emergency care may be unavailable [2, 8]. This report describes a prim gravida who developed a massive postpartum

valval hematoma complicated by hemorrhagic shock following vaginal delivery at a primary healthcare facility, highlighting the importance of emergency referral and definitive management.

CASE PRESENTATION

Mrs. K.I, a 19yr old un- booked P1 +0. (1A), who had spontaneous vaginal delivery (SVD) at Primary Health care (PHC) Town Maternity about 6hrs prior to presentation was referred to the Federal Teaching Hospital Gombe on account of Left Vulva swelling with vaginal bleeding of six hours duration. Her third stage of labor was actively managed at the PHC. The left Vulva swelling was said to be progressively increasing/expanding in size with associated pain and vaginal bleeding from the valval swelling. The bleeding was said to be initially mild and bright red and progressively became severe, associated with clots and soaked her wrapper. There was associated dizziness and body weakness, no history of fundal pressure, abdominal distension, or uterine atony. No fainting spells, no history genital instrumentation or episiotomy during delivery. She is not a known Diabetic or hypertensive, sickle cell disease or asthmatic, and there is no family history of such. On account of above symptoms she was given intravenous fluid and subsequently referred to the State specialist Hospital Gombe where no intervention was done due to logistics reasons and she was later referred to the Federal Teaching Hospital Hospital for Expert Management.

On examination: a young woman, conscious and alert, pale, afebrile (Temperature 36.8 degree celcius), anicteric, moderately dehydrated, wrapper soaked with blood and she had cold-clammy extremities.

Pulse rate= 135bpm, BP= 90 mmHg/ un-recordable diastolic, Heart sounds=S1S2 only, SPO2=98% in room air. Abdomen: Uterus 18wks size well contracted, no area of undue tenderness, liver, spleen not palpably enlarged and kidney were not ballotable. Vaginal examination revealed: Normal female external genitalia, there was active vaginal bleeding from the Left vulva, there was a huge left Vulva swelling measuring about 10cm by 8cm with ragged edges and fresh blood oozing at its base. No vaginal wall tear, cervical laceration or active uterine bleeding. Her RR=24bpm, chest=vesicular breath sounds bilaterally.

Assessment: Primary Postpartum hemorrhage secondary to huge vulva hematoma complicated by hypovolemia shock and severe anemia. Intravenous access was secured with two wide bore cannulas. 2-way Foley's catheter passed for input/output monitoring of urine (which drained about 80ml of concentrated urine). Her urgent packed cell volume was 14%, Platelets =184 x 10^3 /ml (145-500 x 10^3/ml), Neutr=6.2 x 10 3/uL(1.5-8 10 3/uL), Monocytes=5% (1-7 %), Basophil=0.5% (=< 3%), Eosinophil=2.9% (1-5%). EUCR: Na^+ =144mmol/L (142-152 mmol/L), K^+ =4.1 mmol/L (3.5-5.6mmol/L), Cl^- =103mmol/L (96-107 mmol/L), Cr= 66umol/L (50-132umol/L), Urea= 3.6mmol/L (2.5-5.8 mmol/L). Her blood group was O Rhesus positive, Genotype =AA, Retroviral screening, Hepatitis C virus and HBSAg were non-reactive. Urinalysis was negative for Glucose and protein. Bedside Abdominopelvic scan revealed Normal liver and spleen architecture. Kidneys in their normal locations and appeared normal. The uterus looks bulky but empty, no retained products of conception seen. No intramural mass seen, the adnexae were free. Minimal collection at the pouch of Douglas. Three units of blood were requested from the lab. She was resuscitated with two liters (2L) of Normal saline, and her vital signs two hours after resuscitation was Pulse rate=110mmHg, Blood pressure=110/60mmHg, HS=S1S2 only and RR=20cpm, SPO2=98%, chest clinically clear and she had made 90ml of urine over 2 hours. The bleeding vessel at the hematoma base was clamped with small artery forceps, first unit of fresh whole blood transfusion was commenced preoperatively and theatre booked for emergency vulva exploration under anesthesia.

Left vulvar exploration of the hematoma was done in theatre with intraoperative findings of: Vulvar hematoma of about 10cm x 8cm in diameter, Hyperemic vaginal portion of the vulvar with ragged edges, 600ml of clotted blood, active bleeding vulva vessels which were clamped and ligated, Estimated blood loss of about 700ml. Hemostasis adequately secured and the wound closed with vicyl 1 suture ensuring obliteration of the dead space, and the skin closed with vicryl 2 O suture. She was transfused 2 more units of whole blood intraoperative. Her immediate postoperative condition was satisfactory. She was placed on prophylactic antibiotics IV Amoxicillin clavulanic acid 1.2g 12 hourly for 48 hours, IV Metronidazole 500mg 8 hourly x 48hours, IV Pentazocine 30mg 6 hourly x 24 hrs.

Her first day postoperative was stable as she had no fresh complain and her vital signs were essentially within normal ranges. The surgical site was cleaned and dry. The postoperative packed cells volume was 22%. She was transfused with 3 additional packed cells on postop days 2, 3 and 4, under frusemide cover 40mg before and after transfusion, giving a total of 6 units of blood transfused. The post transfusion packed cell volume was 32%. Her medications were converted to oral tabs Diclofenac 50mg B.D x 7/7, Tabs Augmentin 625mg B.D x 7/7, Tabs Metronidazole 400mg TDS x 7/7, Tabs Fesolate 200mg TDS x 1/12, Tabs folic acid 5mg daily x 1/12. She was discharged home on 6th day postop and also advised on good perineal hygiene and Sitz bath twice daily for the next 7 days and was asked to return for follow up in 7 days' time.

Postnatal clinic: she was well and had no complaint. Wound site was healing well as the edema had resolved. She was also counseled on contraception and she opted for Implanon which she was offered. She was also counselled to together with her partner to resume coitus whenever it is adjudged to be more convenient for them.



FIG I: showing Left vulvar Hematoma



FIG II: showing the vulva following exploration and repair.

DISCUSSION

Postpartum vulvar hematoma is an uncommon but potentially life-threatening complication of vaginal delivery, resulting from injury to vulvovaginal vessels during childbirth. Although genital tract trauma is a recognized risk factor, hematomas may develop even without obvious perineal injury [9]. Significant concealed blood loss can occur within the compliant valval tissues, leading to profound anemia and hemorrhagic shock [10, 11], as was seen in the case of Mrs. K. I. The packed cell volume of 14% in our patient demonstrates the severity of blood loss and the importance of prompt assessment. This was done in this case although the patient presented late.

Management depends on the hematoma's size, progression and hemodynamic status. Conservative treatment is appropriate for small, non-expanding hematomas in stable patients, whereas large hematomas associated with hemodynamic instability require urgent surgical exploration and hemostasis [1, 13]. This was the case for Mrs. K. I who presented with a progressive/expanding huge vulvar hematoma in hemorrhagic shock on account of which we urgently called for help, resuscitated and she had emergency wound exploration in the theatre with findings as documented above. Resuscitation and blood transfusion are essential when severe blood loss has occurred. Selective arterial embolization may be considered when bleeding persists or surgical treatment fails, depending on availability and skills of the surgeon [12, 14].

This case highlights the importance of early recognition and timely referral from primary healthcare facilities. Limited emergency resources and delays in definitive treatment may worsen maternal outcomes [1, 16]. Mrs. K. I case was recognized late because it took over 5 hours before it was recognized referred, thus, she presented about six hours post-delivery with severe anemia and in

shock which led to several units of blood transfused. The patient's successful recovery and discharge on the 6th day demonstrate the potential for favorable outcomes following prompt resuscitation, surgical intervention and appropriate supportive care [15, 17].

CONCLUSION

Massive postpartum vulvar hematoma is a rare but potentially life-threatening complication of vaginal delivery that can rapidly progress to hemorrhagic shock. This case highlights the importance of early recognition, prompt resuscitation, timely surgical exploration, and adequate blood transfusion in preventing maternal morbidity and mortality. Strengthening emergency obstetric care, improving referral pathways, and ensuring access to blood products and surgical expertise at primary healthcare facilities are essential to optimizing maternal outcomes, particularly in resource-limited settings like ours.

PATIENT CONSENT

Written informed consent was obtained from the patient for publication of this case and the accompanying data. Patient identifiers have been removed.

REFERENCES

1. Tilahun T, Wakgari A, Legesse A, Oljira R. Postpartum spontaneous vulvar hematoma as a cause of maternal near miss: a case report and review of the literature. J Med Case Rep. 2022; 16:85. Doi: 10.1186/s13256-022-03281-2.
2. Oong GC, Eruo FU. Vulvar hematoma. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2023.
3. Anass E, et al. Post-partum hemorrhagic shock following puerperal hematoma. PAMJ Clin Med. 2020; 3:43. doi:10.11604/pamj-cm.2020.3.43.2310.
4. Takahashi H, et al. managing vulvovaginal hematoma by arterial embolization as first-line hemostatic therapy. Taiwan J Obstet Gynecol. 2017; 56(2):224-6. doi:10.1016/j.tjog.2017.02.004.
5. Tseng JY, Lin IC, Lin JH, Chang CM, Chao WT, Wang PH. Optimal approach for management of postpartum vulva hematoma: report of three cases. Taiwan J Obstet Gynecol. 2020; 59(5):780-3. doi:10.1016/j.tjog.2020.07.030.
6. Heffner LJ, Mennuti MT, Rudoff JC, McLean GK. Primary management of postpartum vulvovaginal hematomas by angiographic embolization. Am J Perinatol. 1985; 2(3):204-7. Doi: 10.1055/s-2007-999949.
7. Onyeodi I, Izah A, Ukpeteru F. Post-partum vulva hematoma management in a low resource setting: a case report. Trop J Obstet Gynaecol. 2024.
8. Bienstman-Pailleux J, Huissoud C, Dubernard G, Rudigoz RC. Management of puerperal hematomas. J Gynecol Obstet Biol Reprod (Paris). 2009; 38(3):203-8. doi:10.1016/j.jgyn.2008.10.002.
9. World Health Organization. WHO recommendations for the prevention and treatment of postpartum haemorrhage. Geneva: World Health Organization; 2012.
10. American College of Obstetricians and Gynecologists. Practice bulletin no. 183: postpartum hemorrhage. Obstet Gynecol. 2017; 130(4):e168-86.
11. Heffner LJ, Mennuti MT, Rudoff JC, McLean GK. Primary management of postpartum vulvovaginal hematomas by angiographic embolization. Am J Perinatol. 1985; 2(3):204-7. Doi: 10.1055/s-2007-999949.
12. Winkelman J, Murphy K, Booth C. Delayed presentation of a non-resorbing postpartum vulvar hematoma: a case report. Case Rep Womens Health. 2023; 38:e00518. doi:10.1016/j.crwh.2023.e00518.
13. Postpartum angiographic embolization for vulvovaginal hematoma: a report of two cases. PubMed. 2001. PMID: 11209635.
14. American College of Obstetricians and Gynecologists. Practice bulletin No. 183: postpartum hemorrhage. Obstet Gynecol. 2017; 130(4):e168-86.
15. World Health Organization. WHO recommendations for the prevention and treatment of postpartum haemorrhage. Geneva: World Health Organization; 2012.