

Case Report**SPONTANEOUS VULVAR HEMATOMA IN PREGNANCY: A CASE REPORT****Salina Shrestha, Jyoti Bhaju Lama, Sujata Khadka Neupane, Suruchi Mahato, Saraswati Gurungr**Department of Obstetrics and Gynaecology, B&C Medical college Teaching Hospital and Research Center, Jhapa, Nepal**Submitted: 10th - October-2024, Revised:6th-November-2024, Accepted: 20th – November- 2024***ABSTRACT**

Spontaneous vulvar hematoma is a rare occurrence during pregnancy but can be seen as an uncommon complication of childbirth or may present after traumatic injury. Here we present a case of a 19-year-old female with a vulvar hematoma who presented with complaints of vulvar swelling and pain with no preceding traumatic event at 32 weeks of pregnancy. The diagnosis was made through physical examination and radiological evaluation. Due to increasing size and unbearable pain, surgical evacuation of the hematoma along with blood transfusion was done. The postoperative period was uneventful, vulval swelling resolved, and she was discharged on the 4th postoperative day.

Keywords: Pregnancy, Spontaneous, Vulvar hematoma**INTRODUCTION**

A vulvar hematoma is the accumulation of blood inside the vulva. Vulvar hematomas are uncommon, with an incidence in the obstetric population ranging from 1 in 300 to 1 in 1500 deliveries¹⁻³. Most hematomas occur as a rare complication of childbirth, but other causes can include road traffic accidents, sexual trauma, domestic violence, and in some cases it may be spontaneous^{1,4,5}. If left undiagnosed and untreated, a hematoma can be fatal. Treatment options can vary between conservative or surgical, depending on size and progression of hematoma. Both management options have good outcomes⁶. The current case discusses the management of a spontaneous vulvar hematoma after unsuccessful conservative treatment.

CASE REPORT

A 19-year-old primigravida at 32 weeks of gestation was referred to the Emergency Department of B & C

Hospital and Research Center on 2024/5/17 with a complaint of sudden onset swelling over the perineal region for the past 3 days. The swelling was progressive in nature and was associated with pain, discomfort, whitish per vaginal discharge, and difficulty emptying her bladder. There was no history of trauma, fever, sexual intercourse, PV bleeding, lower abdominal pain, or any bleeding disorder.

Upon examination, the patient appeared to be normal during the general and systemic examination. Pallor was observed, but there were no other signs of icterus, cyanosis, lymphadenopathy, or dehydration. Local examination of the perineal region revealed a mass of approximately 8*4 cm over the right labia majora. The mass was oval in shape, had a smooth surface, and showed bluish discoloration of the skin with mucoid per vaginal discharge. Upon palpation, the mass was firm and tender with no local rise in temperature. During the per abdominal examination, the height of uterus corresponded to 30 weeks of gestation with a



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longitudinal lie, cephalic presentation, and a fetal heart rate of 142 beats per minute with no contractions.

A vulval hematoma was diagnosed, for which conservative management with analgesics, antibiotics, magnesium sulfate dressing along with ice pack was done in another center. However, the size of the hematoma continued to increase with persistent pain, requiring surgical intervention for which she was referred. Ultrasonography was done to rule out any other hematoma and to assess fetal status. The ultrasound revealed no other pelvic hematoma and a single live fetus at 32 weeks of gestation. Blood investigations showed a hemoglobin level of 8.8 grams per deciliter, with other investigations and coagulation profile within normal limits. Under saddle anesthesia, most dependent part of hematoma was identified, then a nick was made and the vulval hematoma was evacuated, approximately 200 grams of clots were removed, hemostasis was secured, and the hematoma site was packed and an indwelling catheter was left in the bladder and the patient was shifted to the postoperative ward. Broad-spectrum antibiotics and analgesics were continued, and one unit of whole blood was transfused postoperatively. Her post-transfusion hemoglobin level was 9 grams per deciliter. Pack was removed after 24 hours. She was discharged on 4th postoperative day and her postoperative period was uneventful.



Figure 1: Vulval hematoma involving right labia majora at the time of presentation



Figure 2: Identification of the most dependent part of hematoma before incision

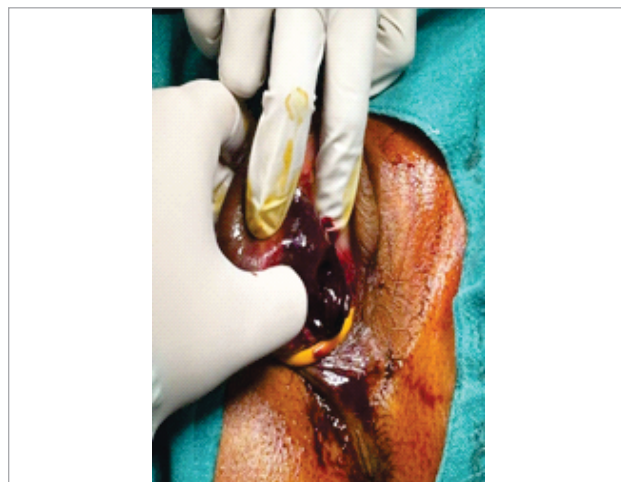


Figure 3: Intraoperative image of blood clot evacuation

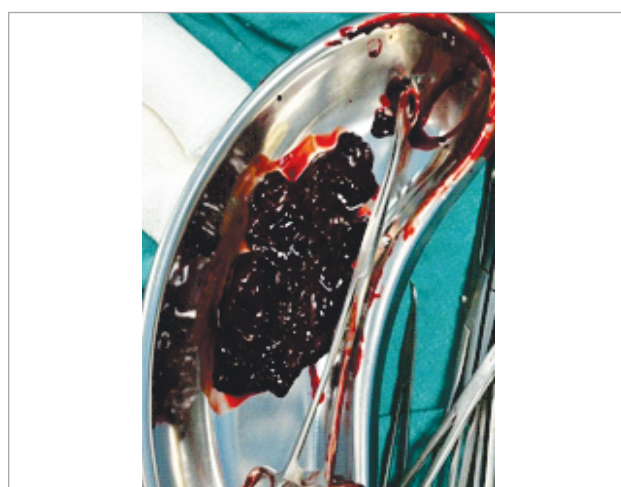


Figure 4: Evacuated clots after hematoma drainage

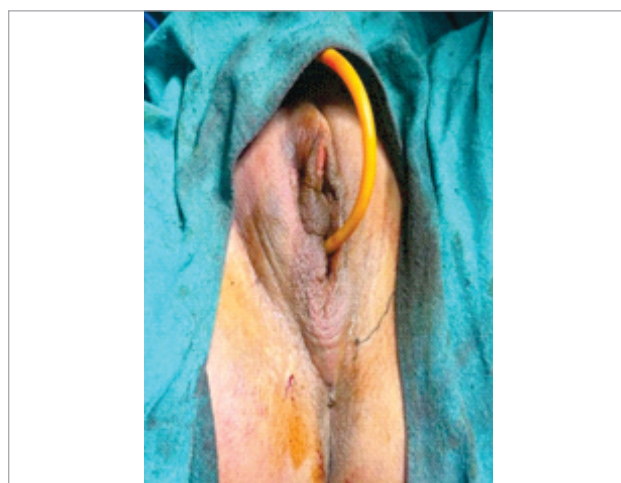


Figure 5: Vulva after hematoma evacuation

DISCUSSION

This was 32 weeks pregnant women who developed vulvar hematoma without any preceding trauma or any antecedent cause. Blood supply to vulva comes from external and internal pudendal arteries. A spontaneous rupture of the labial branches of internal

puddental artery may be linked to aneurysms, atherosclerosis, or clotting disorders, leading to a vulvar hematoma^{2,7}. Approximately 87% of hematoma occur after the repair of episiotomies or vaginal lacerations⁴. The increased venous pressure caused by the rising weight of the uterus during pregnancy can lead to the development of varicose veins in the vasculature. Vulval hematoma can be treated either conservatively or with surgery. In other study related to vulval hematoma like, Propst et al found that conservative management was more effective than surgery^{4,8} while Benrubi et al noted that patients treated conservatively had longer hospital stays and required more future procedures^{9,10}. Kanai et al. reported that surgery is necessary for managing a large hematoma if its diameter exceeds 5 cm. They also noted that the patient achieved complete recovery without experiencing any complications^{10,11}. Surgical options available include evacuation under anesthesia (EUA) as performed in our case, evacuation with hemostatic stitch application, and arterial embolization^{1,6}. In the discussed case, the patient was initially managed conservatively but due to the increasing size of the

hematoma causing pain and functional disability, surgical treatment was recommended. While there is limited evidence regarding packing of the hematoma cavity, it was utilized in this case. Prompt diagnosis and management of hematomas is essential to prevent their extension to other areas, and to avoid the development of cardiovascular collapse which can lead to serious maternal morbidity and mortality. Therefore, timely recognition and treatment of these conditions is crucial.

CONCLUSION

Spontaneous vulval hematoma during pregnancy is a rare complication that requires prompt diagnosis and treatment. Due to lack of response to conservative management, surgical intervention was done, leading to a successful outcome, with the patient being able to continue her pregnancy without any complications.

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