**CASE REPORT** 





# Spontaneous Vulvar Hematoma in Labor: A Rare Presentation

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#### Abstract

Vulvar hematoma during pregnancy is a rare event. Usually they develop due to trauma post-delivery. Rarely such hematomas appear spontaneously intrapartum without any underlying cause. A 25-year-old primigravida at 34 weeks with twin pregnancy was found to have developed spontaneously a vulvar hematoma intrapartum. Prompt recognition and timely drainage of the hematoma prevented any untoward complication and led to quick recovery.

Keywords Vulvar hematomas · Spontaneous · Pregnancy induced hypertension · Intrapartum hematomas · Twin pregnancy

## Introduction

Vulvar hematoma during pregnancy is a rare event. Usually they develop due to trauma post-delivery. Rarely such hematomas appear spontaneously intrapartum without any underlying cause. We present a rare case of spontaneous intrapartum hematoma.

## Case

A 25-year-old primigravida at 34 weeks gestation with twin pregnancy came to the emergency department of our Hospital. She had complaint of pain in abdomen since last night and history of leaking per vaginum since morning.

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There was no history of bleeding per vaginum or any other complaints. All her antenatal investigations were normal and ultrasound done earlier showed diamniotic dichorionic twins. On examination, her general condition was fair with pulse 90/minute and blood pressure 150/90 mm Hg. Her urine albumin was 2+on dipstick. Her cardiovascular system was normal, and bilateral chest was clear with normal breath sounds. On per abdominal examination, uterus was overdistended with abdominal wall edema. Mild uterine contractions were present, and both fetal heart rates were normal. On per vaginal examination, cervix was 3 cm dilated with good effacement, membranes were absent and presenting part was vertex. Patient was given injection dexamethasone. She went in to spontaneous labor. Her progress of labor was normal. After few hours, it was noticed that she suddenly developed a 3 cm x 4 cm right-sided vulvar hematoma. At that time, her vitals and fetal hearts were normal. On per vaginal examination, cervix was fully dilated and fully effaced. After half an hour, the hematoma had increased up to 11 cm × 8 cm approximately. Even after half an hour of waiting, the head did not descent and one fetus developed irregular fetal heart. She was then taken up for emergency caesarean section. On caesarean section a 1.9 kg male baby and 2.1 kg female baby were delivered. Per op uterus was normal and rest of pelvis was normal with no pelvic hematoma or collection. Vulval hematoma was drained vaginally. Around 300 cc of clots was removed and hemostasis was achieved. Post op period was uneventful and she was discharged on day 7.

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#### Discussion

Spontaneous vulvar hematoma in pregnancy is a rare event. Incidence varies between 1 in 500 and 12,495 deliveries [1]. And those occurring intrapartum is a rarity. Only 2 to 3 cases have been reported so far in literature. Risk factors [2] are nulliparity, age > 29 years, birth weight > 4.5kgs, instrumental delivery, prolonged labor, pre-eclampsia, genital tract varicosities, bleeding diathesis, precipitate delivery, etc.

The vulva receives its blood supply from two external pudendal and one internal pudendal artery on each side. The injury to labial branches of the internal pudendal artery can cause vulvar hematomas [3]. Since the subcutaneous tissue in the vagina is quite pliable, the injury to these vessels at times can cause severe hemorrhage and lead to the formation of hematoma in the concealed space. Delay in recognition and management can result in it extending to supralevator region with reperitoneal extension leading to serious maternal morbidity. Timely recognition and treatment is hence important. Hematomas that are greater than 5 cm are usually drained surgically. Postoperatively to prevent infection and pain, broad-spectrum antibiotics and analgesics should be given. Close observation is also required to see that it does not increase in size again. Prompt intervention of hematoma results in better patient outcome, less scarring, postpartum pain, and dyspareunia [1].

In our case, the hematoma occurred spontaneously during labor without any underlying cause. Our patient had twin pregnancy and had developed pre-eclampsia, which are risk factors for the development of spontaneous vulvar hematoma. It is observed that most of the spontaneous vulvar hematomas were right-sided vulvar hematomas as ours. This may be due to dextro rotation of uterus.

This case is reported in view of its rarity (Fig. 1).

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#### Declarations

Conflict of interest Authors declare that they have no conflict of interest.

**Ethical standards** This article does not contain any study with human participants performed by any of the authors.

**Informed consent** Informed consent was obtained from individual participant included in the case report.

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## About the Author



Fig. 1 Vulvar hematoma involving right labia majora



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