

CASE REPORT



Postpartum hematoma of the Labia Majora: A rare case report and review of recommendations

Oumayma Yaich, Montacer Hafsi, Asma Zouaghi and Safa Azzouzi

Department of gynecology and obstetrics Kasserine

ABSTRACT

Introduction: Postpartum vulvar hematomas are rare but potentially severe complications that can occur without evident risk factors, impacting maternal prognosis.

Methods: We report the case of a 28-year-old multiparous woman (P7G7) who presented on the 5th day postpartum with a painful hematoma of the right labia majora following an unassisted vaginal delivery at home without instrumentation or episiotomy. Clinical examination and perineal ultrasound confirmed a moderate-sized encapsulated hematoma, managed conservatively with symptomatic treatment, prophylactic antibiotics, and close monitoring.

Results: The hematoma resolved nearly completely by the 15th day postpartum, with no contralateral involvement. The patient resumed normal activities without complications.

Discussion: This case highlights the importance of rapid diagnosis and individualized management to minimize complications. We discuss pathophysiology, therapeutic options, and recommendations based on current literature.

Conclusion: Early diagnosis and conservative management are key for moderate vulvar hematomas, emphasizing the need for structured postpartum follow-up.

KEY WORDS

Postpartum vulvar hematoma; Labia Majora; Perineal ultrasound; Conservative management; Obstetric complication

ARTICLE HISTORY

Received 09 May 2025;
Revised 30 May 2025;
Accepted 06 June 2025

Introduction

Postpartum vulvar and perineal complications, though often considered benign, can significantly affect patients physically and psychologically. Vulvar hematomas are rare but serious, with an incidence of less than 1 per 1,000 vaginal deliveries, potentially underreported due to inadequate documentation [1]. They typically result from the rupture of subcutaneous veins or arteries, often triggered by obstetric trauma or coagulation disorders. If undetected or mismanaged, they can lead to infection, tissue necrosis, or vascular and nerve compression [2]. This case report details a rare, late-onset vulvar hematoma presenting on the 5th day postpartum, exploring optimal diagnostic and therapeutic strategies based on current evidence.

Case Presentation

A 28-year-old multiparous woman (P7G7) with no significant medical or surgical history delivered vaginally at home, spontaneously giving birth to a 3.2 kg newborn without complications. No perineal trauma, instrumentation, or episiotomy was reported.

On the 5th day postpartum, the patient presented to the emergency department with intense, throbbing pain in the right perineal region, reporting increasing discomfort while walking and sitting, accompanied by visible swelling. No systemic symptoms (e.g., fever, severe fatigue) were noted.

Physical examination revealed a firm, tense swelling of the right labia majora, approximately 6 cm in diameter, with blue-purple discoloration of the overlying skin (Figure 1).

The left labia majora was examined and showed no swelling, discoloration, or tenderness, ruling out contralateral involvement. There was no fluctuation or purulent discharge in the right-sided hematoma (Figure 2), and palpation elicited marked pain without signs of necrosis or active bleeding.

Perineal ultrasound confirmed an encapsulated subcutaneous hematoma measuring 6 × 4 cm in the right labia majora, with no deep extension or communication with pelvic tissues. Laboratory tests showed a hemoglobin level of 10.1 g/dL, indicating moderate blood loss.

The patient was admitted for close monitoring due to concerns about potential lesion expansion. A conservative approach was chosen given the absence of rapid progression or compression of surrounding structures. Treatment included paracetamol (1 g every 6 hours) and nonsteroidal anti-inflammatory drugs (NSAIDs) for pain relief, ice application every 3 hours to reduce inflammation and prevent hematoma growth, a semi-reclined position to minimize perineal pressure, and twice-daily vaginal cleansing. Prophylactic amoxicillin-clavulanic acid was initiated to prevent secondary infection.

Regular clinical assessments monitored the hematoma's evolution. Within 72 hours, swelling and pain decreased noticeably. The patient was discharged with home follow-up instructions. By the 15th day postpartum, examination confirmed near-complete hematoma resolution, with minimal residual swelling and

*Correspondence: Mr. Montacer Hafsi, Department of gynecology and obstetrics Kasserine, e-mail: Montacer.hafsi@etudiant-fmt.utm.tn

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no contralateral involvement. The patient resumed normal daily activities uneventfully.



Figure 1. Clinical View Showing Blue-Purple Discoloration of the Labia Majora Hematoma.



Figure 2. Examination Confirming Absence of Fluctuation or Purulent Discharge

Discussions

Postpartum vulvar hematomas typically arise from vessel injury during delivery, often within 48 hours. Late-onset cases, as seen here on day 5, may be linked to gradual pelvic pressure increases during postpartum recovery [1, 3]. Hematomas commonly develop in the anterior and posterior urogenital triangles, confined by resistant fascial layers (e.g., Colles' fascia, urogenital diaphragm) that limit deep spread [2]. In this case, the hematoma presented as a blue-purple mass in the right labia majora, with no contralateral involvement, and was self-limiting, consistent with literature [4].

Management depends on hematoma size and progression. Moderate hematomas (<8 cm), like this patient's, often resolve with conservative treatment (analgesics, ice, rest), as demonstrated by the successful outcome here [5]. Large hematomas (>8 cm) or those with compression signs (ischemia, severe pain) may require surgical drainage or embolization in unstable cases [6]. Conservative management can promote spontaneous hemostasis by maintaining hematoma pressure to tamponade bleeding vessels, avoiding rebleeding risks associated with surgical evacuation [7]. The absence of

contralateral involvement in this case further supported a conservative approach, as bilateral hematomas may indicate more extensive vascular injury requiring intervention [8].

The psychological impact of vulvar hematomas, including prolonged pain and delayed recovery, underscores the need for empathetic, holistic care. This case's success with conservative management, supported by ultrasound to rule out deep extension, reinforces its efficacy for stable, moderate hematomas.

Conclusions

This case illustrates a rare, late-onset postpartum vulvar hematoma of the right labia majora, with no contralateral involvement. Early diagnosis via clinical evaluation and perineal ultrasound, coupled with conservative management, was key to achieving near-complete resolution by day 15 postpartum. Structured postpartum follow-up and heightened awareness among healthcare providers are essential to optimize outcomes. Further consensus on management protocols is needed to standardize care for this uncommon condition.

Disclosure Statement

Consent for publication

Written informed consent was obtained from the patient for publication and accompanying images. Consent forms are available for review by the Editor-in-Chief.

Availability of supporting data

Not applicable.

Acknowledgements

None.

Ethical approval

Not required per institutional policy for case reports.

Competing interests

All authors declare no conflicts of interest.

Funding

Not applicable.

Author contributions

All authors read and approved the final manuscript.

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