Spontaneous vulvar hematoma – A rare complication in the antepartum period

Rajeshwari Kalyanaraman, MBBS; Nadia M Kianfar, MS-3; Veronica Maria Pimentel, MD
Maternal Fetal Medicine, St Francis Hospital and Medical Center

Vulvar hematoma is a common obstetrical complication with an incidence ranging from 1:300 to 1:1000 deliveries. Risk factors in the puerperal period include nulliparity, prolonged second stage, instrumental delivery, and episiotomy. Spontaneous pre-labor vulvar hematomas are rare and only two cases have been reported in the literature.

### Introduction

Vulvar hematoma is a common obstetrical complication with an incidence ranging from 1:300 to 1:1000 deliveries. Risk factors in the puerperal period include nulliparity, prolonged second stage, instrumental delivery, and episiotomy. Spontaneous pre-labor vulvar hematomas are rare and only two cases have been reported in the literature.

### Case presentation

A 24-year-old obese primigravid at 33 weeks with a history of gestational diabetes diet-controlled presented to triage with painless vaginal bleeding. Except for history of excessive bleeding with piercing, she denied traumatic injury, recent intercourse, infection or personal/family history of a bleeding disorder.

Physical exam was notable for 12x6 cm area of fluctuant edematous right labial mass, with spontaneous drainage of small amount of purulent material (Figure 1). One hour later, expansion of the mass was noted beyond the marked margins. Surgical management was expedited. Incision and evacuation of 30 ml of blood and clots was performed (Figure 2).

Intravenous (IV) vancomycin & cefoxitin were initiated prior to surgery due to concerns for abscess. Post-surgery, patient was transitioned to oral antibiotics for seven days. Her complete blood count and coagulation panel were normal. She remained afebrile and hemodynamically stable. The fetus had a daily reactive NST. She was discharged on hospital day (HD 2) with an uncomplicated course, except for treatment of vulvar candidiasis.

### Table 1

<table>
<thead>
<tr>
<th>Gravida</th>
<th>Gestational age</th>
<th>Patient age</th>
<th>Size of hematoma</th>
<th>Operative day</th>
<th>Imaging performed</th>
<th>Presenting symptom</th>
<th>Work-up</th>
<th>Medications</th>
<th>Starting Hct</th>
<th>Prenatal course</th>
<th>Delivery course/outcome</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>G1P0</td>
<td>33w3d</td>
<td>24</td>
<td>12x7cm</td>
<td>HD1</td>
<td>None</td>
<td>Vaginal bleeding</td>
<td>CBC, coagulation studies</td>
<td>Antibiotics</td>
<td>40.2%</td>
<td>GDMA1</td>
<td>Uncomplicated vaginal delivery</td>
<td>This case has many similarities to the 2012 case. Both had good outcomes. In contrast, the 1957 patient presented with several days of symptoms and with significant hemodynamic instability, leading to maternal and fetal deaths. Management of small vulvar hematomas is conservative with icepacks, analgesia, and antibiotics. Surgical management is required in vulvar hematomas greater than 5cm, rapidly expanding, causing extreme pain or compressive symptoms, and if hemodynamically unstable. Our case highlights that vulvar hematomas can present pre-labor spontaneously, expand quickly and need prompt treatment to avoid hemodynamic instability and eventual maternal and fetal morbidity as in the case from 1957.</td>
</tr>
</tbody>
</table>

### Conclusion

This case has many similarities to the 2012 case. Both had good outcomes. In contrast, the 1957 patient presented with several days of symptoms and with significant hemodynamic instability, leading to maternal and fetal deaths.

Management of small vulvar hematomas is conservative with icepacks, analgesia, and antibiotics. Surgical management is required in vulvar hematomas greater than 5cm, rapidly expanding, causing extreme pain or compressive symptoms, and if hemodynamically unstable.

Our case highlights that vulvar hematomas can present pre-labor spontaneously, expand quickly and need prompt treatment to avoid hemodynamic instability and eventual maternal and fetal morbidity as in the case from 1957.