

DOI: <https://dx.doi.org/10.18203/2320-1770.ijrcog20254304>

## Case Report

# A rare gynaecological emergency: non-obstetric vulvar hematoma

Sugandha Goel\*, Bina Goel, Neha Agrawal, Maitri Modh

Department of Obstetrics and Gynecology, Kamla Nagar Hospital, Jodhpur, Rajasthan, India

**Received:** 27 October 2025

**Revised:** 06 December 2025

**Accepted:** 08 December 2025

### \*Correspondence:

Dr. Sugandha Goel,

E-mail: goelsurg1@gmail.com

**Copyright:** © the author(s), publisher and licensee Medip Academy. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

## ABSTRACT

Injuries of female genital tract accounts for 0.8% of gynecological admissions. Non obstetric vulvar hematoma typically results from blunt trauma to the genitalia. Although they are small and pose little threat but at times become large to cause hemodynamic instability. Herein, we report a case of 32-year-old woman with complaint of swelling and severe pain at vulva due to injury by a cow. Examination revealed a hematoma on left labia majora of size 10×8 cm. Incision and drainage of swelling done at left mucocutaneous junction. Blood clots of approximately 500 cc were removed. Postoperative follow-up indicated significant symptomatic improvement and restoration of normal vulval anatomy. Timely intervention is important in vulvar hematomas. In case of minor injuries conservative approach may work but in large hematoma surgery is required to drain the hematoma.

**Keywords:** Non obstetric vulvar hematoma, Hemodynamic instability, Incision and drainage, Conservative approach

## INTRODUCTION

A vulvar hematoma is a collection of blood beneath an intact epidermis and presents as swollen fluctuant lump.<sup>1</sup> It is usually seen in obstetric population following repair of episiotomies and birth related soft tissue injuries and rarely seen in non-obstetric population.<sup>2</sup> Due to the abundant blood supply and the lack of valves in the perineal veins, the likelihood of significant hematomas is high.<sup>3</sup> In this report, we are reporting a case of 32-year-old woman with complaint of swelling and pain at vulva due to injury by a cow treated by surgical management.

## CASE REPORT

A 32-year-old woman brought on wheelchair to OPD clinic of Kamla Nagar Hospital with complaint of swelling and severe pain at vulva for 6 hours due to injury by a cow. There was no history of sexual trauma. Her menstrual cycle was regular, and last menses was 10 days back.

On physical examination: pulse was 88/min, blood pressure was 100/70 mmHg, respiratory rate-18/min, temperature 98.60 F per abdomen was soft, local examination revealed a hematoma on left labia majora of size 10×8 cm which was bluish in color and tender, overlying skin appears stretched and subcutaneous tissue was exposed over it (Figure 1).

On Internal examination vagina and cervix were found to be normal, so the provisional diagnosis of left vulval hematoma was made.

Preoperative laboratory test showed Hb 10.9 g% with normal white blood cells (WBC) and platelet count, Serological test were negative, prophylactic antibiotics were given and patient shifted to OT for drainage of hematoma. Under spinal anesthesia, incision given over most prominent area of swelling at left mucocutaneous junction.

Blood clots of approximately 500 cc were removed, cavities were irrigated with saline, washed with betadine and bleeding points were secured. Dead space was obliterated using vicryl 2-0 suture (Figure 2). Haemostasis was achieved. Examination of urethra, vagina and rectum was done to exclude any extended injuries. Foleys catheter inserted in urinary bladder (Figure 3). Patient was discharged satisfactorily on second day postoperatively with relief of symptoms.



**Figure 1: Hematoma on left labia majora size 10x8 cm.**



**Figure 2: Blood clots removed from hematoma.**

### Outcome

Following drainage of vulvar hematoma patient relieved of symptoms rapidly. The 32-year-old patient resumed after 1 week, returning to a regular normal activity. After 2 weeks patient had no complaints and on examination inflammation at mucocutaneous junction got subsided, vulva appeared symmetric. Thus, prompt detection and

early treatment are necessary to reduce the pain, accelerate the recovery and prevent secondary infection and necrosis.



**Figure 3: Repair of mucocutaneous junction.**

### DISCUSSION

The vulva is made up of loose connective tissue and smooth muscle, supplied by branches of the pudendal artery, a branch of the internal iliac artery.

The injury to labial branches of the internal pudendal artery, in the superficial fascia of the anterior and posterior pelvic triangle may cause significant vulvar hematomas.<sup>4</sup> The swelling in such cases generally follows the cleavage planes and may become large sized since the subcutaneous tissue offers low resistance.

If bleeding takes place, beneath the pelvic fascia and levator ani, the latter is separated from the perineum.<sup>5</sup> On the other hand, if the hematoma is on the pelvic fascia, it can spread below Poupert's ligament and continue retroperitoneally to the renal fossae.<sup>5</sup>

Conservative management can yield good results in absence of hematoma expansion. It is associated with longer stay in hospital, an increased need for antibiotics and blood transfusion, and greater subsequent operative interventions.<sup>6</sup> In our case hematoma was large and causing intense pain so evacuation was necessary to prevent long term effect like pressure necrosis and infection.

### CONCLUSION

Non-obstetric vulvar hematomas are rare pathology in which damage of adjacent organs must be ruled out. Most cases can be managed conservatively, but if the pain does not disappear and if there is suspicion of an expanding hematoma, it will be necessary to examine the area under anaesthesia and drain to reduce the pain, accelerate the recovery and prevent secondary infection and necrosis. In our case hematoma was large and causing intense pain so evacuation was necessary. Prompt care greatly reduces the risk of complications and extended hospitalization in low-resource settings.

*Funding: No funding sources*

*Conflict of interest: None declared*

*Ethical approval: Not required*

## REFERENCES

1. Hong HR. A case of vulvar haematoma with rupture of the pudendal artery. *Obstet Gynecol Sci.* 2014;57(2):168-71.
2. Virgili A, Bianchi A, Mollica G, Corazza M. Serious hematoma of the vulva from a bicycle accident: a case report. *J Reprod Med.* 2000;45:662.
3. Gianini GD, Method MW, Christman JE. Traumatic vulvar hematomas. Assessing and treating nonobstetric patients. *Postgrad Med.* 1991;89(4):115-8.
4. AB Schmidt, AW Lykkebo. Post-coital genital injury in healthy women: a review. *Clin Anat.* 2015;28(3):331-8.
5. M Vermesh, G Deppe, E Zbella. Non-puerperal traumatic vulvar hematoma. *Int J Gynaecol Obstet.* 1984;22(3):217-9.
6. AM Propst, JM Thorp. Traumatic vulvar hematomas: conservative versus surgical management. *South Med J.* 1998;19(2):144-6.

**Cite this article as:** Goel S, Goel B, Agrawal N, Modh M. A rare gynaecological emergency: non-obstetric vulvar hematoma. *Int J Reprod Contracept Obstet Gynecol* 2026;15:322-4.