# Giant vulvar hematoma during pregnancy after sexual intercourse: A case report

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**Abstract.** Lower genital tract hematomas are rarely seen in clinical practice. Although one can frequently see vulvar hematomas when delivering a baby, there are few reports on vulvar hematomas in pregnant patients. Here the authors present a case on a giant vulvar hematoma in a pregnant patient that developed after usual sexual intercourse. Due to the enlarging hematoma and unbearable pain, an operation was offered to the patient. Under general anesthesia, a 5-cm vertical incision was made on the thinnest portion of the vaginal mucosa, and the hematoma was evacuated. As the case reported here is very uncommon, the usual recommendations about sexual intercourse during pregnancy should not change.

Key words: Pregnancy, sexual intercourse, vulvar hematoma

## 1. Introduction

Hematomas occurring in the lower genital tract are rarely seen in the obstetrics and gynecology practice. Vaginal delivery is the most common etiologic factor of lower genital tract hematomas in the peripartum period, with a known incidence  $\sim 1$  in 300-1000 deliveries (1-4). Traffic accidents, sexual intercourse and rape are other cited etiologies. This report presents a case of a giant vulvar hematoma in a pregnant patient that developed after sexual intercourse.

## 2. Case

A 30-year old patient (G2P1) at 32 weeks pregnant was referred to our emergency clinic with a complaint of vulvar swelling, which was accompanied with bleeding and unbearable pain immediately following usual sexual intercourse. The patient denied any history of interpersonal violence in her marriage. She denied any

\*Correspondence: Dr. Servet Hacivelioglu Department of Obstetrics and Gynecology,Canakkale Onsekiz Mart University, Faculty of Medicine, Canakkale, Turkey E-mail: servetozden@comu.edu.tr Mobile phone: +905336656349 Fax number: +90 286 263 59 56 Received: 12.05.2011 Accepted: 21.06.2011 aggression, coercion, or instrumentation with other objects by her husband. There was no, evidence of any history of bleeding diathesis. The complaint of vulvar swelling and unbearable pain began 15 minutes after intercourse.

On physical examination, the patient was anxious and complained of severe pain. Her vital signs were as follows: blood pressure - 100/60 mmHg; temperature 36.7° C; heart rate 88 beats per minute; respiration 17 breaths per minute. There was no abdominal tenderness or rebound. The distance between the upper part of the uterine fundus and the pubic bone was 31 cm. On gynecological examination, an ~10 x 15 x 15 cm hematoma on the left side of the vulva, not extending beyond the midline, was observed. The skin and mucosa covering the hematoma was extremely taut, tender and edematous. There was an oozing bleed in the vaginal mucosa (Fig. 1). Obstetric ultrasonography revealed a live fetus with appropriate measurements of fetal biometry for gestational age. Laboratory assessment showed hemoglobin at 7.4 g/dL and hematocrit at 23%. A bleeding diathesis work-up was performed and yielded no abnormal findings. An operation was offered to the patient due to the enlarging hematoma and unbearable pain.

Under general anesthesia, a 5-cm vertical incision was made on the thinnest portion of the vaginal mucosa and the hematoma was evacuated.



Fig. 1. Vulvar hematoma during pregnancy.



Fig. 2. The view seen after surgical drainage of the hematoma.

Within the cavity, multiple bleeding areas were present, and hemostasis was maintained by suturing with polyglactin No: 0 (Vicryl®). A drain was placed in the cavity. The skin of the incision was sutured by polyglactin No: 2-0 (Vicryl®). Since a periuretral edema was also present, a foley catheter was inserted for urine drainage. A tight bandage was applied over the wound area in order to obtain further hemostasis, and the operation was terminated (Fig. 2). Two units of packed red blood cells were given perioperatively in order to correct the patient's acute anemia. The patient was discharged on the second day following the operation without any complications.

At term, a cesarean section was performed and the patient delivered a healthy baby with an Apgar score of 8 and 10 in the first and fifth minutes, respectively.

## 3. Discussion

In this case, an acute enlarging vulvar hematoma occurred during pregnancy after sexual intercourse was presented. In the literature, there were three treatments for vulvar hematomas: surgical management, conservative and arterial embolization (5-6). We offered surgical treatment to the patient because of unbearable pain and the enlarging hematoma.

The occurrence of hematomas during delivery is usually thought to be caused by small vessel or capillary ruptures and to be associated with increased blood flow through the lower genital areas (7). In our patient, a history with neither vulvar varices nor visible varicose changes on examination suggest traumatic ruptures of deep vulvar varicose veins during sexual intercourse.

Vulvar hematomas usually result from traumas such as traffic accidents, sexual intercourse (consensual or by force), falls, and bicycle accidents (8-10). One study studied consensual coital injuries in nonpregnant women (11) and detected vulvar hematomas (9%), vulvar lacerations (30%), vaginal wall lacerations (48%), and other injuries such as broad ligament hematoma, ruptured ovarian cyst, posterior fornix perforation with secondary peritonitis, and a ruptured ectopic pregnancy (13%). In another study of nonpregnant women, the incidence of lower genital tract trauma was 0.8% in all gynecologic emergencies, with 22% of those traumas related to vulvar hematomas (12).

There are few reports on the management of vulvar hematomas during pregnancy following sexual intercourse. We found only two cases of a vulvar hematoma developing during pregnancy, with those reports dating back to 1957 and 1965 (13-14). Additionally, Kurdoglu *et al.* recently reported a case describing puerperal vulvar hematoma that was developed after a vaginal birth (15). Since the hematoma was life threatening, the authors managed the case surgically. They recommended surgical treatment in case of life threatening hematomas.

Although some authors suggested that obstetric vulvar hematomas could be managed conservatively (7), surgical drainage reduces prolonged morbidity and hospital stay (16) and may save the patient's life (15).

Since the incidence of lower genital tract hematomas is very low in pregnancy, there are no prospective randomized studies in the literature related to route of delivery and perinatal outcome in these patients. We preferred an abdominal route in our case because of the possible rebleeding risk of the vessels in the hematoma cavity during vaginal delivery.

In conclusion, unless there are gestational risks (like abortion, preterm birth or vaginal bleeding, etc.), sexual intercourse is generally allowed throughout pregnancy. As the case reported here is very uncommon, the usual recommendations about sexual intercourse during pregnancy should not be changed. But patients with vulvar varices may require additional caution while pregnant.

# References

- 1. Cheung TH, Chang A. Puerperal haematomas. Asia Oceania J Obstet Gynaecol 1991; 17: 119-123.
- 2. Zahn CM, Yeomans ER. Postpartum hemorrhage: placenta accreata, uterine inversion, and puerperal hematomas. Clin Obstet Gynecol 1990; 33: 422-431.
- 3. Sheikh GN. Perinatal genital hematomas. Obstet Gynecol 1971; 38: 571-575.
- Pieri RJ. Pelvic hematomas associated with pregnancy. Obstet Gynecol 1958; 12: 249-258.
- Benrubi G, Neuman C, Nuss RC, Thompson RJ. Vulvar and vaginal hematomas: a retrospective study of conservative versus operative management. South Med J 1987; 80: 991-994.
- Kunishima K, Takao H, Kato N, Inoh S, Ohtomo K. Transarterial embolization of a nonpuerperal traumatic vulvar hematoma. Radiat Med 2008; 26: 168-170.

- 7. Vermesh M, Deppe G, Zbella E. Non-puerperal Traumatic Vulvar Hematoma. Z Geburtshilfe Perinatol 1994; 198: 77-79.
- Virgilli A, Bianchi A, Mollica G, Corazza M. Serious hematoma of the vulva from a bicycle accident: A case report. J Reprod Med 2000; 45: 662-664.
- 9. Vermesh M, Deppe G, Zbella E. Non-puerperal traumatic vulvar hematoma. Int J Gynaecol Obstet 1984; 22: 217-219.
- Sill PR. Non-obstetric female genital tract trauma in Port Moresby, Papua New Guinea. Aust N Z J Obstet Gynaecol 1987; 27: 164-165.
- Ahmed E, Syed SA, Parveen N. Female consensual coital injuries. J Coll Physicians Surg Pak 2006; 16: 333-335.
- Sau AK, Dhar KK, Dhall GI. Nonobstetric lower genital tract trauma. Aust N Z J Obstet Gynaecol 1993; 33: 433-435.
- Molodkin BV. A case of large hematoma of the vulvar region in pregnancy. Akush Ginekol (Mosk) 1965; 41: 147-148.
- Mulder PH. Fatal spontaneous hematoma of the vulva in a primipara at 36 weeks gestation before onset of labor. Henry Ford Hosp Med Bull 1957; 5: 250-255.
- Kurdoglu M, Kurdoglu Z, Cim N, Yildiz M. One of the obstetrical emergencies, puerperal vulvar hematoma threatening maternal life. J Turk Soc Obstet Gynecol 2010; 7: 239-242.
- Propst AM, Thorp JM Jr. Traumatic vulvar hematomas: conservative versus surgical management. South Med J 1998; 91: 144-146.