J Cases Obstet Gynecol, 2017;4(3):64-67

Case Report

Vulvar Hematoma following precipitate delivery: A case report

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Abstract

Vulvar hematomas are extremely rare and have not been extensively reported. Nulliparity, prolonged second stage of labor, instrumental delivery, big baby (> 4 kg), genital tract varicosities and maternal age > 29 years are some risk factors. Although conservative management or observation is an option, complications, including difficult delivery and excessive vaginal bleeding, may occur.Early recognition and prompt management are the key to reducing morbidity. There is no published information on the risk of recurrence in subsequent deliveries.

Key Words:

Vulvar hematoma, vulvar varicosities, precipitate delivery, surgical evacuation

Introduction

Non-traumatic vulvar hematomas are unusual but should be recognized and managed promptly. The incidence varies between 1 in 500 to 1 in 12,495 confinements [1]. Vulvar varicosities is an important cause of vulvar hematoma. This warrants a more preventive approach to avoid catastrophe especially among women seeking delivery services in the peripheral poor resource settings. Early recognition and prompt referral of the patient is important in such cases. Treatment options include conservative and surgical. For hemodynamically unstable patients with an increasing hematoma more than 5cms, surgical drainage is the best modality. For small hematomas (less than 5 cm) with a stable patient conservative approach with close monitoring, antibiotics, analgesics and perineal care can suffice. Surgical drainage provides quick relief from pain, provides a better wound healing and reduces chances of dyspareunia in future.

Article History:
Received: 11/12/2016
Accepted: 29/04/2017

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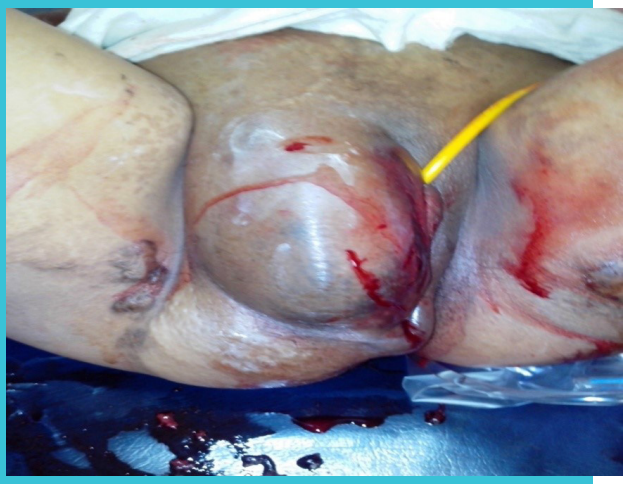
Case Presentation

A 30 year old grand multipara, P5L5 (Parity 5) was referred to our tertiary institute following normal delivery at a rural hospital 130 kilometers away. The referral was done for vulvar swelling following delivery and anemia. From the history noted, the patient complained of labor pains since early morning around 2am after which she reported to the rural hospital. She was registered at the same hospital for routine antenatal care. She had a precipitate delivery at 3.20 am (i.e. 1hr 20min following labor onset) at the rural center. She delivered a female baby weighing 3250 gms without episiotomy. A staff nurse conducted the

delivery. Following delivery a swelling appeared over the vulva, which was sudden in onset, fast increasing in size, and associated with excruciating pain. In view of this swelling and anemia she was referred to our tertiary hospital. On admission her vitals were stable except for mild pallor.

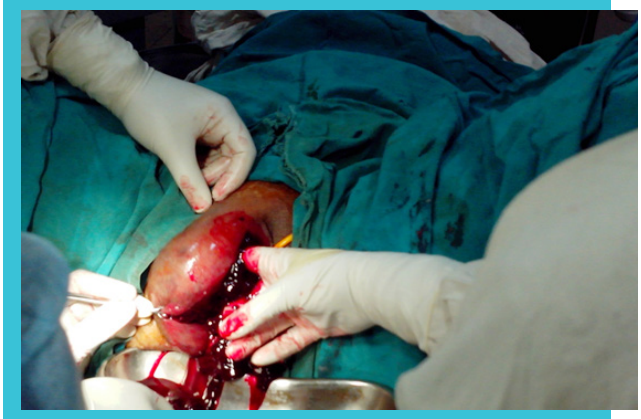
Figure 1.



Vulvar swelling on the right labium majus 12x10 cm extending from the side of clitoris to the fourchette,non fluctuant.Slight blackish discoloration of overlying skin and vulvar varicosities seen.

There was no guarding, rigidity, tenderness and distension on per abdominal examination. Uterus was palpable upto 20 wks size and well retracted. Local genital examination revealed few varicosities on the perineum. A vulvar swelling 12x10 cm, tense, tender and non- fluctuant was seen over the right labium majus extending from the right side of clitoris to the fourchette (Figure 1). Her bedside investigations were normal except for haemoglobin level of 8.2 gr/dL. With the diagnosis of fast progressing vulvar hematoma patient was taken for urgent exploration and evacuation of hematoma under spinal anesthesia. Consent was taken, blood was arranged and bladder was catheterised. Intraoperatively, on the medial side of hematoma a small tear was present. Incision was taken through the same. On incising blood clots (300 grams) were removed by finger dissection and hematoma was evacuated (Figure 2). The bleeders were identified at the base of the hematoma, ligated and secured. Figure of eight sutures were taken with no 1chromic catgut and hemostasis achieved, 300g clots were removed. Dead space was obliterated. Necrosed vulvar skin was cut till fresh skin margin was seen. Muscle and subcutaneous tissue sutured by polygalactin no. 1 and skin by mattress sutures (Figure 3). Postoperatively 1 unit packed cell volume was transfused. Patient was put on broad spectrum antibiotics. Good perineal care and Sitz bath was instituted. Patient recovered well and was discharged on postoperative day 7 (Figure 4).

Figure 2.



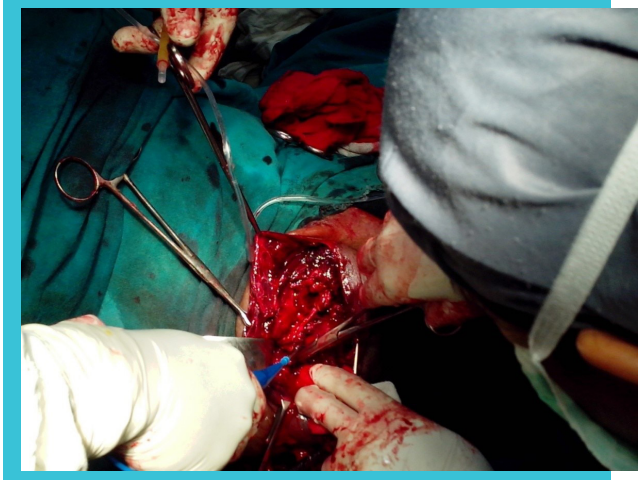
Incision on medial side of hematoma with removal of clots

Discussion

Vulvar hematomas are very rare with few cases reported in literature. Spontaneous hematomas ocurring without any trauma or obstetric complication during delivery are quite unusual. Due to delay in recognition and management can be associated with serious maternal morbidity, rapid management and treatment are very important. Vulvar hematomas can be divided into vulvar and pelvic types, depending on whether it is above or below the levator ani [2]. The vulva has a rich arterial supply from two external pudendal and one internal pudendal artery on each side. The injury to labial branches of the internal pudendal artery, which is located in the superficial fascia of the anterior and posterior pelvic triangle, can cause vulvar hematomas [3]. The venous drainage of the female external genitalia consists of labial veins, which are tributaries of the internal pudendal vein and venae comitantes. Injury to these vessels causes severe hemorrhage and

can lead to hematoma formation in the concealed space. Management options include surgical and conservative treatment. Surgical management should be promptly performed for the large and rapidly expanding hematomas (over 5 cm) [4]. Hemodynamic status and cardiovascular stability must be determined prior to surgical intervention.

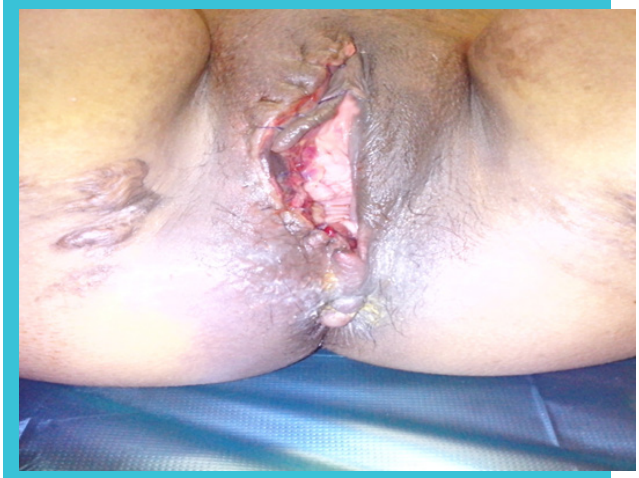
Figure 3.



Identification of bleeders and hemostasis

Conservative management can be considered when the single digit dimension of the hematoma is less than 5cm and it does not expand. [5] Prompt surgical treatment helps to stop the pain, prevent further bleeding and tissue distraction and minimizes risk of infection [6]. Surgical treatment on a vulvar hematoma should be performed in an operation theatre with adequate analgesia. The hematoma should be widely opened through an accessible site and all clots should be evacuated. The bleeding vessels should be ligated and the cavity should be drained [7]. Layered closure of the wound can be done by mattress sutures [8] or figure of eight stitches as in our case. There is little evidence to support routine packing of the hematoma cavity instead of proper layered suturing. This appears controversial as it can increase the chances of postoperative wound infection. To prevent infection, broad-spectrum antibiotics should be given and good analgesia and close observation are important postoperatively. Prompt resolution of hematoma will improve outcome and result in reduced scarring, postpartum pain and dyspareunia. Treatment of the vulvar varices can be done safely during pregnancy by sclerotherapy [9]. The vulvar hematoma in this case was mainly a result of rupture in a vulvar varicosity. Also our patient had a precipitate delivery, which is contributory to the hematoma formation. Prompt referral led to better management of the patient allowing good recovery without any further complications in our case. Preventive measures for women in rural settings can be promotion of institutional deliveries, partographic monitoring of progress of labour, avoiding unnecessary augmentation of labour and exploration of genitalia following precipitate labour and difficult deliveries. Caution in women who are multiparous and those having vulvar varicosities.Thus puerperal hematomas following vaginal delivery need to be recognized and managed timely [10].

Figure 4.



Healed perineum

Acknowledgement
The authors thank the study participant ,study staff and Obstetrics and Gynecology Department, Byramjee Jeejeebhoy Government Medical College and Sassoon General Hospitals, Pune. The authors would like to thank Dr. Ajay Chandanwale, Dean, BJGMC. The authors also thank International Fogarty program, Fogarty International Center, NIH grant number1D43TW009574 and Dr. Robert Bollinger, Fogarty PI, Founding Director of the CCGHE, and Professor of Infectious Diseases, JHU. The content in this paper is solely the responsibility of the authors and does not necessarily represent the official views of the National Institute of Health.

Declaration of Interest
None

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