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Case Note

Severe haematoma of the vulva: A report of two cases and a clinical review

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Abstract
Haematoma of the vulva may occur following blunt trauma due to its highly vascular structure. We present two cases of haematoma of the vulva caused by domestic violence, following a kick on the perineum and falling astride on the perineum. Evacuation of the haematoma and repair of lacerated tissues were successfully performed.

Non-obstetric haematoma of the vulva is a relatively rare condition. It is usually seen after a blunt trauma. Athletic and accidental trauma, vigorous intercourse are the most common etiologic factors. The perineum is a highly protected region, due to reflex adduction of the thighs in the face of an impending assault. The rich vulvar vascular network may be easily damaged by contusive frontal impacts, which crush the vulvar tissues against the osseous planes. Management of vulvar hematomas may range from a conservative approach to surgical drainage. Incision and drainage is advised in more severe cases to reduce infective complications and hospitalization[1].

We present an unusual case of a vulvo-vaginal haematoma caused by domestic violence following a kick on the perineum and a case of the more usual aetiology of falling astride on the perineum.

Case 1
A multi-parous 34 year old lady presented with complaints of severe perineal pain and an inability to adduct her thighs, following a kick on the perineum by her husband, 3 hours back. The patient had passed urine two hours back, which was not blood stained.

There was no past history of any bleeding diathesis in the patient. Her previous three deliveries were normal deliveries. Examination of the patient revealed a frog leg posturing with a pulse rate of 128 beats per minute. Pallor was present. Per abdomen examination revealed no abnormality. Genital examination revealed a swelling 10 x 12 cm on the right vulva, extremely tender to palpation with a bluish skin hue. Penetrative vaginal examination could not be performed (Fig. 1)

Case 2
A nullliparous 15 year old girl presented with complaints of severe perineal pain and a perineal swelling, following a fall on the perineum, following an attempt to cross a ditch. The patient had passed urine three hours back, which was not blood stained.

There was no past history of any bleeding diathesis in the patient. Examination of the patient revealed a pulse rate of 130 beats per minute. Pallor was present. Per abdomen examination revealed no abnormality. Genital examination revealed a swelling 10 x 10cm on the right vulva, extremely tender to palpation and a bluish skin hue. Hymen was present. Penetrative vaginal examination was not performed.

Management
In both the cases, the baseline investigations included blood haemoglobin, bleeding and clotting time and a P-A view of the pelvis to note for the diastasis of the symphysis pubis. Other than a fall in the Hb levels in both the cases (8.2 G% in case -1 and 8.8 G% in case-2), the above mentioned investigations were normal in either case. A cross match and the necessary arrangements for blood were made for both the cases.

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Operative procedure

An incision and drainage was performed in both the cases, the incision line being on the inner aspect of the vulva. After evacuation of the clots and separately ligating the individual bleeding points (fig 1), the dead space obliteration was done by a continuous running stitch with 1-0 chromic catgut. Vulval skin was closed with 1-0 chromic catgut, episodic mattress (fig 3). Through out the procedure, a red rubber urethral catheter was kept in situ to prevent an accidental breach of the urinary tract. Post-operatively, a self retaining Foley's catheter was kept for 24 hours, with a round the clock cover of opiod analgesics and broad spectrum antibiotics (Cefotaxime and metronidazole).

Both the patients were discharged on the third post-operative day with an advice to complete the course of the prescribed oral antibiotics and a follow up after 3 weeks. Follow up after 3 weeks revealed no abnormality in both the cases.

Fig 1: With reference to case 1, 10X12 cm vulval swelling is seen with a superficial bluish skin hue. Also note, a shift in the midline of the introital opening and an encroachment of the right vulval swelling on the region of the left vulva.

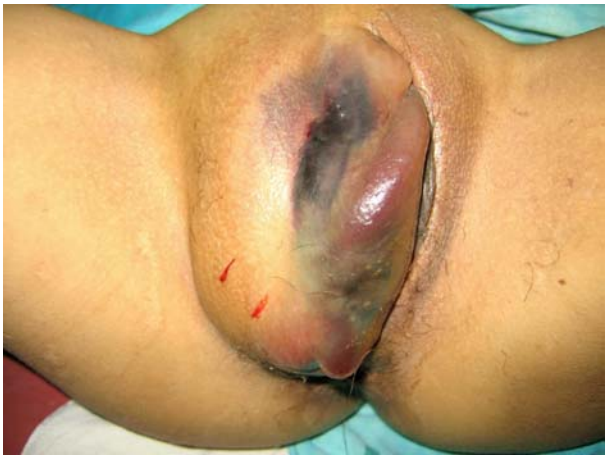


Fig 2: Incision on the inner aspect of the vulva showing the depth of the cavity after clot evacuation

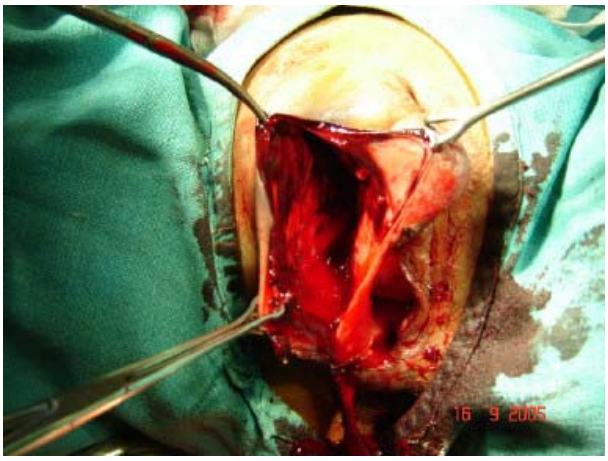
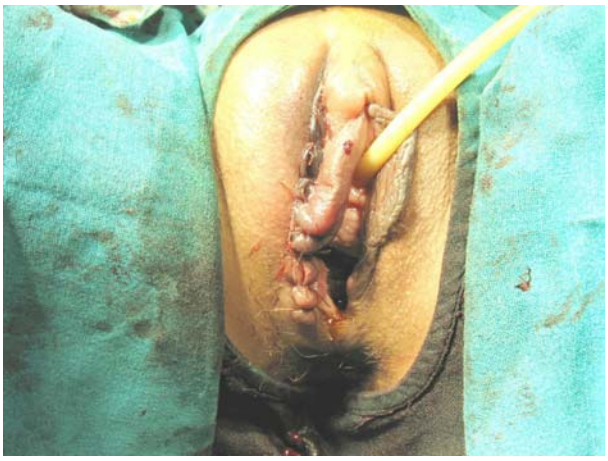


Fig 3: The final result, after dead space obliteration and skin stitches



Discussion

Non-obstetric haematoma of the vulva is a relatively rare condition[1,2,3,4]. It is usually seen after a blunt trauma. Athletic and accidental trauma and vigorous intercourse are the most common etiologic factors[1,2,3,4,5,6]. It usually constitutes 0.8% of all gynaecological admissions, in tertiary and referral hospitals[7]. Unusual aetiologies may include automobile accidents[7], goring by a cow[8], straddle bicycle seat bar accidents[1], and human bite following cunnilingus[5]. Diagnosis is usually not a problem when there is proper co-relation with the history, but sometimes, the vulval swelling could be for a mistaken for a Bartholin's gland duct abscess[9].

The vaginal vault, especially the right and posterior fornices are the frequent sites of coital injury for parous women; on the other hand, lower vaginal and introital injuries were caused by first acts of coitus[7]. Management of the vast majority of vulvar haematomas is conservative. Most resolve spontaneously when simple measures are taken, like tight vaginal packing. Serial examinations are necessary to distinguish uncomplicated haematomas from those requiring surgery[10].

In a case series report of 29 patients with vulval haematomas resulting from obstetric trauma and other causes, it was found that patients managed conservatively had more subsequent operative intervention and more complications requiring antibiotics, transfusion, and more days of hospitalization than patients managed operatively. It was also found that an increased risk of complications and increased hospitalization was found with patients with haematomas managed conservatively when the product of the longitudinal diameter and the transverse diameter was 15 or greater[3]. In the absence of acute haematoma expansion, conservative management was often successful[2].

In the presence of continuous bleeding or wound expansion / dehiscence following simple incision and drainage, selective angiographic embolization of the pudendal and inferior gluteal arteries was a successful second line treatment performed with minimal complications[11].

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