

Spontaneous Vulval Hematoma in Pregnancy

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Case Report

Abstract: Vulval hematomas may be a result of various obstetric and non obstetric traumas. Spontaneous development of hematomas during pregnancy, without antecedent trauma is indeed rare. We present a case of a young multigravida who came with sudden onset of pain and swelling in the perineal area, of short duration (4 days). After examination a diagnosis of vulval hematoma, involving the left labium majus, was made. A surgical management was undertaken following a failed conservative approach. The post operative recovery was good and patient was discharged after 1 week in good health.

Keywords: Spontaneous, vulval hematoma, labium majus, pregnancy.

Introduction

Occurrence of vulval hematomas is rare, as perineum is a highly protected area due to reflex adduction of thighs.

Various causes of non-obstetric vulval hematoma have been reported, like falling astride, domestic violence, vigorous intercourse¹⁻³ etc. Obstetric hematomas on the other hand, mostly result from repair of episiotomies or vaginal lacerations following an uneventful delivery. Spontaneous development of hematomas during pregnancy is very rare. These hematomas can range from small to very large hematomas often compromising the hemodynamic stability of the patient. Accordingly the management may range from conservative approach to aggressive surgical management. In intractable cases, embolisation of the pelvic vessels has been tried.



Figure 1



Figure 2



Figure 3

Case Report

A G2P1L1 with 16 weeks gestation, who had a previous normal delivery, presented to labor room with acute onset (4 days) of a mass in the perineal region associated with severe pain, there was no history of fall, any blunt injury to the perineum, vigorous act of coitus, or any history suggestive of bleeding diathesis. On examination the patient's general condition appeared normal and all the vital parameters were stable. On local examination of the genital area, a mass was present involving the left labium majus about 10*5 cm (fig 1) with a bluish discolouration. The mass was tender but there was no local rise of temperature. There was no active bleeding from the genital tract and no vaginal lacerations were found, the uterus was corresponding to 16 week size and was quiescent. A diagnosis of a vulval hematoma was made, and ultrasound was done to rule out any pelvic hematoma. It confirmed the presence of vulval hematoma

and a live gestation of 16 week size. Patient's coagulation profile was normal. A conservative line of management was tried with broad spectrum antibiotics, analgesics, icepacks and glycerin magnesium sulphate dressing done daily to relieve the edema. The patient complained of persistent pain which was severe in nature, hence a decision was made to operate. Under saddle block, the hematoma was evacuated with the nick on the most dependent part, about 100cc of blood clots were removed, there were no active bleeding points, the hematoma cavity was tightly packed and a indwelling catheter was left in the bladder (fig 2). The patient was continued on broad spectrum antibiotics and analgesics. The pack was removed after 24 hours. The post operative period was uneventful, patient got discharged after 1 week, she was followed after 4 weeks, there were no complaints and vulva looked absolutely normal (fig 3, arrow shows healed incision site). At present patient is in her 28 weeks of gestation with no further complaints.

Discussion

Hematomas of the female genital tract are uncommon. Various cases of vulval hematoma secondary to falling astride, vigorous intercourse, domestic violence, snowboarding, cattle goring¹⁻⁵ etc. have been reported in non pregnant women. Although many cases reports of obstetric hematomas appear in the literature, they are common following delivery. Appearance of vulval hematoma in a pregnant woman without any preceding trauma or any antecedent cause is extremely rare. In India 80% of the population resides in rural areas, where people live in close association with animals, hence goring by cattle horn is common even in pregnant women. Though this lady does not give any history of domestic violence, it should always be borne in mind in a women hailing from rural background with low literacy status, as there is a social and cultural hindrance to revealing the facts. Such issues should be sensitively handled. As there was no history suggesting any bleeding tendencies in the patient and the coagulation profile was normal, bleeding diathesis was ruled out. This case is reported for its rarity as there was virtually no preceding cause for the development of hematoma. The incidence of obstetric hematomas including those in pregnancy and delivery has not been mentioned, as there are very few reports of the same^{6, 7}. The incidence of puerperal hematomas varies widely; it is in the range of 1 in 300 to 1 in 5000 deliveries⁸. Various risk factors for development of hematoma have been described, like, nulliparity, age > 29 years, birth weight of the baby >4 kgs, instrumental delivery, prolonged labor, preeclampsia, Bleeding diathesis^{7,9}. About 87% of the hematomas occur following repair of the episiotomies or vaginal lacerations¹⁰. In the absence of lacerations, rupture of, a pseudo aneurysm, A-V fistula, or vulval varicosity, may be the cause^{11, 12}. The obstetric hematomas can be divided into vulval/vulvovaginal, paravaginal, pelvic/subperitoneal. In vulval/vulvovaginal hematomas, bleeding is obvious on the external surface with or without vaginal extension, limited above by the anterior urogenital diaphragm. Both types arise from injury to the branches of the pudendal artery (the posterior rectal, transverse perineal and posterior labial arteries. Paravaginal hematomas are not seen externally and can be detected only on vaginal examination. They result from damage to the descending branch of the uterine artery. The haematoma is confined to the paravaginal tissues in the space bounded inferiorly by the pelvic diaphragm and superiorly by the cardinal ligament. Subperitoneal hematomas are the result of damage to the uterine artery branches in the broad ligament. The hematoma develops within the broad ligament and can dissect retroperitoneally. It can be clinically occult

despite significant blood loss. A high index of suspicion is required to diagnose and manage these haematomas promptly before signs of cardiovascular collapse develop¹³. During pregnancy the vulval hematomas may lead to discomfort and pain, limiting the daily activity. If present during delivery may cause obstruction to delivery, or may explode resulting in severe bleeding¹⁴. Following delivery there is excruciating pain, there may be intractable bleeding, or tenesmus. Sometimes may be unrecognised leading to hemodynamic compromise. Imaging modalities may play a role in differentiating hematomas from other swellings of the vulva, to rule out any sub peritoneal extension, and also for follow up of the patient in the event of conservative management¹⁵. There has been a considerable debate over the appropriate management of these hematomas. Varying results have been obtained by different observers. Propst *et al* reported conservative approach better than the surgical¹⁶, where as Benrubi *et al* have observed that the patient with conservative management required subsequent surgery with blood transfusion and long hospital stay¹⁷. According to EAU guidelines a conservative approach with broad spectrum antibiotic cover, ice pack and analgesic may suffice in small hematomas, but with rapidly expanding hematomas, causing pain and functional disability or leading to hemodynamic compromise of the patient, surgery is a better option¹⁸. The hematoma is to be evacuated under anesthesia and bleeding points secured. Controversies also exist regarding usage of open and closed drains. Usage of closed drains appears to have better outcome¹⁹. There has been little evidence regarding packing of the hematoma cavity. Nevertheless it has been widely practiced. In intractable cases embolisation of various pelvic vessels like internal iliac artery, gluteal vessels, pudendal vessels have been tried successfully²⁰. If undetected and left untreated the obstetric hematomas may contribute significantly to the maternal morbidity and rarely maternal mortality.

Conclusion

Though obstetric hematomas are common, most of them are related to delivery presenting in immediate postpartum period. This case is reported in view of its rarity. Though the conservative treatment was initially tried, surgery appeared to be a better option relieving the discomfort and functional disability of the patient and allowing the pregnancy to continue without any problem.

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