

A RARE CASE OF SPONTANEOUS VULVAR HEMATOMA IN PREGNANCY

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Article Info: Received 20 October 2021; Accepted 20 December 2021

DOI: <https://doi.org/10.32553/ijmbs.v5i12.2352>

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Conflict of interest: No conflict of interest.

Abstract

Vulvar hematoma is a relatively uncommon occurrence. Mostly these result from traumatic injury in non pregnant women or as a complication of childbirth. Spontaneous development of hematomas during pregnancy, without antecedent trauma is indeed rare. We are presenting a case of 32 years old multigravida who presented with sudden onset of pain and swelling in the perineal area since 3 days. After examination a diagnosis of vulvar hematoma was made. Surgical management was done. Post-operative recovery was good. Patient was discharged after 1 weeks and she had a normal vaginal delivery of a healthy baby at

Keywords: hematoma, antecedent trauma

Introduction

Occurrence of vulvar hematoma is rare because perineum is a highly protected area due to reflex abduction of thighs. Various causes of non-obstetric vulvar hematoma have been reported, like falling astride, domestic violence, and vigorous intercourse etc^{1,2}. Obstetric hematomas mostly result from repair of episiotomies or vaginal lacerations following an uneventful delivery. Spontaneous vulvar hematoma during pregnancy is a rare condition. These hematomas can range from small to very large size compromising the hemodynamic stability of the patient. Accordingly the management may range from conservative approach to aggressive surgical management. In intractable cases, embolization of the pelvic vessels has been tried³.

Case report

A 32 years old G2P1L1 with previous normal vaginal delivery presented at 28 weeks gestation with complaints of swelling in the perineal region since 3 days. It was associated with severe pain. There was no history of fall, any trauma to

perineum, act of coitus or any history of bleeding diathesis. On examination the patient's general condition was normal with stable vital parameters. On local examination of genital area, a mass of size 8*10 cm with bluish discoloration was present in right labia majora (figure 1). Swelling was tender with local rise of temperature. There was no active bleeding from genital tract and no vaginal lacerations were found. Uterus was corresponding to 28 weeks size and was quiescent. Fetal heart sound was present. A diagnosis of vulvar hematoma was made. Ultrasound was done to rule out pelvic hematoma. It confirmed the presence of vulvar hematoma and live gestation of 28 weeks. Patient's blood investigations including coagulation profile were normal. A decision to operate was made. 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. Hematoma cavity was stitched and corrugated drain was kept which was removed after 48 hrs and tight pressure bandage was

applied. Indwelling catheter was left in the bladder (figure 2). The patient was continued on broad spectrum antibiotics and analgesics. Post operative period was uneventful. Patient was discharged

after 1 week and was followed after every 2 weeks. There were no complaints and vulva looked absolutely normal. She had a normal vaginal delivery of a healthy baby at term.



Figure 1:



Figure 2

Discussion

Hematomas of the female genital tract are uncommon. Various cases of vulvar hematoma have been reported in non pregnant women^{4,5}. Although many cases reports of obstetric hematomas appear in the literature, they are common after delivery. Appearance of vulvar hematoma in a pregnant woman without any 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 or trauma, 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. As there was no history suggesting any bleeding disorders in the patient and the coagulation profile was normal, bleeding diathesis was ruled out. 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 from 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 diathesis⁹. 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 vulvar varicosity, may be the cause^{11,12}. The obstetric hematomas can be divided into vulvar/vulvovaginal, paravaginal, pelvic/sub peritoneal. In vulvar/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. A high index of suspicion is required to diagnose and manage these haematomas promptly before signs of cardiovascular collapse develop¹³. During pregnancy the vulvar hematomas may lead to discomfort and pain, limiting the daily activity. During delivery it may cause obstruction 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 anaesthesia 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. In intractable cases embolization 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 could be 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.

References

1. Singhal V P, Neelam, Ankur H K, Kaur P, Katiyar N. International journal of Gynae Plastic Surgery. 2010; 2: 35-37.
2. Geist R F, sexually related trauma (review). Emerg Med Clin North America, 1988; 6: 439-66.
3. Dash S, Verghese J, Nizami D, Awasthi RT, Jaishi S, Sunil M. Severe haematoma of the vulva: A report of two cases and a clinical review. Kathmandu University Medical

- Journal (2006), Vol. 4, No. 2, Issue 14, 228-231
4. Kanai M, Osada R, Maruyama K, Masuzawa H, Shih H C, Konishi I. A warning from Nogano: An increase in vulvar hematomas and/or vaginal lacerations, which are caused by snowboarding. *J Trauma*. 2001; 50: 328-31.
 5. Maitri R K, Mahendra G, Sunanda R K. Bull gore injury of the vagina. *Journal of Clinical and Diagnostic Research*. January 2013; Vol7 (1): 158-159.
 6. Nelson EL, Parker AN, Dudley DJ Spontaneous vulvar hematoma during pregnancy: a case report. *J Reprod Med*. 2012 Jan-Feb; 57(1-2):74-6.
 7. Yulia Gurtovaya, Hanna Hanna, Abdul Wagley. Spontaneous intrapartum vulvar haematoma. *MIDWIVES • 2013; ISSUE 5: 48-49*
 8. Scudamore J H, Vulval and Vaginal Haematomata. *Brit. med. J.*, 1964, 1, 1357-1358
 9. Saleem Z, Rydhström H. Vaginal hematoma during parturition: a population-based study. *Acta Obstet Gynecol Scand*. 2004; 83(6):560.
 10. David Morgans, Norman Chan, Catherine A. Clark. Vulval Perineal Haematomas in the Immediate Postpartum Period and their Management. *Australian and New Zealand Journal of Obstetrics and Gynaecology*; Volume 39: Issue 2, pages 223–226, May 1999.
 11. Nagayama C, Gibo M, Nitta H, Uezato T, Hirakawa M, Masamoto H, Sakumoto K, Aoki Y. Rupture of pseudo aneurysm after vaginal delivery successfully treated by selective arterial embolisation. *Arch Gynecol Obstet*. 2011 Jan; 283(1):37-40. Epub 2009 Nov 1.
 12. Po LK, Simons ME, Levinsky ES. Concealed postpartum hemorrhage treated with transcatheter arterial embolization. *Obstet Gynecol*. 2012; 120(2 Pt 2):461.
 13. Sandra Mawhinney, Ruth Holman. Puerperal genital haematoma: a commonly missed diagnosis. *The Obstetrician and Gynaecologist*. July 2007; Volume 9(3): pages 195–200,
 14. Joy SD, Huddleston JF, McCarthy R. Explosion of a vulvar hematoma during spontaneous vaginal delivery. A case report. *Reprod Med*. 2001 Sep; 46(9):856-8.
 15. Guerriero S, Ajossa S, Bargellini R, Amucano G, Marongiu D, Melis GB. Puerperal vulvovaginal hematoma: sonographic findings with MRI correlation. *J Clin Ultrasound*. 2004; 32(8):415.
 16. Propst AM, Thorp JM Jr Traumatic Vulvar Hematomas: Conservative Versus Surgical Management. *South Med J*. 1998;91(2):144.
 17. 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(8):991
 18. Thomas H. Lynch, Luis Martí'nez-Pinẽiro, Eugen Plas, Efraim Serafetinides, Levent Tu'rkkeri, Richard A. Santucci, Markus Hohenfellner. EAUGuidelines on UrologicalTrauma. *European Urology*. 47: (2005); 1–15
 19. Zahn CM, Hankins GD, Yeomans ER Vulvovaginal hematomas complicating delivery. Rationale for drainage of the hematoma cavity. *J Reprod Med*. 1996;41(8):569.
 20. Villella J, Garry D, Levine G, Glanz S, Figueroa R, Maulik D. Postpartum angiographic embolization for vulvovaginal hematoma. A report of two cases. *J Reprod Med*. 2001; 46(1):65.