

Case Report

Hematoma vulvo-vaginal: exceptional etiology of obstetrical near miss

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ABSTRACT

Postpartum hematoma, rare among several causes of postpartum hemorrhage, is exceptionally reported in the etiologies of obstetrical near miss. The authors reported a case of large vulvo-vaginal hematoma after home delivery in a 26 year old patient of Franco-Indian descent. The patient was admitted in a state of hemorrhagic shock combined with an impregnable blood pressure, a significant skin-muquauses pallor and conscience disorder. Its management required a good coordination between the anesthesia team and the obstetrical team as it was based on the hemostasis results after surgical evacuation of the hematoma for more than 1000 ml blood and corrections of blood crass disorders.

Keywords: Pueperal hematoma, Hemorrhage of the postpartum, Madagascar

INTRODUCTION

Postpartum hemorrhage remains an obsession in all birth rooms. It is the main cause of maternal mortality in the world.¹ Usually called a thrombus, puerperal hematoma is a rare etiology. Its prevalence is thought to be one in 4000 deliveries for large hematomas.² Its evolution can be insidious and can lead to an extension towards the retroperitoneal region.³ The loss of blood can be very important and have a short-term impact on maternal life.⁴ Our objective was to recall through a case that a hematoma, apparently a small size on inspection, can turn

out to be considerable and life-threatening to the patient in the short term.

CASE REPORT

At the general admission examination, the arterial pressure (BP) was impregnable. This was associated with a marked paleness of both the skin and mucous membranes, along with an altered consciousness. The obstetric examination revealed a toned uterus and a stream of blackish blood oozing to the vulva which was spontaneously painful and asymmetrical. The right side

was swollen by a mass apparently small on inspection (Figure 1). The mass was bulging in the vagina and had made difficult a vaginal examination. The diagnosis of the vulvovaginal hematoma was made at the clinic. The patient had been transferred urgently to the operating room concomitantly with vascular filling with colloids and macromolecules as well as a placement of an indwelling bladder catheter. An improvement in the clinical condition was observed (BP: 6>4 cmHg, small and stringy pulse). A complete blood count as well as a coagulation test had been requested urgently, revealing a hemoglobin level of 37 mg/dl.



Figure 1: Relatively small-volume vulvar hematoma (relatively small volume of vulvar hematoma).

Evacuation under general anesthesia of a hematoma of more than 1000 g developing up to the right para-rectal region had been carried out, causing the mass to collapse and allowing the discovery of a complete lesion of the right lateral vaginal wall (Figure 2 and 3).

A cervical tear was found and sutured on valved examination. Hemostasis was performed with an electro-surgical knife at the hematoma bed followed by a padding of the vaginal wall with a placement of an intra-vaginal wick. The patient had received antibiotic prophylaxis with cefazolin 2 g and metronidazole 500 mg.

The removal of the wick after 24 hours had resulted in a resumption of active bleeding requiring surgical resumption of the vaginal suture and the placement of a large caliber prostate probe inflated to 80 ml intra-vaginal. She had been deflated in steps of 10 ml per hour from the 12th hour without resumption of bleeding.



Figure 2: Appearance of the lesion after evacuation of the hematoma (appearance of the lesion after hematoma evacuation).



Figure 3: Aspects of the vulva at the end of the intervention (appearance of the vulva after the procedure).

The patient had been transfused during the operation and postoperatively. In 36 hours, she had received, 6 g of tranexamic acid, 12 bags of labile blood products, including 4 bags of fresh frozen plasma, 2 bags of fresh blood, 2 bags of red blood cells and 4 bags of whole blood.

DISCUSSION

In obstetrics, close escape is defined as a serious complication linked to pregnancy or childbirth without ending in death.⁵ In this case, the patient was able to survive with care in a low-resource hospital environment. Large puerperal perineal hematoma, although rare, is a formidable etiology. On the one hand, it is due to its onset which can be insidious. On the other hand, it is caused by its dissecting nature by not having a tendency to fade spontaneously and by being able to develop up to in the supra-vaginal region. For infra-vaginal hematomas, it occurs by either venous or arterial vascular rupture in the thickness of the vagina.² For retroperitoneal or intraligament hematomas after childbirth, it occurs by natural means and in this situation, the origin of bleeding can be either a cervical or isthmic tear.³ In our patient, it evolved insidiously, probably of venous origin. Its insignificant exterior appearance had led to a delay in diagnosis. The vulvar asymmetry was considered by the midwife as a postpartum vulvar edema.

The diagnosis of this pathology is easy at the clinic. Any pain associated with it, usually unilateral swelling, is often the main symptom.² Although this is a form of postpartum hemorrhage, the bleeding has very little or no externalization. The persistent trickle of bleeding in our case was due to a cervical injury and not because of the hematoma. Symptoms may not be alarming; pain may be moderate or substituted by an urge to push or a rectal tenesmus. Any pelvic complaint during the postpartum lull period must then be the subject of a clinical pelvic examination, ranging from inspection to pelvic touches, so as not to miss a large hematoma and engage the prognosis life of the patient due to a delayed treatment. It should also be sought for any signs of shock in the absence of a visible vaginal bleeding or hemoperitoneum.³ If there is any doubt about a high supra-vaginal location, an abdominopelvic CT scan can be used to make the diagnosis and to specify its topography.³

The risk factors for the occurrence of a puerperal hematoma are primiparity, instrumental extraction, episiotomy or perineal tear, pudendal anesthesia, chronic hypertension, pre-eclampsia, vulvar and vaginal veins varicose, twin pregnancies and digital realization of vaginal dilation.^{1,2} In Madagascar, a home delivery as in the case discussed here could be considered as a risk factor. As a matter of fact, a case had been reported in a multiparous woman in Fianarantsoa.⁶

For management purposes, hematomas of small volume as in less than 5 cm and not causing a disorder of hemodynamics and hemostasis, a selective vascular embolization can be performed or failing that an expectation based on monitoring close, hemostasis can be affected by the hematoma by providing local compression.^{1,3} On the other hand, large volume hematomas constitute a medical and surgical emergency.

Their treatment requires a mutual work between the obstetrical team and the anesthesia-resuscitation unit. Indeed, it is based on resuscitation measures and the management of the lesion.^{1,2} The management of the lesion consists of an evacuation of the hematoma by the finger and a control of the hemostasis under adequate anesthesia.² The installation of drainage or an intra-vaginal wick is not compulsory, although it depends mainly on the disrepair caused by the multiple tissue dissections carried out by the hematoma, on the difficulty of finding the exact location of the source of bleeding and therefore, obtaining a correct hemostasis.² If any doubt, intravaginal wicking helps to compress the oozing vessels. Removing it could lead to a resumption of bleeding just like in this case. The current trend is to perform a selective percutaneous radiological embolization of the hypogastric arteries for any uncontrollable genital bleeding.⁷ This technique is not available in our center. The alternative would, therefore, be to perform a ligation of the uterine and/or hypogastric arteries by laparotomy in the event of failure of the intra-vaginal tamponade.^{1,2} It is also the management of choice in the event of a failure of a first embolization.³

Resuscitation measures are rigorous because the complications most often encountered are the usual results of heavy bleeding. Consumption coagulopathy are the most to be feared. Inadvertent vascular filling can also lead to a high dilution. Our patient had been massively transfused as a result of heavy blood loss as well as the unavailability of drugs to manage hemostasis in local pharmacies. In our patient, the nature of this transfusion had been dictated in large part by the availability of products in the blood bank, her clinical condition did not allow a waiting period. Intra-operative antibiotic therapy helps prevent the risk of infection and reduce comorbidity.^{1,2}

CONCLUSION

Puerperal pelvic hematoma is a rare but serious cause of postpartum hemorrhage. The main warning signs are pelvic pain and swelling, which may be minimal. Management must be rapid and multidisciplinary. Good coordination between the intensive care unit, the obstetrics team and the blood bank guarantee good care and can save the life of the patient. Regular and rigorous monitoring of the childbirth allows her to be screened in the immediate postpartum period.

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