

## Case Report

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# Bilateral Massive Hematoma of Bartholin Glands after Prolonged Labour: A Case Report

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## ABSTRACT

**Background:** The early postpartum hematoma represents a rare complication which can appear in the early post-partum period. Its formation and development is favoured by the hypervascularization of the genital area during pregnancy and by the cellular hormone-dependent laxity of the tissues which favours its apparition and diffusion.

**Description of the case:** We present a rare situation of a large bilateral Bartholin glands hematoma at a 27-years-old, primiparous female, who had experienced a prolonged labour, ended by a caesarean section.

**Conclusion:** Early postpartum hematoma is a rare condition which might need in selected cases a surgical approach in order to resect the compromised structures.

**KEYWORDS:** Delivery; Massive hematoma; Bartholin glands.

## INTRODUCTION

Puerperal hematoma is a rare complication which might develop after delivery and which might put the mother's life in danger if not recognized in time.<sup>1,2</sup> Statistically, the incidence of puerperal hematoma widely varies between 1/300 and 1/1500 deliveries while the rate of cases necessitating surgical treatment is almost 1/900 cases.<sup>3-6</sup> Most often, puerperal hematomas develop in the peri-vaginal or peri-vulvar spaces, in the lax tissues, tending to widely dissect the spaces where no anatomical obstacle is present. At this level, due to the high levels of pregnancy hormones there is a limited possibility of spontaneous haemostasis; secondarily, the hematoma might dissect the peri-vaginal and peri-rectal spaces, ascending to the retroperitoneal space.<sup>3</sup> The most common localizations are the vaginal, vulvar and pelvic ones.<sup>3</sup> We present the case of a 27-year-old primiparous patient who developed a massive bilateral vulvar hematoma after a prolonged labour followed by a Caesarian section, associated with perineal debilitating pain, fever and difficulties in defecation. The hematoma proved to be entirely developed into the Bartholin glands, which were irreversibly compromised. A total bilateral resection of Bartholin glands was performed.

## CASE REPORT

A 27-year-old primiparous woman referred herself to Obstetrics clinic during the 39<sup>th</sup> week of gestation for sustained uterine contractions; the local examination revealed a quasi-complete cervical dilation; after a negative labour test the patient was submitted to a Caesarian section. Three days after surgery the patient reported the apparition of two tumoral, renitent lesions with vulvar localization, with mass effect on the distal vagina and anal canal. The clinical examination revealed that the anterior perineal region was significantly tumefied and very painful when touched (Figure 1). The vaginal examination revealed the presence of

two pseudotumoral lesions located on the lateral vaginal wall. The perineal MRI showed the presence of two heterogeneous, hyperintense in T1 hematomas measuring 6/5 cm on the right side and 4/3 cm on the left side of the outer lips (Figures 2 and 3). The patient was resubmitted to surgery, intra-operatively a bilateral massive hematoma of the Bartholin glands being found, with total destruction of the glandular structures. A total bilateral resection of Bartholin glands was performed (Figures 4, 5 and 6). The postoperative evolution was uneventful, the patient being discharged the 4<sup>th</sup> postoperative day.



Figure 1: Bilateral tumefaction of the anterior perineal region.

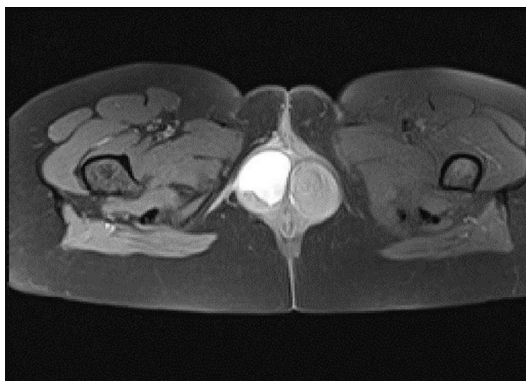


Figure 2: The MRI study revealed the presence of two heterogeneous, hyperintense in T1 hematomas.

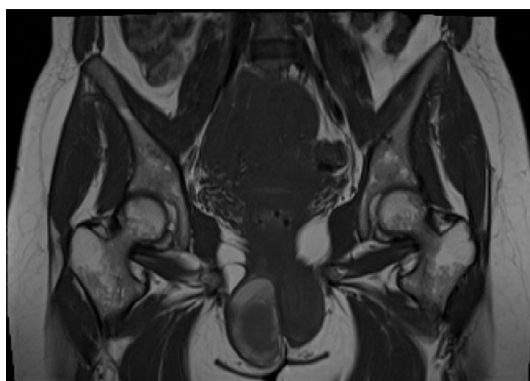


Figure 3: The two hematomas measuring 6/5 cm on the right side and 4/3 cm on the left side are located in the outer lips.



Figure 4: The Bartholin glands are completely compromised due to the large hematomas.



Figure 5: The Bartholin glands are completely compromised due to the large hematomas.



Figure 6: The final aspect after bilateral resection of Bartholin glands.

## DISCUSSION

Most puerperal hematomas develop due to the lacerations which might appear during labour or due to the instrumental extractions, especially due to the use of forceps.<sup>3</sup> Primiparity represents a particular risk factor, which, in association with a prolonged labour, a foetal weight over 4000 gr, coagulation disorders or vulvovaginal varicosities significantly increase the risk

of developing puerperal hematomas.<sup>3,7</sup>

Unless the puerperal hematomas develop secondarily to peri-partum traumatism such as episiotomy or vulvo-vaginal ruptures, they can be related to a secondary necrosis of the small calibre arteries which might be compressed by a too slow descend of the foetal head. Once the hematoma appears, it will have no spontaneous tendency to regress; contrarily it will develop a progressive growth and will compress the surrounding tissues. For this reason, the secondary vascular necrosis might affect blood vessels with increasing diameters.<sup>3</sup>

When it comes to the chronological classification of puerperal hematomas, they can be considered as early and late lesions.<sup>8</sup> In our case we can consider that the hematoma was an early one, developed immediately after the decompression of the perineal region by Caesarean section. In that moment, the small calibre vessels which had been already compressed by the foetal head and necrotised developed a bleeding at the level of the Bartholin glands which was recognized and diagnosed in the third postoperative day.

The second widely recognized classification is the anatomical one which divides the puerperal hematoma into vaginal, vulvar and subperitoneal. In fact, this classification is an essential one because it creates a net separation between vulvar and vaginal hematoma on one side and subperitoneal hematomas on the other side, the two groups having totally different therapeutic strategies.<sup>3</sup> The particularity of our case is the atypical localization, neither vulvar nor perineal but localized symmetrically at the level of the Bartholin glands.

When it comes to the most appropriate therapeutic strategy, it depends on location and dimension of the lesions. While for vaginal or vulvar hematoma a conservative treatment might be taken in consideration especially for the small sized lesions, subperitoneal and retroperitoneal hematomas usually benefit from surgical treatment, although a conservative therapy might be also taken in consideration.<sup>9</sup>

In our case, we decided to perform a surgical manoeuvre consisting of Bartholin glands resection due to the fact that their structure had been already destroyed by the ischemic modifications induced by the compressive hematoma.

To the best of our knowledge, no other case of bilateral Bartholin gland hematoma has been described.

#### CONFLICTS OF INTEREST

The authors declare that they have no conflicts of interest.

#### CONSENT

The patient has provided written permission for publication of the case details.

#### REFERENCES

1. Pinborg A, Bodker B, Hogdall C. Postpartum hematoma and vaginal packing with a blood pressure cuff. *Acta Obstet Gynecol Scand.* 2000; 79(10): 887-889. [10.1034/j.1600-0412.2000.079010887.x](https://doi.org/10.1034/j.1600-0412.2000.079010887.x)
2. Kehila M, Khedher SB, Zeghal D, Mahjoub S. Conservative management of postpartum hematomas large volume: about 3 cases. *Pan Afr Med J.* 2013; 16: 9. doi: [10.11604/pamj.2013.16.9.1918](https://doi.org/10.11604/pamj.2013.16.9.1918)
3. Jacquetin B, Boulleret C, Fatton B. Thrombus genital, extract updates gynaecology and obstetric-tome. 1998.
4. Pieri RJ. Pelvic hematomas associated with pregnancy. *Obstet Gynecol.* 1958; 12(3): 249-258.
5. Villella J, Gary 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): 65-67.
6. Zahn CM, Yeomans ER. Postpartum hemorrhage: placenta accreta, uterine inversion, and puerperal hematomas. *Clin Obstet Gynecol.* 1990; 33(3): 422-431.
7. Ridgway LE. Puerperal emergency, Vaginal and vulvar hematomas. *Obstet Gynecol Clin North Am.* 1995; 22(2): 275-282.
8. Visscher HC, Visscher RD. Early and late postpartum hemorrhage. In: Sciarra RJ, ed. *Gynecology and Obstetrics*. Philadelphia: Harper & Row. 1987; 1-5.
9. Vanlieferinghen S, Piketty M, Blumental Y, Jouannic JM, Desfeux P, Benifla JL. Giant retroperitoneal hematoma in the peripartum of a normal delivery, expectative attitude. *Gynecol Obstet Fertil.* 2011; 39(3): e61-e63. doi: [10.1016/j.gyobfe.2011.01.002](https://doi.org/10.1016/j.gyobfe.2011.01.002)