

Large Supralelevator Puerperal Haematoma Following A Normal Delivery

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ABSTRACT

BACKGROUND: Puerperal Haematomas are not very common and Supralelevator haematomas following normal vaginal deliveries are quite rare.

METHOD: We report a case of supralelevator haematoma following a normal spontaneous vertex delivery, necessitating laparotomy.

RESULTS: A 29 year old multiparous woman who had a normal pregnancy and normal labour, developed a large supralelevator haematoma. She had a laparotomy and her recovery was uneventful.

CONCLUSION: Supralelevator haematomas should be considered in patients presenting with lower abdominal pains and absence of vaginal bleeding following normal delivery. Ultrasound scan is helpful, but not conclusive in the diagnosis of supralelevator haematomas.

KEY WORDS: Puerperal, Haematoma, Supralelevator, Infralelevator.

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INTRODUCTION

Puerperal haematomas are not very common. The reported incidence ranges were 1 in 300 to 1 in 12500 deliveries^{1,2}. It is classified as infralelevator and supralelevator haematomas depending on whether it formed below or above the levator ani muscles³.

The infralelevator haematomas involving the vagina, vulva and perineum are more common³. Haematomas are more likely to occur following operative or instrumental deliveries, but may follow an apparently normal birth⁴.

Haematoma develop following injury to a blood vessel without laceration of the superficial tissue⁵, or following a poorly repaired perineal / vaginal lacerations or episiotomies³.

Infralelevator haematomas are obvious presenting with swelling and pain at the site; however, the supralelevator haematomas are obscure. Unexplained postpartum hypovolaemia associated with Anaemia and lower abdominal pain and / or mass should raise suspicion³.

Ultrasound scan is useful in resolving such confusing clinical condition, especially in patients who had previous normal antenatal ultrasound findings. Classically, blood in the acute phase gives hypoechoic to anechoic ultrasonic picture, as it organizes in the subacute phase it changes to inhomogenous and hyperechoic appearance, in the chronic phase following lysis, it returns to the acute picture.⁶

Unrecognized massive puerperal haematoma may result in maternal death. We present a case of large supralelevator haematoma following a normal labour and spontaneous vertex delivery.

CASE REPORT

Mrs. O.C. C, 29 year old gravida 2 para 1⁺⁰ 1 alive, booked at a gestational age of 28 weeks. Her previous pregnancy, labour and puerperium were normal. She came with the report of ultrasound scan done at 17 weeks gestational age. It showed a normal active single fetus, with anterofundal placenta and adequate liquor amni. The adnexae were normal. Her blood group is 0 Rhesus positive and genotype AA. She was HIV negative. The pregnancy remained uneventful. The last haemoglobin estimation before she came in labour was 10.5gm/dl (at 38 weeks gestational age).

The woman came in active labour at 40 weeks 3 days gestational age and had a normal labour, which lasted about 8 hours culminating in spontaneous vertex delivery of a healthy female baby weighing 4kg. She was given intravenous ergometrine injection and estimated postpartum blood loss was 200mls. The perineum was intact and the 1hr postpartum BP was 140/80Hg, pulse 96 beats/min strong and regular. She was transferred to the postnatal ward after 1hr observation in the labour room. However, about 2-3 hours postpartum she started complaining of lower abdominal pain, inability to urinate and weakness.

Examination revealed severe lower abdominal tenderness, with mild to moderate conjunctival pallor, the blood pressure was 90/60mmHg, the pulse was 100 beats per minute, regular with moderate volume. The vulval pad had a slight stain of blood as expected. She was catheterized, (150mls of urine was drained), given intravenous infusion, parenteral analgesics and antibiotics. She was also observed closely and her condition did not show further deterioration.

On the first postpartum day, abdominal pain and tenderness subsided permitting proper abdominal palpation. This revealed a tender cystic lower abdominal mass, (distinct from the uterus) just to the right of the midline.

A transabdominal ultrasound scan showed a right adnexal cystic mass measuring about 14cm in the longest diameter. There was no free fluid in the peritoneal cavity. The sonologist's differentials were acute torsion of an ovarian cyst, haematoma and degenerated pedunculated fibroid with possible torsion. The haemoglobin

estimation done on this first postpartum day was 8gm/dl. The lower abdominal pain persisted. She was subsequently counseled for laparotomy.

Operative findings included clean peritoneal cavity, normal uterus with normal tubes and ovaries. A cystic mass on the right anterolateral bladder wall was found. Needle tap confirmed it was a haematoma. It was opened and about 1 litre of altered blood was evacuated, a drainage tube was inserted into the cavity, which was removed 48hrs later. An indwelling urethral catheter was also left in situ to rest the bladder wall. One unit of blood was cross-matched pre operatively, but was not transfused. Her postoperative period was uneventful and the rest of the puerperium was normal.

DISCUSSION

Puerperal haematoma is an uncommon complication of the postpartum period. The risk factors are not well known, but a study in Sweden pointed to nulliparity, maternal age above 29yrs and birth weight exceeding 4000gm as important risk factors⁷. Our patient was 29yrs old and her baby weighed exactly 4000gm.

True broad ligament haematoma or other forms of supralelevator haematomas are uncommon following normal vaginal delivery, especially after a relatively short and uneventful labour such as the case reported. However, it may occur following incomplete uterine rupture or a deep lateral cervical tear, which may result from forcible instrumental delivery through an incompletely dilated cervix or during a difficult breech extraction⁴. Some forms of supralelevator haematomas following spontaneous vaginal deliveries reported in the literature include a case of rupture of the left uterine artery leading to a large retroperitoneal haematoma⁸, and another case of the rupture of the right ovarian artery resulting in haemoperitoneum and retroperitoneal haematoma⁹. Our search did not reveal any case quite like the one presented involving the rupture of bladder wall vessel.

Once haematoma has been diagnosed, prompt treatment is mandatory to stop pain, prevent further bleeding and tissue damage and minimize subsequent infection².

Nevertheless, small haematomas will resolve on expectant management, though close follow-up will be required for early detection of expansion of the haematoma. Ultrasonography and / or MRI will be very useful in the detection and follow-up of this condition especially in supralelevator types¹⁰.

At surgery, evacuation of the clots, ligation of any identifiable bleeding vessel and insertion of a drainage tube may be required². In perineal or paravaginal haematomas, some authors advocate evacuation of clots with application of tight gauze pack for 48hours⁴. Fluid

replacement and / or blood transfusion is/are determined by patient's condition.

In conclusion, this case report was presented to create awareness, and highlight the need for close observation of postpartum patients irrespective of how 'smooth' the labour and delivery appeared.

The key to diagnosing obscure haematomas such as the case reported lies in having a high index of suspicion and the presence of the classical clinical symptoms of abdominal pain and shock symptomatology⁹, in the absence of vaginal bleeding.

Ultrasound scan (where available) is supportive, but not conclusive in the diagnosis of this condition because of the non specific appearance of blood on ultrasonography.

REFERENCE

1. Zahn CM, Yeomans ER: Postpartum haemorrhage, placental accreta, uterine inversion and puerperal haematomas. *Clin Obstet Gynaecol* 33:422, 1990.
2. Morgans D, Chan N, Clark CA. Vulval perineal haematomas in the immediate postpartum period and their management. *Aust NZJ Obs Gynaecol* 1999;39:223-227.
3. Dutta DC: Injuries in the birth canal. In: Konar H. Ed. DC Dutta's Textbook of Obstetrics, 7th Edition. New Central Book Agency(P) Ltd Chintamani Das Lane Kolkata. 2011; 422- 431.
4. Myerscough PR. Maternal injuries. In: Myerscough PR. (Ed) Munro Kerr's Operative Obstetrics 10th edition Bailliere Tindall, London, 1995:441-468.
5. Cunningham FG, Macdonald PC, Leveno KJ, Gant NF, Gilstrap LC. Abnormalities of the puerperium. In: Licht J (Ed), Williams Obstetrics 19th Edition. Appleton and Lange / Prentice Hall international inc. 1993:643-650.
6. Middleton WD, Kurtz AB, Hertzberg BS. Placenta, umbilical cord and cervix. In: Thrall JH (Ed), *Ultrasound, The Requisites* 2nd Edition. Mosby, St Louis Missouri 63146. 2004: 486-514
7. Saleem Z, Rydstrom H; Vaginal Haematoma during parturition; A population based study. *Acta Obstet Gynaecol Scand.*2004; 83(6) 560.
8. Geburtshilfe Z. Rupture of the uterine artery after spontaneous delivery with unusual course in childbirth. A case report. *Pubmed* August 29, 2005. ...
9. Krakow K. Intraperitoneal haemorrhage due to rupture of right ovarian artery in the second day of puerperium. A case report. *Pubmed.* August 29,2005.
10. Guerriero S, Ajossa S, Bargellini R, Amucano G, Marongiu D, Melis G. B, Puerperal Vulvovaginal haematoma; Sonographic findings with MRI correlation. *J. Clin. Ultrasound*, 2004; 32(8) 415.