Case Report **DOI: 10.56412/gmcp.2023.6.01.134**

A Rare Case Of Huge Broad Ligament Hematoma Developing During Caesarean Section and Managed Conservatively

Dr. Parneet Kaur[1], Dr. Sangeeta Aggarwal[2], Dr. Nancy Grover[3]

[1]Professor & Head Dept of Obstetrics & Gynaecology, GMC, Patiala,

[2]Associate Professor Dept of Obstetrics & Gynaecology, GMC, Patiala,

[3]Junior Resident Dept of Obstetrics & Gynaecology, GMC, Patiala

Corresponding Author : Dr. Parneet Kaur

Professor & Head Dept of Obstetrics & Gynaecology, GMC, Patiala,

Email : parneetkd@yahoo.com.in

Absract

Broad ligament haematoma is one of the most serious emergencies faced in labour room with incidence between 1:500 and 1:20,000. It occurs due to obstetric trauma to the cervix, upper vagina or uterus that extends into uterine or vaginal vessels or vessels of the broad ligament. The diagnosis is usually late as pain is not of a conspicuous nature and so also the vaginal bleeding. Unexplained shock with features of internal hemorrhage following delivery raises the suspicion. If not diagnosed in time, it can prove fatal contributing to maternal mortality. The definitive treatment of broad ligament hematomas is variable according to size, location and severity of patient. Thus, strong clinical acumen is required for immediate diagnosis. Timely intervention is one of the important factors for successful treatment. Here we report a rare case of huge Broad Ligament Hematoma developed during Caesarean Section and managed conservatively.

Introduction:

Broad ligament haematoma is one of the most serious emergencies faced in labour room with variable incidence between 1:500 and 1:20,000[1] Broad ligament hematoma results from a tear in upper vagina, cervix or uterus that extend into the uterine or vaginal arteries[2] It occurs most commonly following operative delivery, trauma or surgery but it may also occur following spontaneous vaginal delivery. These can be dangerous as they remain silent and not cause evident vaginal bleeding. Most patient report fullness or pressure in recto anal area or an urge to push or they complain of dizziness and eventually may become hypotensive and anemic[3]. It may be treated either conservatively with blood transfusion, fluid resuscitation and observation or with surgical exploration and evacuation[4] . Or it may be successfully treated with Uterine artery embolization

CASE REPORT:

- We report a case of 35-year-old patient who presented in emergency of Department of Obstetrics and Gynecology RHP on 14/11/22 at 8pm (CR No: 46731) as P3L3 with operative day of LSCS done at nearby Civil Hospital. The operative notes mentioned broad ligament hematoma on left side with drain kept in situ and two units PRBCs transfused there. On arrival, patient was in shock with BP 82/52mmHg, PR 120/minute feeble, SpO2 97% on room air, drain output 300 ml. On per abdomen examination uterus was 30-week size, deviated towards right, distention present. Immediately resuscitation measures were started, Pitocin infusion continued and 1-unit PRBC started. MTP activated and communicated to blood bank.
- Ultrasound on bed was done which showed uterus to be of post-partum in size with heterogenous hyperechoic material measuring 8.5 x 7.5 x 12 cm in left hemipelvis on left lateral aspect of uterus extending up to lateral pelvic wall and into lower abdominal cavity. Broad ligament hematoma was confirmed. Based on patient hemodynamic instability a decision of exploratory laparotomy was made.
- Patient was undertaken for laparotomy under general anaesthesia. Intraoperative findings: On

entering the peritoneal cavity there was large hematoma 20 x 7 cm extended from bladder to high up along left lateral wall. On left side, an active bleeder was present in infundibulopelvic ligament which was ligated. As uterus was totally flabby and patients vitals were still deteriorating so decision of hysterectomy was taken. 3 units PRBC, 3 units FFP and 2 units PC were transfused intraoperatively and intraperitoneal drain was placed in situ. Patient vitals become stable and hematoma was not expanding hence left undisturbed. Abdomen was closed after observing patient vitals for further 15 minutes.

- Post operatively patient was shifted to ICU for monitoring and her inotropes were tapered off gradually. Her haemoglobin was 8.2gm and TLC was 36000, thus higher group of antibiotics was started. On POD-4, patient's haemoglobin fell down to 5.6gm but vitals were stable. 1-unit PRBC transfused and NCCT abdomen was done which showed 20 x 8.4 x 8.7 cm hematoma in left hemipelvis extending into left iliac region, reaching up to splenorenal recess.
- Pt was referred to higher centre on insistence of relative on POD-6, where CECT abdomen was done which showed no active bleeder/AV malformation/ pseudoaneurysm. Drain output was gradually decreasing so removed. On POD-10 stiches were removed, there was gaped abdominal wound, ASD was done twice daily and patient was managed conservatively and referred back to our institute.
- At RHP resuturing was done on POD-27. Repeat ultrasound was done which showed resolving hematoma with size 6.4 x 2.4 cm and she was discharged after suture removal under satisfactory condition.
- Patient came for follow-up regularly and after 2 months, a repeat ultrasound showed no collection and haematoma was completely resolved

DISCUSSION

Para genital haematoma are of two types: supralevator and infralevator[5]. Supralevator haematoma spreads upward and outward beneath the broad ligament. Our case is an example of supralevator haematoma. It can be silent and may cause abdominal pain, hypovolaemia shock. Imaging modalities like transabdominal/transvaginal ultrasound confirms the diagnosis. Broad Ligament haematoma can be managed both conservatively and surgically depending upon patient haemodynamic status, size and rate of haematoma expansion. Our patient was haemodynamically unstable at the time of diagnosis and given the circumstances that the haematoma was expanding we decided for surgical management.

CONCLUSION

Broad ligament haematoma is very rare event following a caesarean section. It is diagnosed on the basis of clinical suspicion, ultrasound. Resuscitation, volume replacement and surgical exploration are the key steps in management. It can be left undisturbed if not expanding in size and generally resolve completely over the period of 2 months.

REFERENCES

1. Korde-Nayak V, Biniwale P. Broad Ligament Haematoma. Labour Room Emergencies. Springer Singapore; 2019. p. 395–402. Available from: http://dx.doi.org/10.1007/978-981-10-4953-8_41
2. Yalla D, Nadar AN, Usha Rani G. Spontaneous broad ligament haematoma following a normal vaginal delivery. The New Indian Journal of OBGYN. 2019; 5(2): 140-1
3. Duckett RA, Pillai M, Marsh L. A case of spontaneous broad ligament haematoma. J Obstet Gynaecol. 2007;27(4):448-449. doi:10.1080/01443610701359951
4. Varvoutis M, Nguyen NTT, Grotegut C. Spontaneous broad ligament hematoma after vaginal delivery requiring hysterectomy. AJP Rep. 2021;11(1):e34. doi:10.1055/s-0040-1722727
5. Deng L, Naidu S. Ultrasound of a late onset postpartum broad ligament haematoma. Sonography. 2020;7:83–87