

Puerperal Scar Rupture: A Case Report

Dr. Anjai Gupta¹, Dr. Archana Suneja², Dr. Savita Singhal³

¹Professor, Department of Obstetrics and Gynaecology Pt. B.D. Sharma PGIMS Rohtak

²Senior Resident, Department of Obstetrics and Gynaecology Pt. B.D. Sharma PGIMS Rohtak

³Senior Professor, Department of Obstetrics and Gynaecology Pt. B.D. Sharma PGIMS Rohtak

ABSTRACT

Post partum haemorrhage occurring after 24 hrs to 12 weeks is rare and affects around 0.23-3% of all pregnancies. Secondary PPH occurs mostly after normal vaginal delivery and rarely after caesarean section. The later condition may be due to dehiscence of uterine scar incision after cesarean section leading to fatal and severe bleeding. Hence we report a case of secondary postpartum hemorrhage after 10 days of cesarean section.

Keywords: Secondary postpartum hemorrhage, Dehiscence, Uterine scar rupture.

INTRODUCTION

The rate of caesarean section is increasing worldwide. Due to this, infrequent complications of Lower Segment Caesarean Section (LSCS) have been encountered.^{1,2} Uterine scar dehiscence or rupture following caesarean section in puerperium is one of the rare complications. It can lead to postpartum haemorrhage, pelvic hematoma, pelvic abscess, endomyometritis, generalised or localised peritonitis and sepsis.³ Caesarean scar dehiscence (CSD) is life-threatening and can lead to increased morbidity, postpartum hemorrhage (PPH), and even death, if not treated promptly.

CASE REPORT

A 28-year-old, para 4 with 3 live children with previous one lower segment caesarean section (LSCS) had a repeat emergency LSCS for scar tenderness. Her antenatal period was uneventful. LSCS was done in a private hospital and a healthy baby was delivered. Her postoperative period was uneventful and she was discharged with stable vitals on 5th postoperative day. She reported to tertiary center with secondary PPH and fever after 10 days of caesarean. She was managed with 3 units PRBC and antibiotics and was discharged after 15 days. However, she reported to our institute in emergency with excessive bleeding per vaginum for two days. At admission, patient was conscious with thready pulse - 110 bpm and BP 100/70 mm of Hg. She was pale. On examination, abdomen was soft, non-tender and well contracted uterus. On local examination clothes were soaked with blood completely. On per vaginum examination, vagina was full of clots, uterus was 10 weeks size, filled with clots and defect was felt at scar site. Ultrasonography examination revealed hypoechoic collection anterior to the uterus, a linear hypoechoic tract seem to be communicating with endometrial cavity and outside with above mentioned collection with possibility of scar rupture.

Emergency laparotomy was performed. Per operatively, uterus was 8 weeks size and bladder adherent to scar site. Bladder retracted downwards by sharp dissection and then scar rupture was seen with infected margins. Uterine rent was sutured in two layers by chromic catgut no. 1. Complete haemostasis was achieved and abdomen closed in layers. Postoperative period was uneventful, she was put on higher antibiotics and patient was discharged after 10 days in stable conditions.

DISCUSSION

Caesarean section scar is the most common site of rupture due to its atrophic and inelastic character.⁴ Presenting features include abdominal pain and in some cases, massive secondary PPH. If left undiagnosed, it can amount to grave maternal morbidity and even death. Ultrasonography is the earliest investigation to be done. On trans abdominal usg, pain on probe compression and overlying sutures can be seen.

The common findings seen on TAS and TVS are as follows:

1. Hypoechoic hematoma/collection anterior to the uterus
2. Focal defect in the anterior myometrium in the region of CS
3. Communication of collection with the endometrial cavity
4. Mild free fluid or hemoperitoneum if present

In some cases due to collection in the pelvis it is difficult to determine the defect hence MRI can be done⁵

The common findings seen on MRI are as follows:

1. Hematoma/collection can appear as hypo-/hyperintense on T1WI and hyperintense on T2WI (depending on blood degradation products)
2. The collection may be seen to communicate with the endometrial cavity
3. The extent of uterine rupture
4. The extent of hematoma in the pelvis and abdomen and its relation with various organs
5. The status of pelvic organs, peritoneal cavity, pleural cavity for any hemoperitoneum/free fluid.
6. Myometrial thinning and scar thickness are better assessed on MRI.

Management of caesarean scar dehiscence includes proper antibiotic cover and repair of the defect. Uterine artery embolization can be considered in cases where there is severe bleeding⁶.

In 2022, Jyoti Dahal et al studied a case of 25 years old female presented with puerperal pyrexia for 9 days after caesarean section. Investigations were done which revealed uterine scar rupture with autovesical collection. The management of the case included intravenous antibiotics, an intracervical Foley's catheter and a gonadotropin-releasing hormone agonist.³

Another case was reported by Rinku Sengupta et al in 2012 where a 27-year-old with previous two caesarean sections presented with postpartum heavy bleeding with passage of clots after 10 weeks of elective caesarean section. She was taken for laparotomy followed by total abdominal hysterectomy.⁷

CONCLUSION

As the rate of caesarean section is increasing and so are the complications like scar rupture. Though rare, caesarean scar rupture leading to secondary PPH causing grave morbidity and mortality. Early diagnosis and prompt management can lead to prevention of complications.

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