Indian Journal of Obstetrics and Gynecology Research 2020;7(4):608–610

Content available at: https://www.ipinnovative.com/open-access-journals

Indian Journal of Obstetrics and Gynecology Research

Journal homepage: www.ijogr.org

Case Report

Postpartum uterine scar dehiscence with abdominal sepsis: Rare sequalae

Niranjan N Chavan[1], Shweta A More[1,*], Pradyna Changede[1], Menakshi Charaya[1]

[1] *Dept. of Obstetrics and Gynaecology, Lokmanya Tilak Municipal General Hospital and Lokmanya Tilak Municipal Medical College, Mumbai, Maharashtra, India*

ARTICLE INFO

Article history:
Received 31-05-2020
Accepted 27-08-2020
Available online 07-11-2020

Keywords:
Postpartum uterine dehiscence
Sepsis
Hysterectomy

ABSTRACT

Caesarean section is one of the common treatment offered in modern obstetrics. Despite being common, it can get complicated by life threatening complications like uterine scar rupture. It's spectrum of manifestation can be from subtle symptoms of abdominal pain to warning signs like secondary postpartum hemorrhage (PPH) and septic shock. In these cases, thorough clinical examination supported with radiological imaging may lead to prompt diagnosis and early surgical intervention. This can avoid associated morbidity and mortality of this rare complication. We present case report of this rare entity with review of present available literature.

Key Messages: Caesarean section rarely followed by life-threatening complication in the form of uterine scar dehiscence leading to puerperal sepsis. Early recognition aided with imaging can lead to timely intervention and prevention of morbidity as well as mortality.

1. Introduction

Even though caesarean section is common in modern obstetrics, postoperative period may get complicated by rare occurrence of uterine scar dehiscence. Scar dehiscence may present with secondary postpartum haemorrhage, localized wound infection, endomyometritis, peritonitis leading to sepsis. Clinical signs, biochemical investigation and radiological investigation aid in proper diagnosis as well as therapeutic decision making. Subtle symptoms with intact superficial scar can mask underlying uterine scar dehiscence and early abdominal sepsis. Early surgical intervention could be lifesaving in such scenario. We present case report of a postpartum uterine scar dehiscence with abdominal sepsis managed with early surgical intervention

2. Case History

A 26-year old female patient was presented to our department with complaints of gradually worsening abdominal pain, fever with chills, loose stools with faecal incontinence since 7 days. The referred patient was P2L2, underwent LSCS for the indication of previous LSCS in labour 14 days back. She had uneventful immediate post-operative recovery.

When referred to our Institute, patient had tachycardia with stable other hemodynamic parameters. Per abdominal examination showed lower abdominal tenderness, with minimal guarding and no rigidity. The superficial wound was healthy without any discharge or gapping. Per-vaginal examination showed suprapubic tenderness. Biochemical findings were unremarkable. Ultrasound examination of patient showed free fluid in pelvis with moving echoes and discontinuity of anterior uterine wall suggestive of scar site uterine rupture with pelvic collection. Based on clinical presentation and supportive imaging we came to diagnosis of the uterine rupture at the site of previous LSCS scar. Decision of emergency exploratory laparotomy was taken.

During exploratory laparotomy around 200 ml of pus drained, omentum was densely adherent to anterior abdominal wall, pus was adherent on bowel surfaces and

* *Corresponding author*.
E-mail address: shwetaankusmore@gmail.com (S. A. More).

https://doi.org/10.18231/j.ijogr.2020.129

uterine wall, uterus was atonic with friable tissue and uterine rupture seen on scar site with rent measuring 2×1.5 cm and having irregular necrotic margins (Figures 1 and 2). Hence decision of hysterectomy was taken as a lifesaving procedure. Thorough pelvic lavage was given. Pus was sent for culture, which showed MRSA. Appropriate systemic antibiotics were started as per culture and sensitivity report and pelvic drain was inserted for monitoring. Post-operative period was uneventful. Patient was discharged from hospital on day 4 of exploration and called for follow up on 7^{th} postoperative day. On clinical follow up, patient had complete resolution of symptoms.

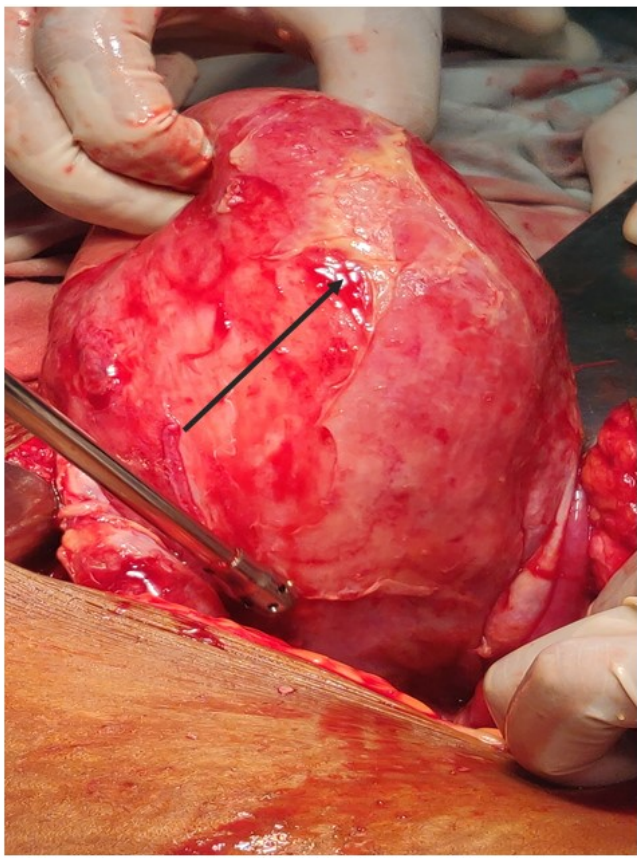

Fig. 1: Intraoperative findings shows pus filled cavity with pus flakes (black arrow) densely adherent to uterine wall

3. Discussion

The incidence of uterine rupture is 0.6% to 3.8%.[1] The risk is more with the factors like previous classical caesarean section, previous lower segment caesarean section, inadvertent use of uterotonics, previous surgery leading to breach in uterine cavity like myomectomy, adenomyomectomy, mullerian anomalies and metroplasty, underlying medical conditions like diabetes. Though the risk of uterine rupture is more with scarred uterus but such incidences in unscarred uterus also reported in literature.[2]

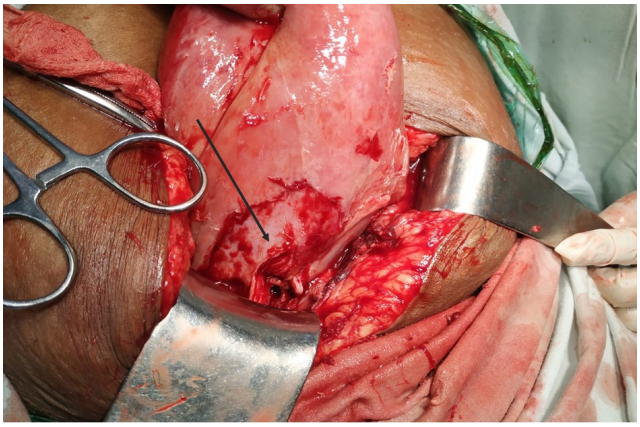

Fig. 2: Intraoperative findings uterine scar site rupture with rent Measuring 2x1.5cm with irregular margin (as shown by black arrow). Surrounding scar shows necrotic, friable tissue with irregular margins suggestive of dehiscence. There is loss of tone of a uterus

Patient having prior one LSCS and underlying infection could be the risk factors for our patient.

These patient may present between immediate postpartum days to typically 2-3 weeks of postpartum. Delayed presentation of the scar dehiscence till 6 weeks of postpartum period has also been reported in literature.[3] Postpartum uterine scar dehiscence can present as secondary PPH, localised or generalised peritonitis, sepsis, septic shock and superficial wound infection.[4,5] Uterine scar dehiscence with peritoneal infection present with abdominal pain and tenderness, fever, tachycardia, anaemia, sepsis and in sever cases as a septic shock, Additionally in our case patient was having loose stools lasting for longer duration, because of severe inflammation of uterine incision lead to purulent discharge resulting in peritoneal inflammation and bowel irritation.

Being a rare complication, high index of suspicion during clinical examination and the imaging modalities like an ultrasonography, magnetic resonance imaging and computed tomography can aid the diagnosis.[6] Ultrasonography is the commonly used imaging technique in these patients, because of its easy availability and good sensitivity.[7] On ultrasonography, the uterine incision site will show full-thickness hypoechoic area with fluid in the uterine incision line. This is typical of uterine dehiscence. In addition, pelvis collection/ localised hematoma along the uterine incision line can be visualized during USG.[1,8]

Management of these patients can be either conservative or surgical depending on the hemodynamic status and severity of infection. The haemodynamically stable patient without active bleeding,conservative management with broad spectrum antibiotics for uterine dehiscence can be considered.[1] The patient who is hemodynamically unstable or significant infection with signs of sepsis, exploratory

laparotomy should be considered. If margins of dehiscence are regular, re-suturing of margin can be attempted. In our case, because of necrotic irregular margin with significant infection, hysterectomy was a preferable option. In these patients with uterine rupture, elective LSCS should be consider in future pregnancies as uterine wound healing is poor in them leading to high chances of recurrence.

4. Conclusion

Postpartum uterine scar dehiscence is rare but life-threatening complication. High index of suspicion and prompt diagnosis can be aided by imaging modalities like ultrasonography. The morbidity and mortality associated with postpartum uterine scar dehiscence can be prevented with accurate diagnosis and timely management.

5. Conflict of Interest

The author(s) declare(s) that there is no conflict of interest regarding the publication of this article.

References

1. El-Agwany AS. Conservative management of infected postpartum uterine dehiscence after cesarean section. *J Med Ultrasound*. 2018;26(1):59. doi:10.4103/jmu.jmu_5_18.
2. Siddiqui MN, Ranasinghe JS. Spontaneous rupture of uterus. *J Clin Anesth*. 2002;14:368–70. doi:10.1016/s0952-8180(02)00375-6.
3. Wagner MS, Bédard MJ. Postpartum Uterine Wound Dehiscence: A Case Report. *J Obstet Gynaecol Canada*. 2006;28(8):713–5. doi:10.1016/s1701-2163(16)32236-8.
4. Aggarwal P, Ali Z, Sharma A. Uterine Scar Dehiscence Rare Cause of Secondary Postpartum Hemorrhage – A Case Report. *Int J Obstet Gynaecol Res*. 2019;6(3):766–72.
5. Bharatam KK, Sivaraja PK, Abineshwar NJ, Thiagarajan V, Thiagarajan DA, Bodduluri S, et al. The tip of the iceberg: Post caesarean wound dehiscence presenting as abdominal wound sepsis. *Int J Surg Case Rep*. 2015;9:69–7. doi:10.1016/j.ijscr.2015.02.013.
6. Kamaya A, Ro K, Benedetti NJ, Chang PL, Desser TS. Imaging and Diagnosis of Postpartum Complications. *Ultrasound Q*. 2009;25(3):151–62. doi:10.1097/ruq.0b013e3181b5451e.
7. Shaamash AH, Ahmed AGM, Latef MMA, Abdullah SA. Routine postpartum ultrasonography in the prediction of puerperal uterine complications. *Int J Gynecol Obstet*. 2007;98(2):93–9. doi:10.1016/j.ijgo.2007.03.042.
8. Royo P, Manero MG, Olartecoechea B, Alcázar JL. Two-dimensional power Doppler-three-dimensional ultrasound imaging of a cesarean section dehiscence with utero-peritoneal fistula: a case report. *J Med Case Rep*. 2009;3(1):42. doi:10.1186/1752-1947-3-42.

Author biography

Niranjan N Chavan, Additional Professor

Shweta A More, Senior Resident

Pradyna Changede, Assistant Professor

Menakshi Charaya, Registrar

Cite this article: Chavan NN, More SA, Changede P, Charaya M. Postpartum uterine scar dehiscence with abdominal sepsis: Rare sequalae. *Indian J Obstet Gynecol Res* 2020;7(4):608-610.