



POST LSCS SCAR DEHISCENCE AT TERTIARY CARE CENTER : A RARE IATROGENIC COMPLICATION WITH POST OPERATIONAL MORBIDITY AND MORTILITY

Dr Mohani balai

Resident Doctor, Department of Obstetrics and Gynecology, SMS Hospital and Medical College, Jaipur

Dr Pawan Kumar Agarwal

Professor, Department of Obstetrics and Gynecology, SMS hospital and medical college, Jaipur

Dr Anchal

Resident Doctor, Department of Obstetrics and Gynecology, SMS Hospital and Medical College, Jaipur

ABSTRACT

Introduction-Uterine Scar Dehiscence following LSCS is a relatively rare but critical complication, often linked to the development of fatal outcome. This condition carries significant risks, including the potential for infection-related complications, such as peritonitis and abscess formation, primarily arising from compromised uterine closure and scar tissue integrity. Faulty myometrial approximation during LSCS can yield similar outcomes, underscoring the importance of precision during the procedure. Various factors can contribute to the weakening of the lower uterine segment or incisional wound, including technical suturing, suture material, emergency situations, and other causes. The delay in diagnosing and managing uterine dehiscence can have severe consequences, leading to substantial morbidity and mortality. **Material and Method-** All cases of scar dehiscence are taken from SMS Medical college and hospital, Jaipur A tertiary care center between January 2024 to January 2025 were found. The ICD 10 Coding system, histopathology reports, and operating records were used to identify the cases. Further details were recruited from patient medical records after removing duplicate entries. **Result-** Total Nine cases were reviewed and analysed with in period. It shows that as age increases the chances of scar dehiscence increases. (Table1) Among nine cases the patient with sepsis showed mortality. Abdominal pain is the most common presenting symptom in study group. (Table2) Four cases were cured by Dehiscence repair, and three cases recovered by conservative treatment, For 2 cases we had to perform hysterectomy. (Table3)

KEYWORDS : Scar Dehiscence, Post Lscs, Hysterectomy, Sepsis

INTRODUCTION

Though rare, uterine scar dehiscence can sometimes complicate lower segment caesarean section operation with complications like post partum hemorrhage, endomyometritis, localized and generalized peritonitis, and sepsis.

Uterine dehiscence following LSCS is a relatively rare, but critical complication, often linked to the development of puerperal sepsis. This condition carries significant risks, including the potential for infection-related complications, such as peritonitis and abscess formation, primarily arising from compromised uterine closure and scar tissue integrity [3,8]. Faulty myometrial approximation during LSCS can yield similar outcomes, underscoring the importance of precision during the procedure. Various factors can contribute to the weakening of the lower uterine segment or incisional wound, including technical suturing, suture material, emergency situations, and other causes. The delay in diagnosing and managing uterine dehiscence can have severe consequences, leading to substantial morbidity and mortality.

Faulty myometrial approximation during LSCS can yield similar outcomes, underscoring the importance of precision during the procedure. Various factors can contribute to the weakening of the lower uterine segment or incisional wound, including technical suturing, suture material, emergency situations, and other causes. The delay in diagnosing and managing uterine dehiscence can have severe consequences, leading to substantial morbidity and mortality.

The condition's pathophysiology typically begins with a severe infection in the uterine layers, leading to necrosis of the weakest part, often the cesarean incision [15]. Improper closure techniques, such as tight locking sutures, can also contribute to myometrial ischemic necrosis [16]. Symptoms of early uterine dehiscence range from postpartum bleeding to mild pelvic pain and suprapubic sensitivity [11]. In cases of late uterine dehiscence, symptoms include sepsis, anemia, fever, tachycardia, suprapubic tenderness, and vaginal tenderness, due to the spread of infection to the peritoneal cavity.

MATERIAL AND METHOD

All cases of scar dehiscence are taken from SMS Medical college and hospital, Jaipur A tertiary care center between January 2024 to January 2025 were found. The ICD 10 Coding system, histopathology reports, and operating records were used to identify the cases. Further details were recruited from patient medical records after removing duplicate entries. A total number of Nine women with uterine scar rupture post LSCS identified over the duration of study. Women had complete medical records, and their data were used for full analysis. Maternal characteristics including demographics, post obstetric history, details of parity and mode of delivery, and complications were observed.

From the case records, patient demographics, age, parity, gestational age, and relevant clinical profiles were extracted. Etiological factors were also identified. Maternal outcomes and complications were assessed, so as the perinatal outcome. Blood transfusion history, morbidity and mortality were noted as well. All data were gathered and tabulated. For ethical consideration, patient autonomy, confidentiality, beneficence and non maleficence were maintained. Approval and informed consent were obtained. Data were screened, grouped, and analysed. Frequency and percentage were determined for comparative purposes. Referencing was assembled.

RESULT

Total Nine cases were reviewed and analysed with in period. Among nine cases four cases were more than 32 years, two cases were belongs to 18-22 yrs age group, one case was belongs to 23-27 yrs age group, two cases were belongs to 27-32 yrs age group. Majority of cases were more than 32 years. It shows that as age increases the chances of scar dehiscence increases. (Table1)

Table 1 Basic Age Group In The Study Group-

Age group	Number of Cases	Percentage
18-22 yrs	2	18%

23-27 yrs	1	11.11%
28-32 yrs	2	18%
>32 yrs	4	44.44%

Table 2 depicts about symptoms seen in cases post LSCS. 18% Cases presented with Hematoma. 55.55% cases presented with abdominal pain, 11.11% cases presented with severe vomiting and diarrhea and 11.11% case presented with sepsis. Among nine cases the patient with sepsis showed mortality. Abdominal pain is the most common presenting symptom in study group.(Table2)

Table 2 Symptoms of Presentation and Outcome Seen in Study Group

Symptoms	Number of Cases	Percentage	Outcome
Hematoma	2	18%	Live
Abdominal pain	5	55.55%	Live
Severe	1	11.11%	Live
Vomiting and Diarrhea			
Sepsis	1	11.11%	Death
Total	9	100%	

Table 3 depicting treatment given to the patient to all cases. Four cases were cured by Dehiscence repair, and three cases recovered by conservative treatment, For 2 cases we had to perform hysterectomy.(Table3)

Table 3 Treatment Given to the Patients-

Treatment	Number of Cases	Percentage
Conservative Treatment	3	27%
Hysterectomy	2	18%
Dehiscence repair	4	36%
	9	100%

DISCUSSION

Postpartum uterine dehiscence, although rare, is characterized by the reopening of the incision line after a LSCS, with incidence rates ranging from 0.2% to 1.5% for low transverse incisions and about 4% to 9% for classical incisions [11]. Risk factors for this condition include diabetes, emergency surgery, closure technique, puerperal infection, and hematoma at the incision site [14]. The condition's pathophysiology typically begins with a severe infection in the uterine layers, leading to necrosis of the weakest part, often the cesarean incision [15]. Improper closure techniques, such as tight locking sutures, can also contribute to myometrial ischemic necrosis [16]. Symptoms of early uterine dehiscence range from postpartum bleeding to mild pelvic pain and suprapubic sensitivity [11]. In cases of late uterine dehiscence, symptoms include sepsis, anemia, fever, tachycardia, suprapubic tenderness, and vaginal tenderness, due to the spread of infection to the peritoneal cavity.

Uterine scar dehiscence can lead to peritonitis, and treatment varies depending on the severity of infection. Antimicrobial treatment is usually sufficient if the infection is limited, but surgical intervention is necessary if there is uterine incisional necrosis. In some cases, peripartum hysterectomy can be required [17].

Infection associated with uterine dehiscence can manifest with symptoms such as fever, tachycardia, anemia, and signs of sepsis, along with suprapubic and vaginal tenderness. Diagnosis and treatment often involve exploratory laparotomy, and conservative resuturing can be an option, especially when there is no severe wound infection [18]. Choden et al [19] presented a case of uterine wound dehiscence with pelvic abscess following a cesarean section, characterized by symptoms of paralytic ileus and surgical site infection. Spontaneous cesarean scar dehiscence only 4 months after previous cesarean delivery was reported [20]. This case underscores the importance of thorough evaluation and readiness to address such complications during pregnancy, particularly in women with previous cesarean scars.

Presentation of patients can be post partum hemorrhage, endomyometritis, and generalized and localized peritonitis. Some patients may be diagnosed immediately after childbirth and some may have presentation after about 2–4 weeks of delivery. Identification of the condition requires a high index of clinical suspicion and dependence on radiological signs seen on ultrasonography (transvaginal/3D) or the CT scan. Dehiscence of a lower uterine segment incision is rare but potentially dangerous cause of localized/generalized peritonitis. If the infection begins in an intact uterus and extends into the peritoneum, antimicrobial treatment alone usually suffices. Conversely, peritonitis caused by uterine incisional necrosis must be dealt surgically. Failure to diagnose and treat uterine scar dehiscence promptly can result in long-term complications, including heavy menstrual bleeding abnormalities. Additionally, future pregnancies in affected individuals carry a risk of scar rupture, necessitating careful assessment and vigilance. In one study, magnetic resonance imaging (MRI) showed the appearance of uterine dehiscence in patients after LSCS and differentiated between complete and partial dehiscence [7]. Performing an emergency LSCS, especially in cases with thin myometrial segments, can elevate the risk of wound rupture and postoperative complications. Considerations of urgency and patient condition are essential in decision making. The experience and proficiency of the surgical team, particularly the surgeon, significantly influence the outcome of complex procedures, like LSCS. Surgical skill, decision making, and teamwork are crucial factors in patient outcomes and complication prevention.

Some studies identified several factors that increase the risk of uterine scar dehiscence, including preterm delivery, lack of progress in the first stage of labor, and having multiple previous cesarean deliveries. Furthermore, an analysis revealed that previous laparoscopic and abdominal myomectomies are linked to uterine rupture during pregnancy, with hysteroscopic myomectomy being associated with earlier gestational ages.

REFERENCES

- Centres for Disease Control (CDC) Surgical Site Infection (SSI) Event. 2016. Available at: <http://www.cdc.gov/nhsn/pdfs/pscmanual/9pscscscurrent.pdf>. Accessed Aug. 26, 2016.
- Chelmos D, Huang E, Strohbehn K. Closure of the subcutaneous dead space and wound disruption after cesarean delivery. J Matern Fetal Neonatal Med 2002;11:403–408.
- Bhaddauria AR, Hariharan C. Clinical study of post operative wound infections in obstetrics and gynaecological surgeries in a tertiary care set up. Int J Reprod Contracept Obstet Gynecol.
- Dr. Harish Babu B G, Dr. Narmadha NS, Surgical Wound Infections in Obstetrics and Gynaecology - A Study from Rural Tertiary Care Hospital International Journal of Innovative Research in Medical Science (IJIRMS) Volume 02 Issue 12 December 2017, ISSN No. 2455-8737
- dehiscence with utero-peritoneal fistula: a case report, J. Med. Case Rep. 3 (2009), article 42.
- W. Obstetrics, F Cunningham, K. Leveno, S. Bloom, J. Hauth, D. Rouse, C. Spong, twenty third edition, page no 665.
- Sepsis following pregnancy, bacterial Royal College of obstetrician and gynecologists, April 2012.
- R.A.Kwame-Aryee, A.K.K.Wakye, J.D.Stefan, Peripartum hysterectomies at Korle Bu general hospital, Ghana Med. J. 41 (September (3)) (2007) 133–138.