

A Case Report of Uterine Scar Dehiscence with Loculated Collection in Abdominal Cavity after Caesarean Section

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1. Case Report

A 21 year old srimathi X, P1 L1 with EMLSCS with post operative day 25 admitted in teaching hospital with complaints of abdominal pain and abdominal distension since 15 days. Complaints started after suture removal. She went to local hospital, there ascitic tap was done and aspirated 2 litres of fluid. On examination temperature afebrile, pulse 108 bpm, BP-100/60, Per abdomen distended, uterus sub involuted, pf scar present, bowel sounds heard, per speculum examination yellowish serous fluid is seen coming from cervix. on bimanual examination uterus 16 weeks size, anteverted, mobile. Fornices free and no forniceal tenderness

Investigations:

Hb-12.5 gm/dl, WBC-6800/mm³, RBC-4.16 million/mm³, DC -N 65, L 30, E 3, M 2, B 0, platelets-1.5 lakhs/mm³

Serum creatinine-0.9 mg/dl, B. urea-20 mg/dl, total bilirubin-0.7 mg/dl. Direct bilirubin-0.2 mg/dl, SGOT-18 IU/ml, SGPT-24 IU/ml, ALP-61 IU/ml, total protein-7.4 g/dl, albumin 5.1 g/dl, INR-1.3, APTT-35.2 sec.

Ascitic fluid analysis: TC-16000 cells, N-60%, L-40%, sugar-10.6 mg/dl, protein-4.6 g/dl, albumin-0.4 g/dl, ADA-132 U/L, CBNAAT -Negative. Culture was negative

Pleural fluid analysis:

TC-900 Cells, N 20%, L 80%, ADA 20 U/L, albumin-2.8 g/dl, sugar-102 mg/dl, CBNAAT-negative.

USG abdomen shows irregular, ill defined hypo echoic collection with echogenic echoes measuring 2.4x1.5 cm noted in lower uterine segment anteriorly collection communicating with peritoneal cavity through? defect (7.8 mm)? uterine dehiscence. Mild pleural effusion and moderate free fluid in peritoneal cavity with thick septations and echoes-organised ascites.

MRI-shows loculated, large thick walled, T2 W hypotense, T2 W, STIR Hyper intense collection in peritoneal cavity extending from peri hepatic space on right side up to the pelvis, means about 2.8x11.2x14 cm with lower end of

collection communicated with the defect in anterior wall of uterus (post op site).

Collection also seen extending to the Pouch of Douglas. there is no evidence of T1 W bright signal areas within the collection. Features suggestive of **Organising hematoma**.

Right moderate pleural effusion with passive underlying atelectasis.

Patient treated with injpiptaz and inj. metranidazole for 6 days followed by Exploratory laparotomy done under general Anaesthesia.

Intraoperative Findings

A rent of size 5 cm present in anterior wall of uterus at scar site. purulent flaky material noted in draining from rent site, a Tract of 15 cm with purulent material inside extending from anterior wall of uterus to peri hepatic region. after draining pus uterine rent sutured tract opened and all purulent material drained out. Posteriorly pouch of Douglas visualised and no collection noted both tubes and ovaries normal.

2. Discussion

Puerperal sepsis after a cesarean delivery is a rare complication associated with SSIs, including wound complications as wound hematoma, seroma, infection, dehiscence, necrotizing fasciitis and pelvic abscess with or without endometritis which may further lead to uterine scar dehiscence. A pelvic abscess is a rare cause of postpartum fever; its incidence being less than 1% of patients undergoing obstetrics and gynecology procedures¹. The location of abscess can be either in a posterior cul-de-sac, anterior lay, between the uterine wall and urinary bladder or in the broad ligament. The causative agents are anaerobic bacteria and aerobic gram-negative bacilli. When wound infection develops within 48 hours, the offending organisms usually are groups A or B-hemolytic Streptococcus. Other common pathogens involved in wound infections are *Ureaplasmaurealyticum*, *Staphylococcus epidermidis*, *Enterococcus facials*, *Staphylococcus aureus*, *Escherichia coli*, and *Proteus mirabilis*^{2,3}. Other reported risk factors for SSI and consequently uterine dehiscence chorioamnionitis⁴,

maternal comorbidities, body mass index >30 or 35 kg/m²⁵, corticosteroid use^{7, 8}, subcutaneous tissue thickness >3 cm, no antibiotic prophylaxis⁹ pregestational diabetes^{10, 11}, hypertensive disease/preeclampsia⁸, duration of labor >12 hours, nulliparity¹² twin gestations^{13, 14}, premature rupture of membranes, gestational diabetes¹⁵, blood loss (increased for every increase in blood loss of 100 mL)¹², incision length >16.6 cm, 16-19 and an incision made too close to the relatively avascular cervical tissues which often lead to necrosis of the angles of the wound. In our case-patient has no other associated comorbid conditions. In cases where wound dehiscence is described, the incision may appear healthy or necrotic. In our case necrotic tissue reaction at scar site was present. Some reports describe dehiscence of cesarean scar associated with endometriosis and in some reports without associated Endometriosis. Conservative and aggressive approaches have been proposed for the management of dehiscence of a cesarean scar and parietal wall collection. Conservative measures include broad-spectrum antibiotic coverage and imaging like ultrasonography, or CT scan-guided needle aspiration and blood transfusion if required. The more aggressive methods include exploratory laparotomy followed by resuturing of the incision. In many cases, resuturing is not possible because of friability of the tissue, or due to uterine involution, there may not be enough tissue in the lower uterine segment to allow repair. In our patient's case due to the no excessive friability of uterus and surrounding tissue attempt of resuturing was done and collection was drained.

3. Conclusion

Hereby we concluded that in post cesarean cases with puerperal sepsis and uterine scar dehiscence if the patient is not responding to conservative measures then the decision of exploratory laparotomy should be taken without any delay to avoid various associated morbidities.



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