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Case Report

A SUBTLE AND DELAYED PRESENTATION OF SCAR RUPTURE AFTER VBAC: A CASE REPORT

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Abstract:

Uterine scar dehiscence is the opening of the uterine incision. It is potentially a life-threatening complication. Though it is a rare complication of caesarean section but nowadays it is increasing as caesarean delivery is also increasing. It is more common following vaginal birth after caesarean (VBAC). It leads to postpartum hemorrhage, pelvic hematoma, pelvic abscess, endomyometritis, generalized and localized peritonitis and sepsis. Here we report a case of a 25 year old female who presents with abdominal distention with pyrexia following VBAC. Investigation revealed incomplete uterine scar rupture and huge ascites with left sided mild pleural effusion. The case was managed by laparotomy and drainage of about 6L of encysted pus.

Worldwide the rate of caesarean section is increasing. At the same time complications of Lower Segment Caesarean Section (LSCS) are also rising. Among the complications uterine scar dehiscence or rupture is dangerous but rare complication. It is the opening of the uterine incision line involving all layers of the uterus and the frequency is about 0.3%. This risk increases following vaginal birth after caesarean section (VBAC). It occurs in 0.47%. [1] It can leads to PPH, pelvic hematoma, pelvic abscess, endomyometritis, generalized or localized peritonitis and sepsis. Published cases have shown that the patients developed acute abdominal distention after VBAC. Management includes at first with antibiotics; subsequently, laparotomy. We hereby report a case of uterine scan rupture after VBAC, which was managed by laparotomy and drainage of pus.

Key words:
Caesarean section; case reports; Postpartum; rupture; scar

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Case report

A 25 years old women with obstetric index of para 2 was referred to Department of Gynae and Obstetrics, East West Medical College Hospital on 27th October, 2024 from Rangpur medical college for acute

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abdominal distention vaginal delivery after caesarean (VBAC) at Lalmonirhat of Rangpur district. Women got a child of 4 years delivered by caesarean section. Second one was a twin pregnancy. Her labor pain started on 22/09/24 at her 36+ weeks pregnancy and she set off to a nearby hospital. She had viral hepatitis at that moment (S. bilirubin was 2.7 mmol/L). But on the way she delivered normally in the car. Then she developed Postpartum Hemorrhage. After heading to the hospital they did medical management of PPH and repaired the perineal tear. She was discharged from the clinic on 24/09/24. She was admitted to Rangpur medical college on 01.10.24 due to abdominal distension. Conservative treatment with antibiotics was given. USG of the whole abdomen was done on 19.10.24 which shows incomplete uterine rupture at the site of previous uterine scar with huge ascites with left sided pleural effusion (figure 1 & 2). A CT scan of abdomen was done on 10.10.24 at Rangpur which revealed Bulky uterus with endometrial collection with splenomegaly with huge ascites. Patient was referred to medicine department. They started treatment with Tab. Furosemide + Spironolactone 20/50 mg and Tab. Ursodeoxycholic Acid 150 mg and syrup Lactulose. Ascitic fluid for ADA, glucose, protein were in normal range. On cytology of ascitic fluid, no organism detected, AFB not found and only RBC present. Patient was referred to BSMMU on 14.10.24 for further treatment. On 27/10/2024 this lady was admitted to our hospital with abdominal distention, mild pyrexia, mild abdominal pain. At the time of presentation, the temperature was 100.9 F. Abdomen was hugely distended (abdominal girth at umbilicus 81.5cm), fluid thrill was present. On palpation the abdomen was mildly tender. Patient was clinically anemic.

On investigation, the Hb% was 7.3 g/dL, ESR 51 mm in first hour, WBC count was 11070 /cumm, total platelet count 6,51,000/cumm, S.bilirubin, S creatinine, SGPT were in normal range. These WBC and platelet counts indicate secondary infection. USG showed hugely organized collection with minimal ascites, bulky uterus with mild endometrial collection. Second CT scan done on 27.10.24 which showed large cystic abdominal mass (22x20) cm with air fluid levels and trapped bubbles are noted in abdominal cavity extending up to umbilical region, bulky uterus with endometrial collection and mild ascites. After 2 units of blood transfusion her Hb% was 11 g/dL, WBC count was 22960 /cumm.

On 28.10.24 her laparotomy was done by a team of Gynaecologists and Surgeon. On opening the abdomen there was thick walled encysted mass occupying whole abdomen and sealed in all side. Incision was made on encysted mass and about 6L of yellowish thick pus came out. Pus was sent for C/S and the wall of the cyst was sent for Histopathology. But uterus and adnexa, bladder all were inflamed tissue. After adequate drainage and surgical toileting with normal saline, two drain tube was kept in situ. Abdomen was closed in layers. Post-operative period was uneventful. She was on Meropenem Trihydrate, Metronidazole and Amikacin. (On 3.11.24 her blood picture showed total WBC count 12,000/cumm and platelet count 6,00,000/cumm. Pus was coming through 2 drain tube of about 2.5L/day). Her abdomen was soft, non-tender. Bowel sound was present on 2nd POD. Oral feeding started. Her bladder voided and bowel moved. She was apyrexic. Patient was discharged on 7th Post-operative day, though pus was coming

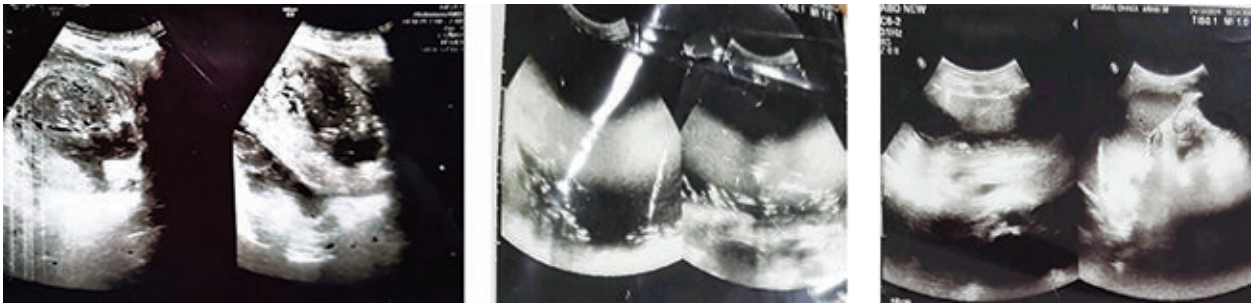

Figure 1 & 2: *Uterus: Bulky in size (A/P 5.73cm). Mild endometrial collection with echogenic component within. Peritoneal Cavity: Huge collection containing echogenic component & debri are noted in the peritoneal cavity.*

through drain tube, it was less than previous amount. On discharge check dressing was done and it was healthy. On 14th POD stitches were removed. On 15th POD her vitals are okay but still now about 300ml of pus was coming through drain tube daily. On 20th POD drain tube showed no collection. On 25th POD drain tube was removed. Patient clinically improved.

Discussion

Postpartum uterine scar rupture is rare but potentially life threatening condition characterized by the opening of all the layers of uterus. There are many risk factors including diabetes, surgical technique, infection, hematoma on incision site, VBAC, inappropriate oxytocin administration.

A study reported three cases of post-caesarean uterine scar dehiscence managed conservatively. All three cases present 1-2 weeks following caesarean section with complaints of abdominal pain and purulent vaginal discharge. All cases were managed with intravenous antibiotics and were discharged within 2-4 weeks. Various imaging modalities such as USG, magnetic resonance imaging and computed tomography can be used for detection of post caesarean scar rupture.

For diagnosis of uterine scar rupture we can do exploratory laparotomy. We can also treat at the same time. However, in case of marked wound infection, endomyometristis hysterectomy may be needed. Conservative approach with intravenous antibiotics and drainage of pelvic collection can be considered in stable patients.

Conclusion:

This case report highlights a rare but important complication of VBAC. As this condition seldom occurs there is no routine guideline for management of the case. Different diagnostic tools and multidisciplinary approach is helpful for diagnosis and treatment. It is recommended that VBAC patient should have hospital management with continuous fetal and maternal monitoring.

Disclosures

Consent was obtained by the participant in this study.

References

1. Guise JM, Eden K, Emeis C, Denman MA, Marshall N, Fu RR, Janik R, Nygren P, Walker M, McDonagh M. Vaginal birth after cesarean: new insights. Evid Rep Technol Assess (Full Rep). 2010 Mar;(191):1-397. PMID: 20629481; PMCID: PMC4781304.
2. Thyagaraju C, Makam SM, Yedla D, Papa D. Conservative surgical management of immediate post-cesarean uterine dehiscence and pelvis abscess due to proteus mirabilis infection: A rare complication of Puerperal endomyometritis. Int J Reprod Contracept Obstet Gynecol. 2021 Jul; 10(7):2895-8.
3. El-Agwany AS. Conservative Management of Infected Postpartum uterine dehiscence after cesarean section. J Med Ultrasound. 2018 Jan-Mar;269(1):59-61
4. Has R, Topuz S, Kalelioglu I, Tagrikulu D: Imaging features of postpartum uterine rupture: a case report. Abdom Imaging. 2008, 33:101-103.

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