



POST-PARTUM UTERINE SCAR DEHISCENCE

Gynecology

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ABSTRACT

Scar dehiscence is disruption of myometrium at the scar site. Its occurrence in the postpartum period following cesarean section is rare. Diagnosis of post-partum scar dehiscence can be made only by a high index of suspicion. MRI is the gold standard for confirmation of diagnosis. This case is unique as we could not find any case of post operative uterine dehiscence associated with tuberculosis and presenting as sub acute intestinal obstruction in the literature reviewed. Treatment was conservative with a plan for surgical repair later.

KEYWORDS

Postpartum uterine scar dehiscence, Sub acute Intestinal Obstruction

INTRODUCTION:

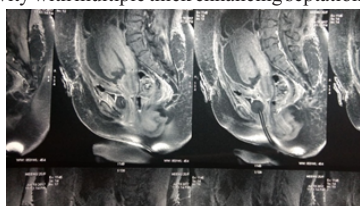
Scar dehiscence is disruption of myometrium at the scar site. Its occurrence in the postpartum period following cesarean section is rare. Though it may remain asymptomatic, it can also present as secondary PPH, pelvic abscess, wound dehiscence, chronic pelvic pain, menstrual disturbances, dysmenorrhoea, and secondary infertility. Its presentation as subacute intestinal obstruction and association with tuberculosis abdomen has not been found by us in literature.

CASE:

We report a case of a 30 year old G2 A1 lady who was referred to us on day 4 of LSCS done at a secondary care hospital with complaints of intermittent fever with chills {spikes of 101°F}, vomiting, abdominal distension for 1 day and breathlessness. She was passing flatus but had not passed stools after surgery. LSCS was done at 36 weeks pregnancy for breech presentation with fetal distress. A fresh stillborn male baby of 2.2 kg was delivered. There were no antenatal, intrapartum and immediate postpartum complications as per the referral note.

On examination, the patient was pale, febrile (101°F) and dyspnoeic (RR 30/min). She had tachycardia (P 116bpm) and BP was 100/60 mm of Hg. Breath sounds were diminished on both sides. The cardiovascular system was normal. Abdomen was distended but there was no rigidity/ guarding or rebound tenderness. Bowel sounds were sluggish. The wound was dry. There was no hepatosplenomegaly but fluid thrill was present. Uterus was 18 weeks size. Bimanual examination revealed no adenexal mass or tenderness. Lochia was healthy.

The patient was investigated and had a Hb of 7.1 g/dL, TLC 9100/cu mm, DLC- N70 L20 M8 E2, Platelet count 1.93/mcL. Her KFT, LFT, S.electrolytes, S.amylase and S.lipase and ECG were normal. Chest X Ray & CECT Thorax showed a bilateral pleural effusion with basal atelectasis with lymph nodes in right para tracheal and pretracheal region. Abdominal X Ray, Ultrasound and CECT Abdomen suggested intestinal obstruction and free fluid in abdomen. An abdominal fluid tap was done and found to be positive for ADA (46.6 IU/L). Cytology of ascitic fluid revealed L91 N2. All these findings were suggestive of abdominal tuberculosis. MRI abdomen revealed a full thickness communication between the endometrial cavity and the peritoneal cavity near the junction of lower uterine body with cervix s/o complete uterine incision dehiscence. Collection was also seen within the peritoneal cavity with multiple thick enhancing septations (Fig.1).



(Fig.1) – MRI Abdomen

In view of sub acute intestinal obstruction likely to be tubercular,

patient was managed conservatively. She was kept nil per orally, on IV fluids, IV antibiotics and continuous Ryle's tube aspiration. One unit of packed cells was transfused. In view of positive ADA, B/L pulmonary effusion and free fluid in abdomen, ATT was started. The patient responded to conservative treatment – became afebrile, had no vomiting, tenderness/ guarding or rigidity. She was discharged 21 days after admission. The patient is in our follow up and doing well. Repair of scar dehiscence is planned at a later stage.

DISCUSSION:

The incidence of scar dehiscence in the post partum period has not been specifically found in the reviewed literature. According to a meta analysis by Tahara et al [14], incidence of CSD irrespective of cause - 1.9%. Other studies Blanco et al [3] and Bromley et al [4] put the incidence between 0.6% and 3.8%. Dehiscence may be complete when full thickness of the myometrium is disrupted or it may be incomplete with varying degrees of involvement of uterine myometrium but an intact serosa.

Women with postpartum uterine scar dehiscence may present with menstrual disturbance -intermenstrual/postmenstrual spotting (64%), dysmenorrhoea (53%), chronic pelvic pain (40%) dyspareunia (18%) or Secondary infertility [13,15]. They may also present with secondary PPH, pelvic abscess, localised abscess, abdominal wound sepsis, endomyometritis. The known risk factors for dehiscence include diabetes, previous uterine trauma, uterine congenital anomaly, previous cesarean section, abnormal placenta implantation, emergency surgery, incision placed too low in the uterine segment, PPH, infection, suture technique & reaction to suture material and hematoma on the uterine incision line or retrovesical hematoma.

The diagnosis is possible by a high index of suspicion and imaging techniques – USG, CT scan & MRI. MRI is the gold standard for diagnosing uterine scar dehiscence and the patient may then be followed up by USG.

The management of such patients varies from case to case and there is no standard protocol. A surgical approach is usually required in most cases. Conservative surgery with removal of fibrous tissue at the site of the scar and repair [8,16] may be done. Laparoscopic and vaginal repair of symptomatic scar dehiscence has been done many years after caesarean section. Hysterectomy may be required in some cases especially if child bearing is not an issue. Recently, microsurgical and robotic surgical repair / uterus reconstruction has also been reported. [5].

If the patient is stable and does not want surgery and future child bearing, she may be managed conservatively. Such patients can use low dose contraceptive pills for contraception. In conservatively managed patients, scar usually heals spontaneously by secondary intention but has poor strength. Therefore, the future pregnancies in such patients herald risk of scar rupture again and need a high index of suspicion and prior assessment of the scar. [10, 11]

Literature Survey:

A summary of cases reported in the literature with varying presentations and managements by different authors is given below:

Table - I

AUTHORS	SYMPTOMS	PEROP / INVES. FINDINGS	MANAGEMENT
Mahapatra K.C. et al 2017[9]	Pelvic Abscess [fever, urinary retention]	-2L pyogenic fluid - Dense bowel adhesions -Uterine wound dehiscence with necrotic margins	Laparotomy & Subtotal Hysterectomy
Hamadeh Sameer et al 2016 [7]	Fever, Dysuria, Purulent Vaginal Discharge	Subserosal uterine abscess	IV antibiotics & USG guided drainage of pus
Bharatam Kaundinya Kiran et al ,2015[2]	Abdominal Wound Sepsis	USG- a collection with stranding in the Pouch of Douglas. Per op: -50 ml thick pus in pelvic cavity and drained. -uterine scar dehiscence with sloughed out margins - localized abscess &- endomyometritis	Exploratory laparotomy-- drainage of pus and repair of dehiscence.
Dwivedi JS et al 2015 [6]	Endomyometritis - Fever, subinvolved uterus, foul smelling lochia	-Rent in the anterior uterine wall at the LSCS incision site -Anterior wall collection of 4cm x2.5cm x2.5cm size.	Conservative (IV Antibiotics). Pt discharged on day 45.
Sengupta Rinku et al, 2011 [12]	Secondary PPH after 8 weeks of LSCS	An active arterial bleed at the left angle of the incision, necrosed incision margins and hemoperitoneum	Laparotomy for uncontrolled bleeding & hypotension. Total Abdominal Hysterectomy done.

A review of three cases managed conservatively has been done by Adnan Incebiyik et al [1]. In all the three cases, the uterine scar healed and the patient were discharged within 19 to 25 days.

Table - II

	PRESENTING SYMPTOM	MONITORING	CLOSURE OF DEHISCENCE	DISCHARGE
CASE I	Abdominal pain [Postop D8]	TLC,ESR, CRP, USG	Spontaneous Day 23	Day 25
CASE II	Abdominal pain [Postop D7]	TLC,ESR, CRP, USG	Spontaneous Day 20	Day 22
CASE III	Pain,redness and discharge from wound site[Post LSCS day 10]	TLC,ESR, CRP, USG	Spontaneous Day 17	Day 19

Our patient presented a challenge as she presented with signs and symptoms suggestive of subacute intestinal obstruction and no symptoms suggesting involvement of the uterus. On reviewing the literature, we could not find a reported case of post operative uterine dehiscence associated with Tuberculosis and Presenting as sub acute intestinal obstruction.

REFERENCES:

- Adnan Incebiyik, Nese Gul Hilali, Aysun Camuzcuoglu Ekrem Karakas, Halef Aydin Mehmet Vural, Hakan Camuzcuoglu, Avni Kilic, University School of Medicine, Sanlurfa, Turkey -Approccio conservativo per cause di deiscenza uterini senza sanguinamento dopo cesareo: cases report]- Accepted May 06, 2013 Bharatam Kaundinya Kiran, P.K. Sivaraja, N.J. Abinешwar, Vasundhara Thiagarajan, D.A. Thiagarajan, Sudeep Bodduluri, K.B. Sriraman, A. Vasantha Ragavan, and Shanmuga Priya Int J Surg Case Rep. 2015; 9: 69–71. Published online 2015 Feb 11. doi: 10.1016/j.ijscr.2015.02.013

- Blanco JD, Collins M., Willis D, Prien S. Prostaglandin E2 gel induction of patients with a prior low transverse cesarean section. Am J Perinatol. 9:80-83
- Bromley B, Pitcher BL, Klapholz H, Lichter E, Benacerraf BR. Sonographic appearance of uterine scar dehiscence. Int J Gynaecol Obstet. 51:S3-S6
- Donnez O, Jadoul P, Squifflet J, Donnez J. Laparoscopic repair of wide and deep uterine scar dehiscence after cesarean section. Fertility and Sterility. 89: 974-980.
- Dwivedi JS, Gupta AS. Postoperative (LSCS) Uterine Scar Dehiscence. JPGO 2015. Volume 2 Number 11. Available from: <http://www.jpgo.org/2015/11/post-operative-lscs-uterine-scar.html>
- Hamadeh Sameer et al. Pelvic Abscess With Uterine Wound Dehiscence Post Caesarean Section, Rare Presentations With Modified Management: Case Report & Literature Review. (2016) J Gynecol Neonatal Biol 2(1): 1-4.
- Klemm P, Koehler C, Mangler M, Schneider U, Schneider A. Laparoscopic and vaginal repair of uterine scar dehiscence following cesarean section as detected by ultrasound. Journal of Perinatal Medicine. 33: 324-331.
- Mahapatra Kishore Chandra, Santosh Kumar Dora, Dr. Tusar Mahapatra, 2017. "A rare case of spontaneous caesarean scar dehiscence presented as Pyoperitoneum during Puerperium (04), 48801-48803.
- Rivlin ME, Carroll CS, Morrison JC. Infectious necrosis with dehiscence of the uterine repair complicating cesarean delivery: a review. Obstetrical and Gynecological Survey. 59:833-837
- Royal College of obstetrician and gynecologists Sepsis following pregnancy, bacterial
- Sengupta Rinku Dhar and Renu Misra, Department of Gynecology and Obstetrics, Sitarum Bhartia Institute of Science and Research, B-16, Qutab Institutional Area, New Delhi 110 016, India Case Reports in Obstetrics and Gynecology Volume 2012 (2012), Article ID 154685, 3 pages <http://dx.doi.org/10.1155/2012/154685>
- Shih C. L., Chang Y. Y., Ho M., Lin W. C., Wang A. M.-H. Hysteroscopic transcervical resection: a straightforward method corrects bleeding related to cesarean section scar defects. American Journal of Obstetrics & Gynecology. 2011; 204: 278.e1-278.e2.
- Tahara M, Shimizu T, Shimoura H. Preliminary report of treatment with oral contraceptive pills for intermenstrual vaginal bleeding secondary to a cesarean section scar. 86:477-9. Epub.
- Thurmond AS, Harvey WJ, Smith SA. Cesarean section scar as a cause of abnormal vaginal bleeding: diagnosis by sonohysterography. J Ultrasound Med. 18:13-16
- Yalcinkaya T. M., Akar M. E., Kammire L. D., Johnston-MacAnanny E. B., Mertz H. L. Robotic-assisted laparoscopic repair of symptomatic cesarean scar defect: a report of two cases. The Journal of Reproductive Medicine. 56: 265-270