Uterine Perforation - A Spontaneous Recurrence

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PRESENTATION OF CASE

A 30-year-old female, gravida-3, para–1, live–1, abortion–1, admitted in Sri Ramachandra Institute of Higher Education and Research (SRIHER) at 37 weeks and 6 days of gestation–planned for elective lower segment Caesarean section.

Growth scan done at 37 weeks showed fetal growth restriction (estimated fetal weight-EFW at 3rd centile) with uterine artery Doppler showing high resistance flow. She had mild anaemia (haemoglobin 9g / dl), B negative blood group, indirect Coomb's test was negative, and injection anti D was not given antenatally. She had an uneventful antenatal period.

In 2013, at 23-years of age, she was referred to SRIHER with high grade fever and lower abdominal pain for one-week duration. She had history of dilatation and curettage done one week back for missed abortion. Pelvic ultrasound and computed tomography showed an adnexal mass with air pockets suggestive of a pelvic abscess. She was taken up for emergency laparoscopy which revealed a pelvic abscess walled off by omental and bowel adhesions along with perforation on the upper part of the posterior surface of uterus with extensive sloughing. In view of the nulliparous status of the patient conservative management was opted for and decision was taken to preserve the uterus under stepped up antibiotic cover. Thorough peritoneal wash was given, and intraperitoneal drain was kept. Patient was intensively monitored. Though she developed features of evolving sepsis prompt critical care management resulted in her steady recovery without undergoing hysterectomy.1

In 2018, (G2A1) patient was planned for elective lower segment Caesarean section (LSCS) at 37 weeks. However, she came to our institute at 33 weeks and 4 days of gestation in early labour. In view of history of previous septic abortion with uterine perforation, she delivered by emergency lower segment Caesarean section. Baby was a late preterm girl, weighing 1.9 Kg, cried immediately at birth. Placenta and membranes were delivered in toto. Intraoperative period was uneventful. Posterior wall of uterus did not show any signs of the previous perforation. Post-operative period was uneventful.

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DISCUSSION OF MANAGEMENT

In October 2020, (G3P1L1A1) patient delivered a boy baby weighing 2.2 Kg by elective LSCS in view of previous LSCS. Intraoperative, dense adhesions were noted between anterior abdominal wall and lower uterine segment. The same was released by sharp dissection and bladder was pushed down. Incision was given in upper uterine segment and baby was delivered as cephalic and cried immediately after birth.

Placenta and membranes were delivered in toto. Following which a 2 x 2 cm rent was noted in the upper part of the posterior surface of uterus. (Figure 1) All the layers of the uterus were noted to be involved. It was sealed by a blood clots which was probably disturbed at placental delivery. The perforation had bleeding edges and same was closed with 1 - 0 chromic catgut interrupted sutures (Figure 2). Period of post-surgery was uneventful, and patient was discharged on post-operative day 4.

DIFFERENTIAL DIAGNOSIS

Uterine perforations usually result from iatrogenic and less frequently; as a spontaneous occurrence. While iatrogenic aetiologies are well known such as dilation & curettage, hysteroscopy, intrauterine contraceptive device (IUCD) insertion; spontaneous causes include pyometra, gestational trophoblastic disease and rarely uterine infarction from a degenerated myoma.

Although dilation & curettage (D & C) is regarded as a relatively safe procedure, uterine perforation is a potentially serious complication and its true incidence is unknown and underestimated as most cases pass undetected.

PATHOLOGICAL DISCUSSION

First trimester abortion is a straightforward and commonly performed procedure. However, complications, including uterine perforation, have been noted. The incidence of uterine perforation varies between 0.8 and 6.4 / 1000 procedures.[2,3] More often than not perforations maybe missed if the patient is clinically stable. The diagnosis is usually made based on operator suspicion. Pregnancy following conservative management of a uterine perforation has not been documented in literature. The more common complications of uterine rupture in pregnancy is seen after hysteroscopy. Recurrent spontaneous uterine rupture has been noted post hysteroscopic procedures. Here we present a silent spontaneous recurrence of a conservatively managed uterine perforation during pregnancy; after an interval of 7 years.

DISCUSSION

In a meta-analysis of legal termination of pregnancy procedures, Nathanson reported a uterine perforation incidence that varied between 0.75 and 15 per 1,000 women. The most commonly perforated area is the relatively avascular uterine fundus.[4] Most cases reported in literature describe uterine rupture after hysteroscopy or hysteroscopic guided procedures such as septal resection. The interval between procedure and subsequent pregnancy associated rupture has ranged from 1 year up to 7 years. The presence of uterine dehiscence and sacculation post dilation and curettage have been reported. However, no cases of pregnancy after uterine perforation have been documented. Due to varied reporting and thus, undetermined incidence; there is lack of clear policy in management of uterine perforations.

Our experiences suggest that premature over-zealous intervention with laparotomies after uterine perforations is unnecessary. We recognise that in the current medicolegal scenario, it is a challenging decision to make, but a well-balanced judgment / will benefit the overwhelming majority of young women seeking first-trimester abortions. While previous uterine perforation is not an indication for Caesarean section, given our case of spontaneous perforation 7 years after the previous incident, reminds us the caution required while performing a seemingly straight forward procedure of medical termination of pregnancy by suction evacuation.

FINAL DIAGNOSIS

Here we present a case of conservative management of uterine perforation following septic abortion (dilation & curettage). Followed by an uneventful term pregnancy 5 years after and finally a possible spontaneous recurrence of uterine perforation in the second pregnancy with an interval period of 7 years. The patient was asymptomatic and clinically stable throughout her gestation and there was no evidence of perforation through her antenatal scans (growth scan at 37 weeks + 6 days). However, the intra operative finding of 2 x 2 cm full thickness perforation sheds light on the possibility of a spontaneous recurrence of a previously healed uterine perforation. Hence, the same must be borne in mind in all pregnancies with a history of previous uterine rupture.

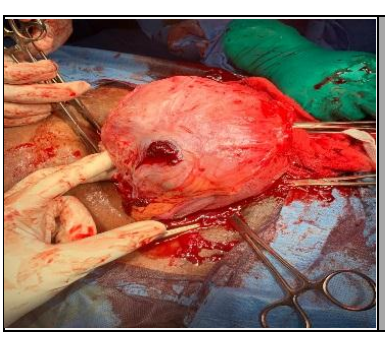

Figure 1.
Recurrent Spontaneous Uterine Perforation on Posterior Wall of Uterus

Figure 2.
Sutured Uterine Perforation

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