Case Report

Diagnosis on dilemma: Arteriovenous malformation with scar pregnancy with old retained product of conception

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ABSTRACT

Cesarean scar pregnancy (CSP) is described as the placement of a gestational sac within the scar from a previous cesarean operation and is considered an ectopic pregnancy. Ectopic pregnancy situated in a cesarean section scar is a rare but potentially life-threatening event. Because of its rarity, there are no universal guidelines to manage this condition. CSP has no pathognomonic signs or symptoms and its presentation varies considerably. Here, we report a case of scar pregnancy containing an old retained product of conceptus.

Key words: Ectopic pregnancy, Hemorrhage, Sacculus, Scar pregnancy, Uterine curettings

Cesarean scar pregnancy (CSP) is a potentially life-threatening ectopic pregnancy where a missed diagnosis is more common than an accurate diagnosis [1]. The incidence of ectopic pregnancy is 1–2% and cesarean scar ectopic occurs in about (0.05%) 1 in 2000 of all pregnancies [2,3]. It is a potentially life-threatening condition and if not diagnosed early and treated, it may be associated with catastrophic complications such as rupture of the uterus and uncontrolled hemorrhage, which may lead to loss of the uterus [1].

CASE REPORT

A 43-year-old female was admitted with a history of abnormal uterine bleeding for 4 months. The patient has given a history of overdue for 15 days followed by heavy menstrual bleeding for 5–6 days. After that, the patient had on-and-off episodes of bleeding per vagina, and for this complaint, the patient visited our medical college. Hereafter, the history was elaborated as above and the examination was done.

On general examination, the blood pressure of the patient was 110/70 mmHg, pulse rate was 84 bpm, weight was 60 kg, and the temperature was afebrile. The patient had mild pallor, no cyanosis, no clubbing, no icterus, and no lymphadenopathy. On per abdominal examination, it was soft and non-tender. On per speculum examination, there was foul-smelling blood mixed discharge was present for which, the high vaginal swab was culture, and sensitivity was taken. The result shows the growth of *Klebsiella*. On bimanual examination, the uterus was bulky, 8 weeks, mobile, and tender.

In the outpatient department, her urinary pregnancy test result came out to be weakly positive and her beta human chorionic gonadotropin (beta HCG) was sent which came out to be 238 mIU/m, and again after 2 days, it was 245 mIU/m. On her transvaginal scan, there was a thickened endometrium of 30 mm.

All necessary investigations were sent and reports were collected. The patient was planned for a hysteroscopy. After 3 days, the procedure was started. On insertion of uterine sound, the patient had a sudden gush of blood and after inserting hysteroscope, there was torrential bleeding. Hence, the decision of exploratory laparotomy followed by hysterectomy was made to save the life of the patient (Fig. 1).

The patient was kept in the intensive care unit (ICU). In the post-operative period, 3 units packed red blood cells were transfused and the patient was kept on higher antibiotics and discharged on day 9. Her histopathology report showed cervix chronic cervicitis with cervical intraepithelial neoplasia-1. Endometrium was consistent with a retained product of conception.

DISCUSSION

In the present case, as soon as the uterine sound was inserted, there was torrential bleeding. Due to this, the modality of the treatment changed to a hysterectomy to stop the bleeding and to

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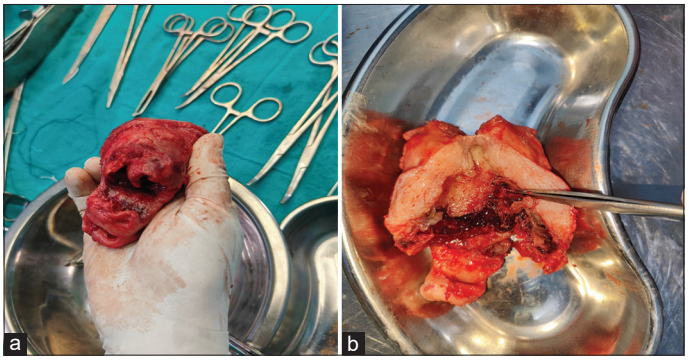

Figure 1: (a) specimen of the uterus along with cervix and (b) previous lower segment cesarean section scar showing retained products of conception

save the life of the patient. The patient was kept in the ICU and on higher antibiotics.

The probable mechanism of implantation at the scar may be a lower segment myometrial wedge defect or a minute fistula in the scar so that the sac is surrounded on all sides by the myometrium [4]. Any previous cesarean section scar should always be carefully explored in a case of incomplete abortion, especially if bleeding is inordinately heavy. In case of a deficiency in the scar, the possibility of bleeding from pregnancy in a scar sacculus should be considered; this applies particularly if only minimal uterine curettings are obtained. If one concludes that bleeding is in fact coming from the scar sacculus, no further attempt should be made to control it vaginally [5].

As the gestational sac may continue to develop in the cesarean section scar, the trends of beta-HCG increment may mimic a viable intrauterine pregnancy. Hence, a high index of suspicion is important, and close monitoring should be rendered when the diagnosis is suggested by transvaginal ultrasound [6]. A variety of conservative and surgical approaches has been proposed for the treatment of CSP; however, the optimal mode of management is yet to be established due to its rare occurrence. In the event of an emergency, laparotomy and hysterectomy may be required [7,8].

CONCLUSION

Diagnosis of CSP requires an accurate and early transvaginal scan of all anterior and low-lying gestational sacs in a post-cesarean pregnancy. The predisposing risk factors include uterine trauma, cesarean section, myomectomy, *in vitro* fertilization-embryo transfer, manual removal of placenta, and adenomyosis. The management of CSP often requires multi-modality treatment for successful outcomes.

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