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Images in Medicine

Radiology Section

A Rare Case of Scar Site Ectopic Pregnancy

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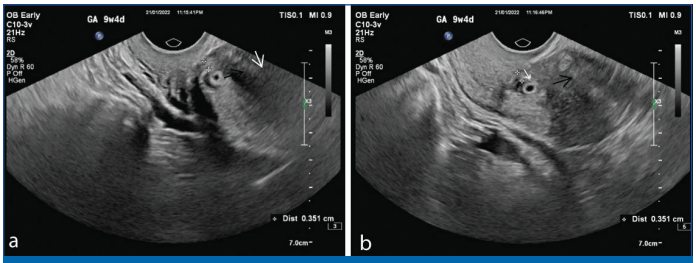
A 27-year-old gravida 2 para 1 woman was admitted in the Department of Obstetrics and Gynaecology with history of 1½ months amenorrhoea with chief complaint of pain in abdomen and per vaginum spotting for three days. She had history of caesarean section four years back in view of foetal distress. She had a normal general physical examination. On perspeculum examination, minor bleeding was present. Bimanual examination revealed an anteverted uterus of six weeks size with bilateral fornices free and no tenderness. Routine blood tests were normal. On admission, the patient's β-hCG levels were 38075.6 IU/L. Transvaginal ultrasonography was performed which revealed a single gestational sac with mean sac diameter of 2.7 mm corresponding to the gestational age of four weeks and five days which was seen in lower uterine segment eccentric in location at previous scar site [Table/Fig-1]. The foetal pole and yolk sac were not visualised. The anterior myometrium, anterior to gestational sac was measured as 3.5 mm, which was diagnostic of scar site ectopic pregnancy. Corpus luteal cyst was noted in right ovary. Left adnexa was clear. Patient underwent laparoscopic resection. A postprocedure transvaginal ultrasound showed absence of the gestational sac and the patient was discharged without any complaints on postoperative day 2. At follow-up, the patient's β-hCG level was 4 mIU/mL after 1½ months of her treatment.



[Table/Fig-1]: Transvaginal sonography coronal (a) and sagittal (b) views of uterus showing gestational sac (white arrow) in lower uterine segment. Anterior myometrium (black arrow) anterior to gestational sac.

Caesarean scars ectopic is among the rarest of ectopic pregnancies. This occurs when a blastocyst implants on a scar from a caesarean section. Incidence estimated in overall caesarean delivery is 1/1800 to 1/2500 [1,2].

Differential diagnosis of caesarean scar ectopic pregnancy includes cervical pregnancy, early placenta accreta and incomplete abortion. The diagnosis of caesarean scar pregnancy requires a high degree of suspicion, especially when there is no intrauterine gestational sac seen and a pregnancy of unknown location is suspected. Clinically, the disease has a variety of manifestations like minor vaginal bleeding, abdominal discomfort, or may be asymptomatic or present with severe pain and haemorrhage. In the present case, the patient had spotting and intermittent abdominal pain. Caesarean scar ectopic should be detected early in order to prevent serious complications. Deepika et al., concluded that placenta praevia, placental abruption, placental accreta, percreta and ectopic pregnancy risk are increased with previous caesarean section pregnancies [3]. Suggested criteria for a caesarean scar ectopic pregnancy include: (a) implantation in the location of a former caesarean delivery scar; (b) gestational sac embedded eccentrically in the lower uterine segment; (c) an attenuated myometrium over the scar; (d) empty uterine cavity and cervical canal; and (e) extensive doppler vascular flow in the area of the caesarean scar [4]. Transvaginal ultrasound with colour, spectral and power doppler imaging is the preferred method of establishing a definitive diagnosis of caesarean scar ectopic pregnancy. The sensitivity of the transvaginal ultrasound is quite satisfactory and has been reported to be 84.6% [5]. Three-Dimensional (3D) ultrasonography is another tool used for caesarean scar ectopic pregnancy. It is being increasingly used as it allows surgeons to study a confined area in better detail [6]. Magnetic Resonance Imaging (MRI) and diagnostic laparoscopy may also be used to confirm a diagnosis. Rotas MA et al., in a case series indicated that endovaginal ultrasonography successfully diagnosed 94 of 111 patients. The other 17 cases were misidentified as cervical pregnancies or incomplete abortions [5]. Sometimes minimally invasive surgical techniques often prove to be effective even in complicated clinical scenarios.

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