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CASE REPORT

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TERM PREGNANCY FOLLOWED BY VAGINAL DELIVERY: IN A WOMAN WITH A PREVIOUS HISTORY OF CAESAREAN SCAR ECTOPIC PREGNANCY (A case report)

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ABSTRACT:

BACKGROUND: *A ectopic pregnancy developing in caesarean section scar is extremely rare and is associated with its significant complications. Because of its rarity little is known about pregnancy outcomes following caesarean scar ectopics. Here we report a case of subsequent term pregnancy followed by vaginal delivery in a patient who had caesarean scar pregnancy and was managed with systemic methotraxate.*
CASE: *A 29 years old lady, para 2+0, first vaginal delivery followed by caesarean section due to breech presentation was found to have a ectopic pregnancy in caesarean scar at 7 weeks of gestation. That was a nonviable pregnancy. Presenting complain was bleeding per vaginum. A single dose of 50 mg methotrexate was given intravenously followed by folinic acid. She was followed by serial scans till 10 months following treatment with methotrexate. She became pregnant after 12 months of treatment. The pregnancy was term and uneventful. She went into labor spontaneously and delivered vaginally. The labor and puerperium was also uneventful.*

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INTRODUCTION:

Caesarean scar pregnancy is a rare form of ectopic pregnancy with an incidence of 1:1800 to 1:2200 pregnancies.[1, 2] It is associated with number of complications such as first or second trimester spontaneous abortions and preterm deliveries.[3, 4] However, the most significant complication of scar implantation is an abnormally adherent placenta, which may lead to life threatening haemorrhage requiring emergency hysterectomy.[1, 5] This inevitably leads to the loss of women's fertility and may have significant long-term adverse effects on women's health and quality of life.
If the uterus is successfully conserved following the treatment of scar pregnancy, women have a chance to try for another pregnancy. However, because of their rarity, little is known about future fertility and pregnancy outcomes following Caesarean scar ectopics. In all the cases of caesarean scar pregnancies reported till date, in which, subsequent pregnancies were progressed to term were delivered by elective caesarean sections. Here we report a case in which a caesarean scar pregnancy was managed conservatively and subsequent pregnancy progressed till term and delivered vaginally.

CASE REPORT:

A 29 years old lady para 2^{+0}, first vaginal delivery followed by caesarean section due to breech presentation, came in out patient department on 1st April 2006, with history of 7 weeks gestational amenorrhoea and complaint of bleeding per vaginum since 15 days. An ultrasound was done, showed a non viable pregnancy of 7 weeks in lower uterine segment in the area of scar. Doppler ultrasound to confirm functional placental circulation as recommended by Jerkovic et al. was not done as the pregnancy was non viable. On vaginal examination, a hard well defined round mass, 3x3 cm in size was ballooning out from the right side of upper cervix. Fresh bleeding soaking examining fingers was also present. Injection methotraxate was decided as treatment option for her. A single dose of 50mg methotrexate in 200 ml of normal saline was given in 30 minutes, along with antibiotic cover for 5 days. After three days of injection methotrexate, the vaginal bleeding stopped.

15th April 2006,
She again came with complain of mild brownish color vaginal discharg for 3 to 4 days.

Ultrasound was repeated on the same day showed "thick walled sac with 4.1 into 2.5 perisac haematoma. No increased vascularity seen around the sac." Coagulation profile (PT / APTT / FDP) and platelets count was advised to rule out clinical or sub clinical coagulation failure. All the investigations were within normal limits. She was advised to have same investigations and ultrasound fortnightly. The vaginal bleeding became slight and than stopped spontaneously after a week.

15th May 2006,

The patient turned up after one month. Ultrasound was repeated . All the findings were same except the size of the haematoma, was reduced to 3.5x2.4 cm. she had normal menstruation a week back. The flow was moderate and remained for 4 to 5 days. She was counseled for expectant management further and advised for monthly follow up scans.

1st February 2007,

She was followed for nine months, had normal menstrual cycles for the last eight months and after five ultrasounds, this was the first time when this showed complete expulsion of product of conception. On vaginal examination there was just an indurated area 2x1.5 cm in size. Further follow up stopped here.

May 2007,

After two months she turned up with ultrasound evidence of six weeks single intrauterine pregnancy. Her antenatal followup was like a normal pregnancy.This was a term uneventful pregnancy. The mode of delivery was discussed with her. She opted for vaginal delivery and was informed about the risk of scar dehiscence. The labour was spontaneous and progressed normally. She delivered vaginaly. The immediate postnatal period and peurperium was also uneventful.

DISCUSSION:

Ectopic pregnancy in a caesarean scar is one of the rare form of ectopic pregnancy and probably the most dangerous one because of risk of uterine rupture and massive hemorrhage.[6]

Presenting complain of our patient was 7 weeks amenorrhoea and vaginal bleeding of and on. The patient may present with lower abdominal pain as reported by Seow KM et al.[7] Patient can present with profuse vaginal bleeding weeks following abortion, as reported by Lee CL.[8]

This condition must be distinguished from cervical pregnancy and spontaneous abortion in progress, so that the appropriate treatment can be immediately offered.[6] In our patient this was diagnosed at 7 weeks gestation. Since the advent of endovaginal ultrasonography, ectopic pregnancy in a caesarean scar can be diagnosed early in pregnancy if sonographer is familiarized with the diagnostic criteria of this situation, especially in women with previous caesarean scar.[6]

Moschose Sreenarasimhaiah S, and Twickler DM outline the criteria for first trimester sonographic diagnosis of caesarean section scar ectopic pregnancy including a new sign of ballooing of lower uterine segment previously not been reported.[9] Our patient was treated with single injection methotrexate 50mg given intramuscularly followed by folinic acid, 36 hours later. Paillocher N et al[10], Seow KM et al and Song MJ et al[11] Maymon R et al[12] also reported successful methotrexate therapy of ectopic pregnancy in the caesarean scar. The systemic methotraxate may be unsuccessful, so, this can be manage effectively with local injection of methotraxate.[13]

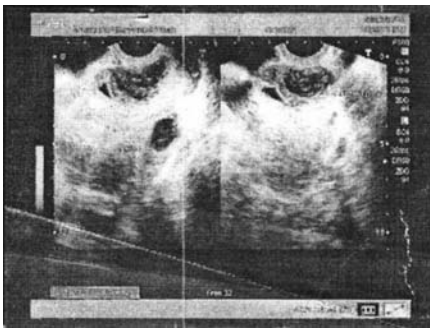
The other treatment options includes expectant management[6], insertion of Shirodker Cervical suture to secure haemostasis during the evacuation of caesarean scar pregnancy[14], suction curettage under ultrasonography guidance in termination of selected cases[15], laproscopic ligation of bilateral uterine arteries followed by excision of ectopic pregnant mass[16] and hysterotomy with uterine preservation followed by intramuscular methotrexate.[17] Operative laparoscopy appears to be a reasonable alternative for the management of unruptured caesarean scar pregnancy.[18]

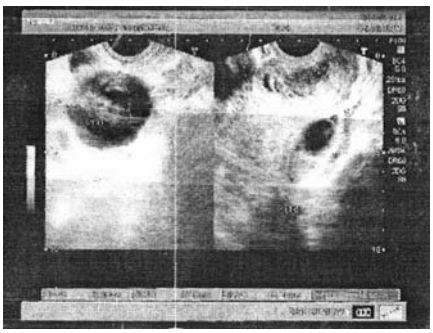
We followed our patient by serial scans initially fortnightly for two months and than monthly for six months. Similar follow up with serial scans was reported by Song MJ etal in cases of cervical pregnancies treated with methotrexate.[11]

Our patient again became pregnant after eleventh months of medical treatment of caesarean scar ectopic pregnancy, the finding correlated with the median time of conception after caesarean scar pregnancy reported by Ben Nagi et al., 2007.[19] The pregnancy was a term, uneventful pregnancy, a finding again correlated with the finding reported by Ben Nagi [19] and is different from Seow et al.,[20] who reported a case of uterine ruptured leading to maternal death at 38 week of gestation. Our patient went into spontaneous labour, progressed normally and delivered vaginally. Labor and peurperium was also uneventful. Ben Nagi J et al[19] and Flye Sainte et al[21], recommends prophylactic caesarean section around 37











weeks due to myometrium fragility caused by ectopic pregnancy and caesarean scar. The vaginal delivery after treatment of caesarean scar pregnancy has not been reported yet, this one is probably the first case.

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