

LAPAROSCOPIC MANAGEMENT OF THE ISTHMOCELE: A CASE REPORT**¹Dr. Swati Garg, ²Dr. Arpita Jain, ³Dr. Vijay Singh Nahata, ⁴Dr. Urvashi Sharma**¹Professor & Head, ²3rd Year PG Resident, ³Assistant Professor, ⁴Assistant Professor, Rajasthan India.

Received on: 08/05/2019 Revised on: 29/05/2019 Accepted on: 19/06/2019 *Corresponding Author Dr. Swati Garg Rajasthan India.,	INTRODUCTION Increasing prevalence of cesarean section worldwide has led to the emergence of an unusual type of ectopic pregnancy, in the scar of previous cesarean section (CS). The gestational sac is fully or partially implanted with in the scar caused by previous cesarean section.
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The first case of caesarean scar pregnancy (CSP) was reported in 1978, since than the prevalence of CSP is increasing from 1/1800 to 1/2500 in various studies.^[1] Till 2001, only 19 cases of CSP were reported, which increased to 161 by 2007.^[2] Till date more than 1000 cases have been reported and the prevalence is expected to increase, partly because of increasing number of caesarean scar (CS) and also increasing awareness and better ultrasound diagnosis.^[3] For a pregnancy that develops in a previous CS, the possible serious complications are massive hemorrhage, uterine rupture, and secondary infection, which often require emergency hysterectomy.

CASE REPORT

A 20 year old female, Gravida₂ Para₁ Live₁ 8⁺⁵wks POG was referred to Mahatma Gandhi Hospital on 28/10/17 with the suspicious of tubal, or cervical pregnancy, as the refereeing doctor was doubtful about intrauterine nature of the pregnancy. On history taking and examination, patient had amenorrhea 2 months 4 days and spotting per vaginum off and on. She had one full term CS and her urine pregnancy test was done about a month back. She visited a local doctor for same and she was prescribed folic acid and routine investigations were done. On ultrasound, a day back, the location of pregnancy was doubtful, so she was referred in our hospital. Her vital parameters on examination were within normal range. She was mildly anemic, abdomen was soft, on pervaginal exam cervix forwards uterus retroverted retroflexed 8 weeks size, left fornices was found to be palpable but no mass was there and it was nontender.

Transvaginal sonography was done, there was single live fetus of 8⁺⁵ wks at utero-cervical junction, which could be Intra uterine, in lower uterine segment (LUS), or intra cervical pregnancy, or Ectopic scar pregnancy (Figure 1). Possibility of bicornuate/cornual pregnancy cannot be

ruled out as a thin layer of myometrium was seen around the gestational sac.

Looking at the doubtful nature of the pregnancy and possibility of life threatening complication, diagnostic laparoscopy was planned with counseling regarding possibility of treatment options depending upon the nature of pregnancy.

On diagnostic laparoscopy 6-8 wks of gestational sac was found, protruding out from the site of previous cesarean scar, with a very thin sac wall impending rupture (Figure 2). Decision of laparoscopy resection and repair was take with consent and counseling of all possible complications. Intra uterine vasopressin was injected (20 mg. in 100 ml NS) UV fold of peritoneum opened and a nick was given over the sac. Products of conception were sucked, hemostats achieved by applying endosutures, taking a reasonable thickness of lower uterine segment (Figure 3). Patient stood operation well.

Post-operative period was uncomplicated and she was followed up with serial beta hCG, it was > 1,50,000 mU/ml pre-operatively and was 11,172 on day 3, & 535 after 15 days.

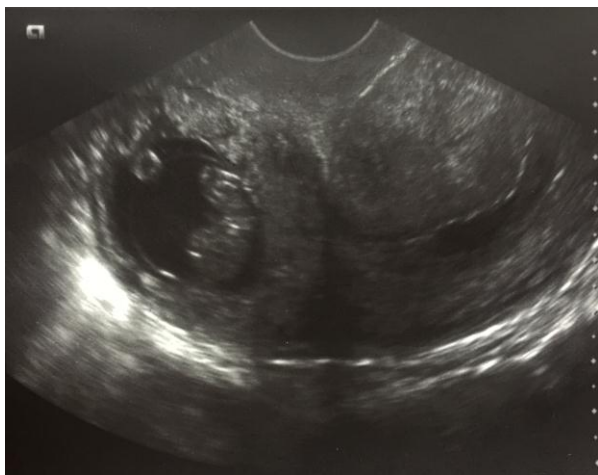


Figure 1: TVS Picture of the case.

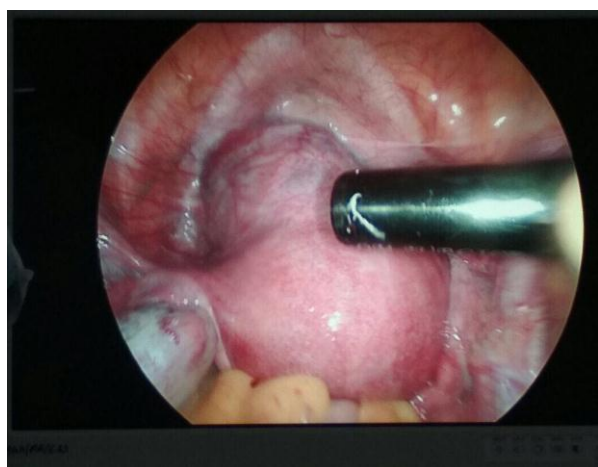


Figure 2: Diagnostic Laparoscopic View.

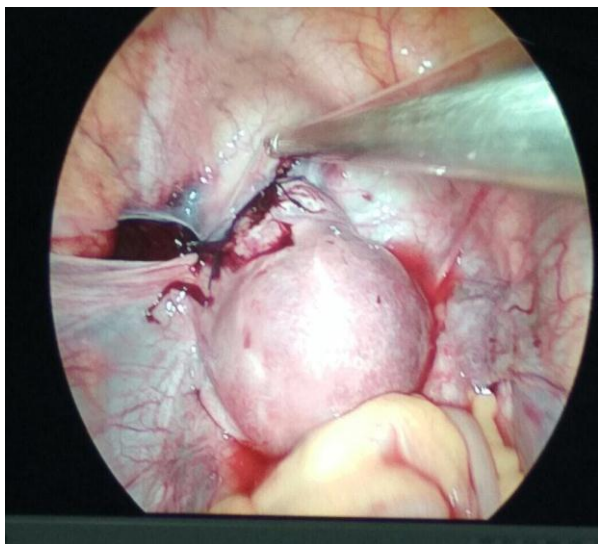


Figure 3: CSP after resection and laparoscopic repair.

DISCUSSION

There are many theories which explain the occurrence of CSP, the most reasonable is that the conceptus enters into the myometrium through a microscopic dehiscent

tract of previous CS and its trophoblasts implant into the myometrium.^[4]

According to the classification of CSP by Vial et. al. there are two different types of CSP.^[5] The first type (CSP-I) is caused by implantation of the amniotic sac into the previous CS with progression of pregnancy toward the cervico-isthmic space and the uterine cavity. This type allows growth of a viable fetus till term but as the implantation is at lower uterine segment there is increase risk of massive bleeding at the time of birth because of atony or rupture at the site of implantation. The second type (CSP-II) is caused by deep implantation into a CS defect with infiltrating growth into the uterine myometrium and bulging from the uterine serosal surface of the uterus. The myometrium left between the sac and the bladder wall is reduced to less than 4 mm., this type of CSP may result in emergency hysterectomy in first trimester only.

Diagnosis usually requires help of imaging techniques, as the clinical presentation is nonspecific. A pregnant patient may be asymptomatic diagnosed incidentally or she may present with vaginal bleeding/spotting and abdominal discomfort. Acute abdominal pain and profuse vaginal bleeding in a rare presentation. Ultrasound is the main diagnostic tool for diagnosis of CSP, which shows a GS attached to a previous CS embedded in the scar and surrounded by myometrium, going towards the endometrium or in between uterine wall and bladder. Color flow doppler shows a prominent and distinct circular vascular flow. A combined trans abdominal and transvaginal ultrasound improves the diagnostic accuracy, which can be further improved by using 3D ultrasound with power doppler or MRI.

Looking at the life threatening complication associated with CSP, an accurate and reliable diagnostic criteria should be followed. The literature reveals that upto 13.6% of CSP are misdiagnosed as inevitable abortion or a cervical pregnancy.^[4]

The safety of subsequent pregnancy and recurrence of CSP has not been reported much. Theoretically, the resection of the old scar and the new repair closure might minimize the recurrence rate.

The main objectives in the clinical management of CSP should be the prevention of massive blood loss and the conservation of the uterus to maintain further fertility, women's health and quality of life. Although many interventions, including medical or surgical methods, have been reported, there is currently no standardized treatment for CSP, especially for CSP-II. The medical treatment with local and/or systemically administered methotrexate (MTX) carries the risk of heavy bleeding, as reported in a few studies.^[6,7] Surgical treatment includes excision of the gestational tissues by laparotomy or laparoscopy, or by hysterectomy. Once CSP-II is diagnosed, termination of the pregnancy should be

considered. Thus, timely management with early and accurate diagnosis that allows the successful preservation of the uterus is very important.

CONCLUSION

CSP is probably the rarest location for ectopic pregnancy and causes the highest probability of life threatening complications, as it is usually misdiagnosed. Therefore early diagnosis with USG, combined with Doppler flow or pelvic MRI, if required, is indicated.

Although expectant management is available, but available literature support termination of such a pregnancy once the correct diagnosis is made. Out of available management strategies, including medication, uterine artery chemoembolisation, surgery or their combinations, in the hand of skilled surgeon, laparoscopic CS resection with wound repair is a safe and effective treatment.

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