



CAESAREAN SCAR ECTOPIC -A RARE ENTITY

Obstetrics & Gynaecology

Dr Naina Yadav 3rd year Resident ,MGH Jaipur

Dr Kalpana Tiwari Associate Professor ,obs And Gynae ,MGH Jaipur.

Dr Priyanka Goel* Assistant Professor ,obs And Gynae ,MGH Jaipur. *Corresponding Author

KEYWORDS

INTRODUCTION

Caesarean scar pregnancy (CSP) is an ectopic pregnancy implanted in the myometrium at the site of a previous caesarean section scar ⁽¹⁾ Its incidence is rising with the increase in number of caesarean sections .Very first case was reported in 1978.

A scar ectopic pregnancy has also been reported following myomectomy, uterine evacuation, previous abnormally adherent placenta, manual removal of placenta, metroplasty, hysterectomy, and in vitro fertilization ⁽²⁾ due to disruption of the endometrium and myometrium leading to improper implantation at the scar site ⁽³⁾

Appropriate diagnosis and timely management of caesarean scar ectopic pregnancy are essential because it may lead to serious complications such as uterine rupture, haemorrhage, hypovolemic shock, disseminated intravascular coagulation, and even maternal death ⁽⁴⁾

Because of the rare incidence and uncommon presentation ,a series of 5 cases was studied at the tertiary care centre.

CASE SERIES

All 5 cases had history of previous caesarean sections and age was between 20-35 years . They were having common presentation of bleeding per vaginum following a certain period of amenorrhoea.

Case 1

20 years female having bleeding per vaginum since 1 day following 6 weeks of amenorrhoea . She had history of caesarean section 1.5 year back . On Ultrasound a viable pregnancy of 6 week 5 days was seen at utero-cervical junction ?scar ectopic pregnancy . Diagnostic hysteroscopy and laparoscopy was done. A gestation sac of approximate 6 weeks size was seen protruding from previous scar site on laparoscopy. Products of conception were removed and defect was corrected under vision.

Case 2

35 years old female presented in emergency department with complaint of acute pain abdomen and bleeding per vaginum since 1 hour. She had history of previous 3 caesarean deliveries and one myomectomy. On examination, patient was pale with hypotension and tachycardia. Pulse -120/min , BP-90/60 . Her Urine pregnancy test was positive . Ultrasound was suggestive of gestation sac corresponding to 6 week pregnancy in uterine scar region and moderate collection in peritoneal cavity.

Patient was taken for emergency laparotomy .intra operative findings were suggestive of 500-600 cc of blood with products of conceptus seen protruding out from the scar. Same removed as far as possible. The defect was repaired in layers. Injection methotrexate 50 mcg intramuscularly was given post operatively. Post operative period was uneventful.

Case 3

28 years old female attended obstetric outpatient department with on and off spotting per vaginum following one and a half months of amenorrhoea. She had history of previous 3 caesarean sections. She was willing for termination of pregnancy with tubal ligation. Ultrasonography was suggestive of Single live pregnancy of 10 week 2 days and a heterogenous area adjacent to Gestational sac seen ?subchorionic hematoma ?collection .

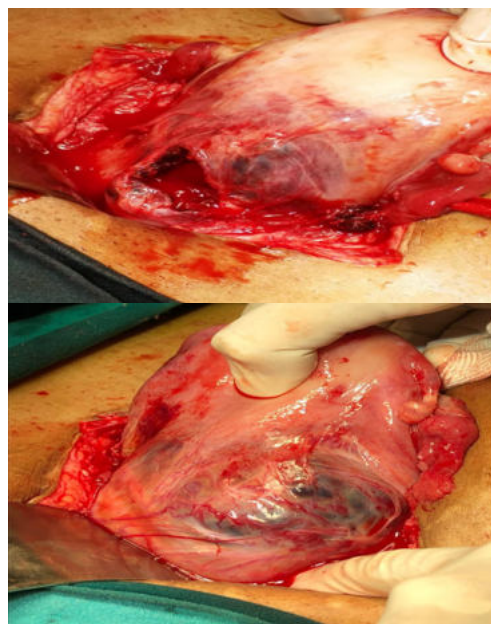
Medical termination of pregnancy along with laparoscopic tubal ligation was planned . Medical termination of pregnancy was done by suction and evacuation. Bilateral fallopian tubes were ligated laparoscopically by silastic rings. Lower uterine segment was distended with overlying peritoneum having dilated vessels. No bleeding in peritoneal cavity . Intra-op Ultrasonography was done and was showing heterogenous area in Lower uterine segment 70x70 mm with peripheral vascularity ?hematoma .Therefore decision for laparotomy was taken . On examination posterior wall of lower uterine segment was very thin with thinned out myometrium. As repair was not possible, decision for hysterectomy was taken after taking consent from patients relatives .

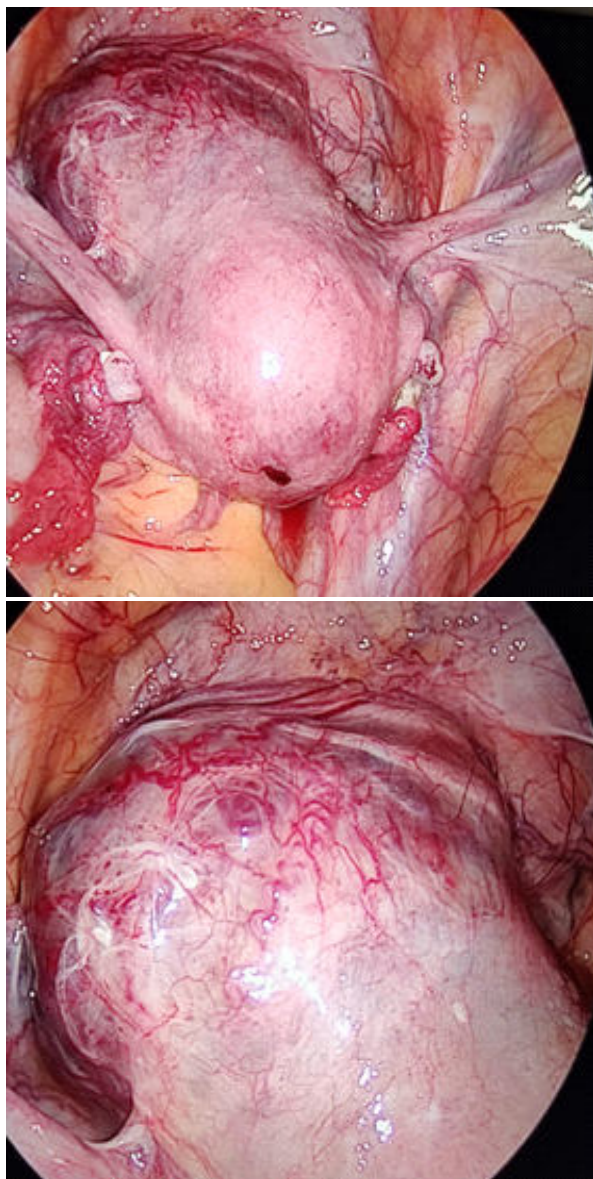
case 4

32 yrs old female presented with complaint of bleeding er vaginum on and off since 15-20 days following Dilatation and evacuation for incomplete abortion. She had history of previous 2 caesarean sections. Ultrasonography was suggestive of well defined solid cystic lesion in lower uterine cavity likely irregular Gestational sac corresponding to 11 week 6 days without obvious foetal echoes. MRI was planned in view of doubtful location of gestation sac. The report was suggestive of large heterogenous haemorrhagic collection in anterior myometrium in lower uterine segment. Thinning of involved anterior myometrium due to ? RPOC with extensive myometrial invasion or ? Complex haemorrhagic collection with anterior wall dehiscence . Laparotomy was done. Hematoma was observed on previous caesarean scar. Products of conception with clots around 100 cc were adherent to previous scar. Same removed. Margins of scar freshened and sutured.

Casec 5

32 yrs female presented with a complaint of spotting per vaginum on and off since 3 days with following 10 weeks of amenorrhoea .Ultrasonography was showing 7 week pregnancy at previous scar site with absent cardiac activity. Ultrasound guided dilatation and evacuation was done . No evidence of bleeding. Post-operative period was uneventful.





DISCUSSION

Vaginal bleeding and abdominal pain are the most common presenting symptoms of caesarean scar pregnancy. Severe acute abdominal pain or heavy vaginal bleeding are concerning for impending rupture, while hemodynamic instability may indicate rupture of caesarean scar pregnancy through the myometrium. However, up to 40 percent of patients remain asymptomatic prior to detection⁽⁵⁾.

Preferred method for definitive diagnosis is Transvaginal ultrasonography with colour doppler, with specific focus towards site of pregnancy i/c/o previous caesarean along with myometrial thickness at scar site if pregnancy is in lower uterine segment⁽⁶⁾.

In addition, magnetic resonance imaging and diagnostic laparoscopy may also be used to confirm the diagnosis.⁽⁷⁾ Management depends upon period of gestation, size of conceptus, and depth of myometrial invasion, vitals and patient's desire for future fertility. It can be managed by medical and surgical or a combined approach.

Several types of conservative treatment have been used such as dilatation and curettage, excision of trophoblastic tissues (laparotomy or laparoscopy)⁽⁸⁾ Local and/or systemic administration of methotrexate⁽⁹⁾.

Bilateral hypogastric artery ligation and selective uterine artery embolization combined with curettage and/or MTX administration has also been suggested in view of severe uncontrolled haemorrhage.^(10,11)

This case series comprises 5 patients who were diagnosed as scar ectopic pregnancy and managed according to period of gestation and symptoms at time of presentation. Detailed history, examination and imaging were used for diagnosis.

Age was between 20 to 35 years and had history of previous caesarean delivery. All 5 cases in this series had common presentation of bleeding per vaginum following a certain period of amenorrhoea. 4 out of 5 were more than 2 previous caesarean sections. One out of 5 was managed with laparo-hysteroscopy.

- Two were managed by laparoscopy with conversion of uterus.
- 1 underwent hysterectomy as conservation of uterus was not possible because defect was present in both anterior and posterior vaginal walls.
- One was managed by ultrasonography guided dilatation and evacuation.
- Follow up was uneventful for all 5 cases.

CONCLUSION

It is very important to have suspicion about scar ectopic in any case of pregnancy with previous caesarean. This will help in early diagnosis by sonography and to make prompt management to avoid serious complications and have a better outcome. Definitive treatment is surgery because of lesser chances of recurrence.

REFERENCES

1. A. Herman, Z. Weinraub, O. Avrech, R. Maymon, R. Ron-El, and Y. Bukovsky, "Follow up and outcome of isthmic pregnancy located in a previous caesarean section scar," *British Journal of Obstetrics and Gynaecology*, vol. 102, no. 10, pp. 839–841, 1995.
2. Patel MA. Scar ectopic pregnancy. *J Obstet Gynaecol India*. 2015;65(6):372–5.
3. Fylstra DL, Pound-Chang T, Grant Miller M, Cooper A, Miller KM. Ectopic pregnancy within a caesarean delivery scar: a case report. *Am J Obstet Gynecol* 2002;187:302–4. <https://doi.org/10.1067/mob.2002.125998>.
4. R. Maymon, R. Halperin, S. Mendlovic, D. Schneider, and A. Herman, "Ectopic pregnancies in a caesarean scar: review of the medical approach to an iatrogenic complication," *Human Reproduction Update*, vol. 10, no. 6, pp. 515–523, 2004.
5. K.-M. Seow, W.-C. Cheng, J. Chuang, C. Lee, Y.-L. Tsai, and J.-L. Hwang, "Methotrexate for caesarean scar pregnancy after in vitro fertilization and embryo transfer: a case report," *Journal of Reproductive Medicine for the Obstetrician and Gynecologist*, vol. 45, no. 9, pp. 754–757, 2000.
6. M.A. Rotas, S. Haberman, and M. Levgur, "Caesarean scar ectopic pregnancies: etiology, diagnosis, and management," *Obstetrics & Gynecology*, vol. 107, no. 6, pp. 1373–1381, 2006.
7. Rotas MA, Haberman S, Levgur M. Caesarean scar ectopic pregnancies: etiology, diagnosis, and management. *Obstet Gynecol*. 2006 Jun;107(6):1373–1381.
8. P.-A. Godin, S. Bassil, and J. Donnez, "An ectopic pregnancy developing in a previous caesarean section scar," *Fertility and Sterility*, vol. 67, no. 2, pp. 398–400, 1997.
9. R. J. Persadie, A. Fortier, and R. G. Stopps, "Ectopic pregnancy in a caesarean scar: a case report," *Journal of Obstetrics and Gynaecology Canada*, vol. 27, no. 12, pp. 1102–1106, 2005.
10. J. Sugawara, M. Senoo, H. Chisaka, N. Yaegashi, and K. Okamura, "Successful conservative treatment of a caesarean scar pregnancy with uterine artery embolization," *Tohoku Journal of Experimental Medicine*, vol. 206, no. 3, pp. 261–265, 2005.
11. M.-J. Yang and M.-H. Jeng, "Combination of transarterial embolization of uterine arteries and conservative surgical treatment for pregnancy in a caesarean section scar: a report of 3 cases," *Journal of Reproductive Medicine for the Obstetrician and Gynecologist*, vol. 48, no. 3, pp. 213–216, 2003.