Laparoscopic Management of Caesarean Scar Ectopic Pregnancy

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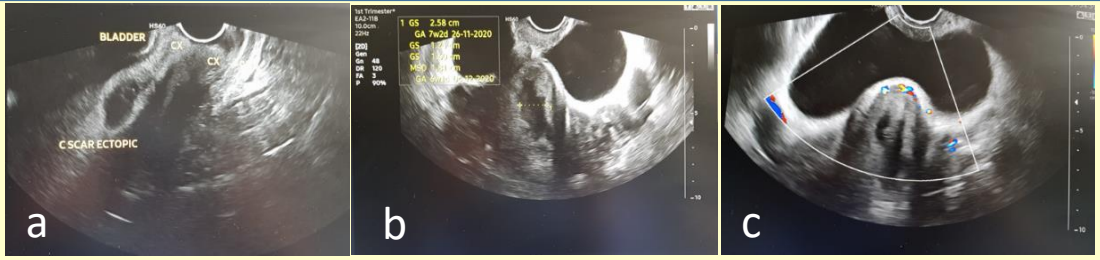
Background

- Caesarean scar pregnancy (CSP) is one of the rarest forms of non-tubal ectopic pregnancy with uncertain true incidence.
- It is characterised by myometrial implantation at the site of a previous caesarean scar.
- It is postulated that its increased incidence is likely due to increased caesarean section rates and assisted reproductive techniques.
- Risk factors: a previous caesarean section (although the number of sections does not appear to influence its occurrence.

Case Summary

- 36 year old woman presented with vaginal spotting and crampy, lower abdominal pain at 6 weeks gestation.
- Obstetrics history: Para 5 (2 vaginal deliveries and 3 caesarean sections); surgical history-abdominoplasty.
- Biochemical profile was unremarkable except for beta human chorionic gonadotrophin)B-HCG) level at 92,816 IU/L.
- Ultrasound showed a live caesarean scar ectopic pregnancy with the gestation sac appearing to protrude into the bladder.
- Suction evacuation of the uterus was done under laparoscopic vision. Dense adhesions between the bladder and the uterus were released laparoscopically.
- Follow up included serial serum beta human chorionic gonadotrophin (B-HCG) levels on day 1, 4, 7 and weekly thereafter until level falls below 20 IU/L .

Figures



Transvaginal ultrasound scan showing: a. Gestation scar b. Mean sac diameter =1.81cm c. Implantation vascularity along caesarean section scar

Discussion

- Light painless vaginal bleeding is the most common presenting symptom although CSP has bee found incidentally in asymptomatic women.
- The number of caesarean sections does not appear to be a risk factor for CSP.
- Other related risk factors include: manual removal of placenta, myomectomy, adenomyosis, previous dilatation and curettage, IVF.
- Diagnosis is mostly by transvaginal ultrasound and the diagnostic accuracy can be enhanced by the use of 3D power Doppler.
- Two types of CSP have been identified: one progresses into the uterine cavity with possibility of viability while the other progresses towards the abdominal cavity with rupture in the first trimester.
- The pathophysiology is not well understood but the risk of uterine rupture and uncontrollable haemorrhage is high.
- CSP can be treated expectantly, medically of surgically. The surgical approach provides optimal results but depends on local expertise. Operative laparoscopy can be considered as the gold standard but hysteroscopic evacuation has high success rates. The vaginal approach allows for less postoperative surveillance with quicker recovery when compared to the abdominal approach.

Learning Points

- The incidence of CSP is on the rise and timely diagnosis can reduce resultant morbidity.
- Light vaginal bleeding and/or abdominal pain may be the presenting symptoms.
- Diagnosis is made by identifying characteristic features on ultrasound.
- Choice of treatment requires appropriate patient selection and availability of local surgical expertise; these play an important part for optimal results. Future fertility issues to be considered at choosing management.
- CSP is high risk for uterine rupture and massive haemorrhage lading to hysterectomy.

References

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