Diagnostic & Management Challenges of Ectopic Pregnancies in a Non-communicating Rudimentary Horn

Dr . Johanna Raghu, Dr. Hend Hadawi, Mr. Elias Kovoor, Mr. Gabriel Awadzi. Darent Valley Hospital, Kent. UK

Ectopic pregnancies (EP) could be extrauterine or uterine when implanted outside of the endometrial cavity. In the UK incidence is 11/1000 pregnancies, with an estimated 11 000 ectopic pregnancies diagnosed each year. 0.2 - 0.5 per 1000 mortality rate from EP.

Rudimentary horn pregnancies (RHP) are exceedingly rare, with a reported incidence of 1 in 75 000–150 000 pregnancies. They result from incomplete development of one of the Müllerian ducts and an incomplete fusion with the contralateral side. They are usually diagnosed in the second trimester with 80% risk of uterine rupture. Women present with significant pain and haemoperitoneum. Ultrasound is the key in the diagnosis but we could consider MRI scanning. The diagnosis may be more difficult when two uterine cornua are fused and the outer uterine contour is normal. Serum hCG is useful for planning management. Surgical treatment is the preferred option.

Case report

We report on a 36-year-old primigravida with no significant past history. She presented with right iliac fossa pain and a pregnancy test was positive in the early first trimester following spontaneous conception. She was hemodynamically stable; an initial ultrasound suggested a delayed miscarriage. A manual vacuum aspiration was unsuccessful. She underwent a hysteroscopy and laparoscopy. At laparoscopy, a non-communicating right horn was seen. Given the limited laparoscopic expertise of the operating team, it was agreed definitive treatment should be undertaken by an advanced laparoscopic surgeon. This was successfully accomplished a few days later.

The horn was fully excised uneventfully. Two years later, she was delivered by an elective caesarean section following an uneventful pregnancy.

Sonographers' skills play a key role in early diagnosis, however many women may present after rupture of RHP. Surgical treatment is safe and effective treatment but could be challenging, if RHP is diagnosed in late pregnancy. We hope that our own experience can help inform the care of patients in future.

Discussion

Early recognition is vital to plan management and minimize adverse outcome of rupture as well as prevent other complications like placenta accreta, pre-term labour and fetal mal-presentation. The risk of rupture prior to the third trimester is at least 50%. Laparoscopic surgical management is the best approach when there is ready availability of expertise for advanced laparoscopic surgery.

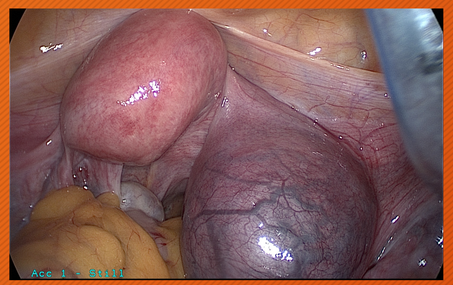

Fig 1: Ectopic pregnancy in right non-communicating rudimentary horn.

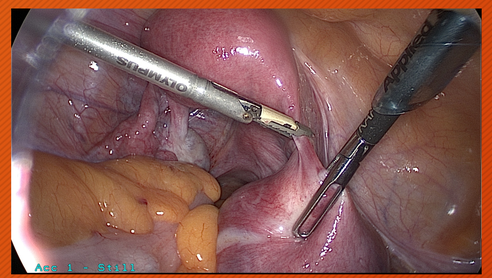

Fig 2. Start of laparoscopic excision of right horn

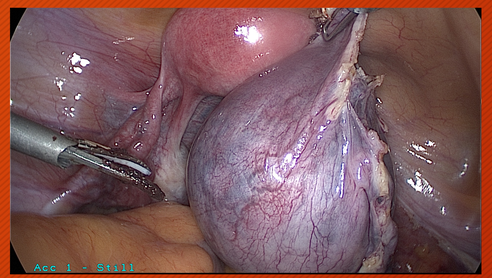

Fig 3. Excision of horn complete

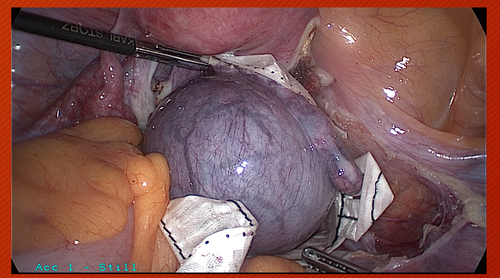

Fig 4. Fully excised horn being inserted into retrieval bag

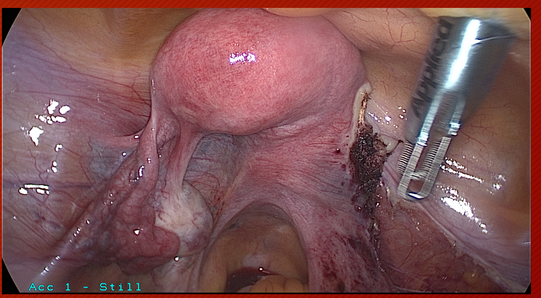

Fig.5. Appearance pelvis following completion of laparoscopic excision

References:
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6881690/