

An Uncommon Site, A Critical Diagnosis: Abdominal Ectopic Pregnancy in a Patient with Prior

Ectopic and Tubal Surgery

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Background

Ectopic pregnancies occur outside the endometrium of the uterine cavity, with the fallopian tubes being the most common site (96% of cases). Abdominal ectopic pregnancies are rare, accounting for less than 1% of all ectopic pregnancies. Abdominal ectopic pregnancies are classified as either primary, where implantation occurs directly in the abdominal cavity, or secondary, where implantation initially occurs in the fallopian tube or ovary followed by re-implantation in the abdomen. [1]

Implantation sites in abdominal ectopic pregnancies can include the pouch of Douglas, omentum, mesosalpinx, and abdominal organs such as the liver, spleen, and intestines.

These pregnancies are classified as early (≤ 20 weeks) or advanced (> 20 weeks). Early AEPs often present with pain or bleeding, prompting timely diagnosis. Advanced abdominal ectopic pregnancies, though rare, can progress to advanced gestational ages, posing significant risks of haemorrhage and organ injury (2).

The maternal mortality rate for abdominal ectopic pregnancies is estimated to be 7.7 times higher than that of tubal ectopic pregnancies, primarily due to the risk of massive haemorrhage from placental separation or invasion into surrounding organs. with mortality rates as high as 20% in some reports. [3]

This case highlights the importance of maintaining a high index of suspicion for abdominal ectopic pregnancy in women with risk factors such as prior ectopic pregnancy, tubal surgery, or ART, as early diagnosis and intervention are critical to preventing life-threatening complications.

Case

A 32-year-old G11P2 with a history of two previous cesarean sections, recurrent miscarriages, and prior left salpingectomy for previous ectopic pregnancy, presented to ED with LLQ pain and vaginal bleeding. Both abdominal and bimanual examinations revealed a discrete palpable mass in the left adnexa. A speculum showed a closed os with some old blood in the vagina. The patient was vitally stable, her Haemoglobin was 94g/L and Beta-hCG 80,050.

A transvaginal ultrasound revealed a well defined, solid heterogeneous mass within the left adnexa, adjacent to the left ovary measuring 57x52x52mm. The mass moved separately to the left ovary and was highly suspicious for a left sided ectopic pregnancy. There was a moderate amount of free fluid in the pouch of Douglas.

Laparoscopy demonstrated a surgically absent left fallopian tube, normal left ovary, and a 4cm clotted mass attached to the left cornua, sigmoid, and omentum. This was excised, and the general surgeons were called intraoperatively to outrule bowel injury. A Blake's drain was placed, and the EBL at the end of the procedure was 200ml.

Histopathology confirmed abdominal ectopic pregnancy.

Discussion

Abdominal ectopic pregnancy (AEP) is a rare but life-threatening condition, accounting for $< 1\%$ of ectopic pregnancies. This case highlights the importance of considering an abdominal ectopic in women with abdominal pain, a positive beta-hCG, and risk factors such as prior tubal surgery or ectopic pregnancy. Abdominal ectopics carry a high risk of maternal mortality, primarily due to catastrophic hemorrhage from placental separation or invasion into surrounding structures (1).

While risk factors for tubal ectopic pregnancy are well-documented, the specific risk factors for abdominal ectopic pregnancy remain poorly characterised. A systematic review by Yoder et al. (2016) included 28 cases of abdominal ectopic pregnancy following IVF identified several trends including a history of prior ectopic pregnancy (39%), and a history of tubal surgery (50%), with 32% of cases involving bilateral salpingectomy, and a higher number of embryos transferred. (4)

In conclusion, abdominal ectopic pregnancy is a rare but serious condition requiring a high index of suspicion, prompt diagnosis, and tailored management. This case reinforces the need for early recognition and intervention to prevent life-threatening complications, particularly in women with risk factors.



Figure 1a: solid heterogeneous mass within the left adnexa, adjacent to the left ovary measuring 57x52x52mm on TVUS

References

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