

A Rare Case of Primary Omental Ectopic Gestation: Case Report

Dr. Siddhant Singh Chandel¹, Dr. Vivek Chail²

¹(Post graduate Resident, Department of Radio-diagnosis, Dr. B. R. Ambedkar Medical College and Hospital/
Rajiv Gandhi University of Health Science, India)

²(Associate Professor , Department of Radio-diagnosis, Dr. B. R. Ambedkar Medical College and Hospital/
Rajiv Gandhi University of Health Science, India)

Abstract: Ectopic gestation refers to implantation of fertilized ovum outside the uterine cavity.

Incidence of ectopic gestations is increasing due to various risk factors and the mortality rate has declined to less than 1 in 1000 patients in recent years(1) because of improved diagnostic capabilities and early recourse to intervention. However, in case of abdominal ectopic gestation the mortality rate is 7.7 times higher as compared to tubal ectopic pregnancy.(2)

Case presentation

A 22 year old woman came with pain in the right lower abdomen.

Reporting a case of abdominal ectopic gestation in a 22 year old, gravida 4 parity 2 live 2, patient complaining of pain in right iliac fossa and weakly positive urine pregnancy test.

Conclusion

Sonological evaluation is the diagnostic procedure of choice in case of acute emergencies such as ectopic gestation where time is a limitation. Abdominal ectopic gestation are although a rare entity but should be thought as a differential if clinical scenario is fitting and bilateral adnexa are clear.

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I. Introduction

Ectopic gestation is implantation of fertilized ovum outside the uterine cavity. Different locations for an ectopic gestation are fallopian tubes (most common) (3), cornua, ovaries, cervix, previous C section scar, pouch of Douglas, omentum, bowel, mesentery, peritoneum, liver, spleen, diaphragm or Gerota's fascia of kidney.

Abdominal ectopic gestation are extremely rare entity constituting 1 % of all ectopic pregnancies with an incidence of 1 in 10200 pregnancies with dreadful mortality rates which are 7.7 times higher than tubal gestation (4) and 89.8 times higher than intrauterine gestation because of risk of torrential hemorrhage from placental separation which could be partial or complete.

Incidence of abdominal ectopic gestations is common in developing countries because of high frequency of pelvic inflammatory disease and artificial insemination fertilization.

Abdominal ectopic gestation are classified as primary or secondary depending upon the implantation site and the diagnosis of primary abdominal pregnancy is confirmed by Studdiford's criteria (4) which is based upon following anatomical conditions: Normal tubes and ovaries, absence of uteroplacental fistula and attachment exclusively to peritoneal surface early enough in gestation eliminates the possibility of secondary implantation.

Ultrasound is the primary diagnostic modality for detection of ectopic gestation, CECT and MRI are adjuvant with when sonography is equivocal.

Classical triad of ectopic gestation is abnormal vaginal bleed, pain and palpable adnexal mass. Other presentation include amenorrhea, cervical motion tenderness and adnexal tenderness. However right lower quadrant pain with loose stools are unusual presentation in an abdominal ectopic gestation which were the chief complains in our 22 years old patients

II. Case Presentation

A 22 years old gravida 4, parity 2, live 2, abortion 1, non tubectomised patient presented with dull abdominal pain localized to the right iliac fossa since 3 days. Pain was dull aching continuous, non radiating and was associated with 3 episodes of loose stools. She also gave history of one episode of non projectile vomiting containing food particle, non blood tinged. Past medical history was unremarkable. No history of

missed cycles in past six months. No prior history of instrumental delivery, termination of pregnancy or intrauterine device insertion.

Urine pregnancy test was weakly positive and the Initial diagnosis of ? sealed off appendicular perforation vs right tubal ectopic gestation was made.

On examination : Patient was thin built. No pallor. BP: 90/60 mmHg. Pulse 96 bpm, RR 18/min. Abdomen was soft, tenderness at right iliac fossa noted, no organomegaly, lymphadenopathy or mass per abdomen.

Bimanual examination : uterus corresponded to 8 week size, anteverted with tenderness in the right fornix, cervical motion tenderness was noted.

Investigations: An ultrasound examination of abdomen and pelvis revealed a solitary, round, well defined, solid heterogeneously hypoechoic mass measuring 28 x 23 mm in the right iliac fossa with few cystic areas and adjacent inflammatory fat stranding seen. No obvious internal vascularity noted.

Multiple mesenteric lymph nodes were seen in right iliac fossa largest measuring 17 x 6 mm.

Appendix was not visualized sonologically.

Uterus was normal with central endometrium measuring 6 mm in thickness.

Bilateral ovaries were normal.

Free fluid with internal echoes seen at right iliac fossa and pelvis.

Hence sonological diagnosis of appendicular mass vs a rare possibility primary abdominal ectopic pregnancy was made and Beta HCG and CECT was advised .

CECT abdomen and pelvis revealed a solitary enhancing soft tissue attenuating lesion with central area of hypoenhancement in RIF measuring 30 x 24mm with surrounding mild fat stranding.

Few small mesenteric lymph nodes in RIF.

Mild free fluid in pelvis and right iliac fossa.

Right ovary showed a cyst likely follicular / corpus luteal cyst measuring 20 x 18mm

Normal size air filled retrocaecal appendix was seen. In keeping with CECT findings differential diagnosis of rare possibility of primary abdominal ectopic gestation vs omental nodule was thought of.



Figure 1 and 2 depict normal uterus with normal endometrial thickness of 6.6 mm

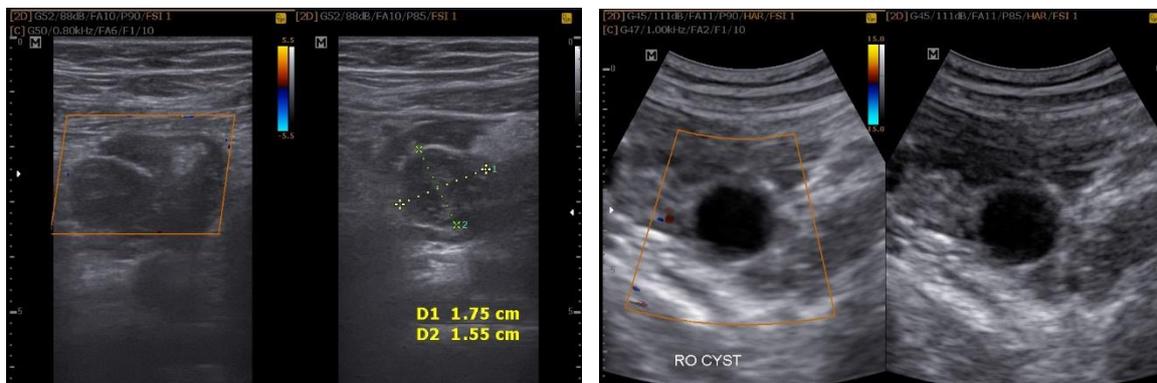


Figure 3 and 4 shows heterogeneously hypoechoic mass in right iliac fossa with no obvious internal vascularity. Right ovarian cyst seen - ? corpus luteal cyst.



Figure 5 and 6 show free fluid with internal echoes in right iliac fossa and normal ileo-caecal junction.

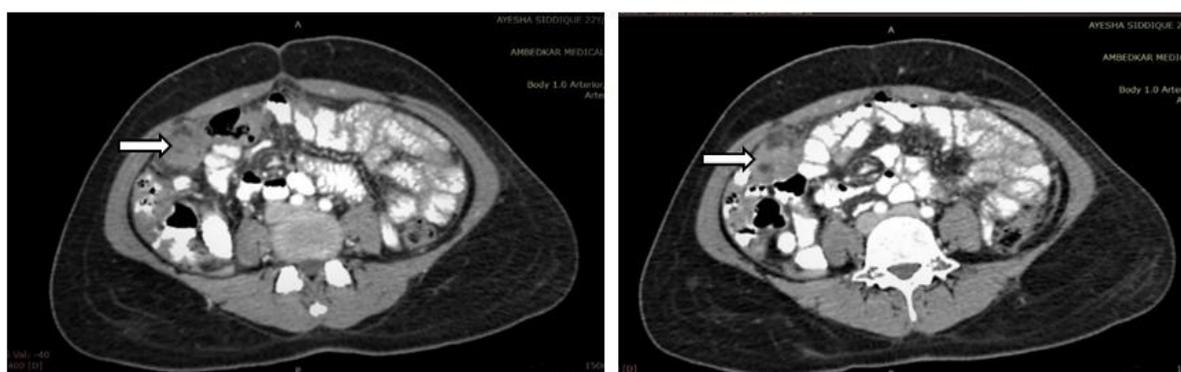


Fig 7 and 8. CECT axial sections shows a solitary enhancing soft tissue attenuating lesion (white arrow) with central area of hypoenhancement in right lumbar region with adjacent fat stranding.

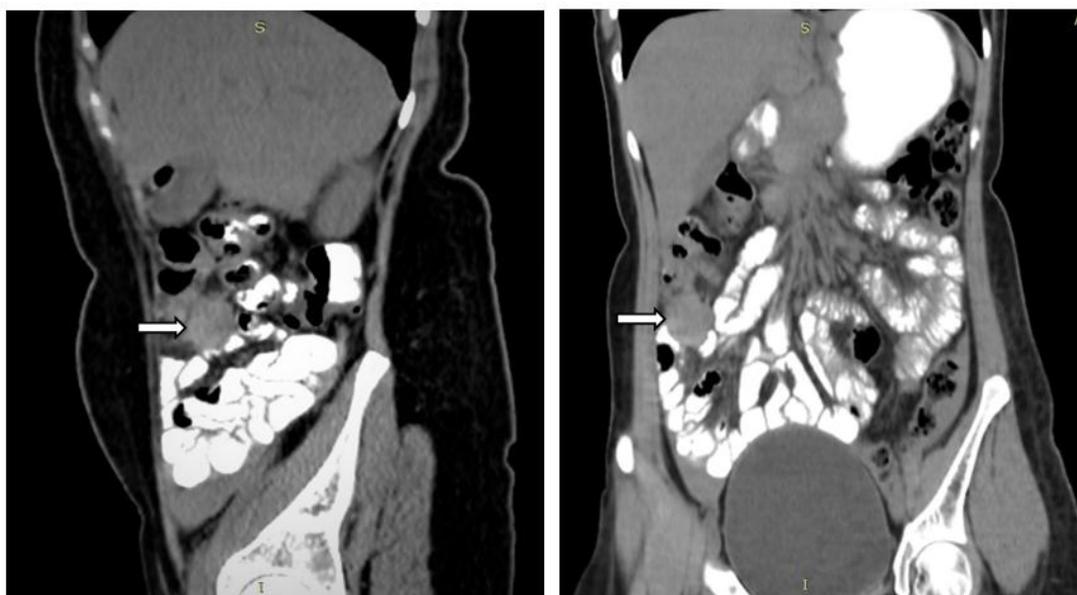


Fig 9 and 10. Depict same lesion white arrows in right iliac lumbar region

Operative findings: Under general anesthesia. A low transverse incision was made and abdomen was opened in layers.

Moderate amount of intra-abdominal hemorrhagic fluid was evident. Visualized uterus was normal in size and there was no sign of tubal rupture or mass.

Bilateral ovaries were bulky.

Abdominal exploratory laparotomy revealed a 5 x 5 cms mass likely placental/ trophoblastic tissue in the infracolic omentum on the antimesenteric border at hepatic flexure suggestive of ?early primary ectopic gestation.

Omentectomy was done and specimen was sent for histopathological examination.
Prophylactic appendectomy was done and abdomen was closed in layers after achieving hemostasis.

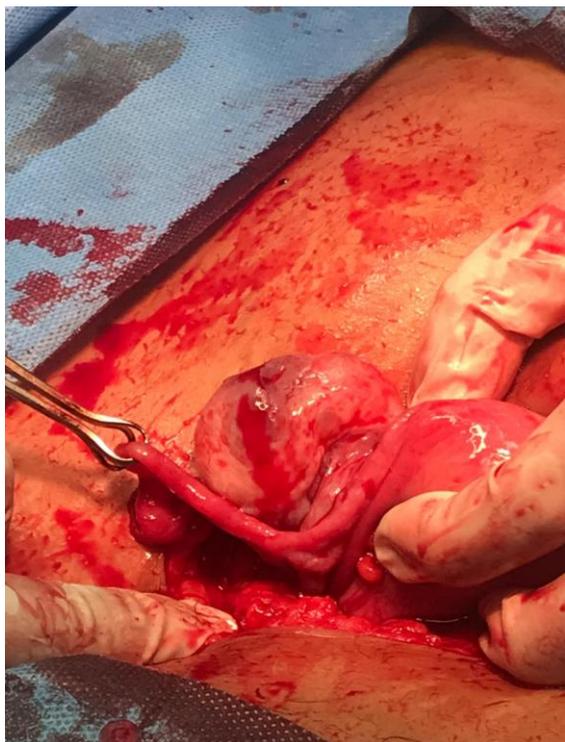


Figure 11



Figure 12

Figures 11 and 12 show a 5 x 5 cms mass likely placental/ trophoblastic tissue in the infracolic omentum on the antimesenteric border at hepatic flexure suggestive of ? early primary ectopic gestation.

Histopathology

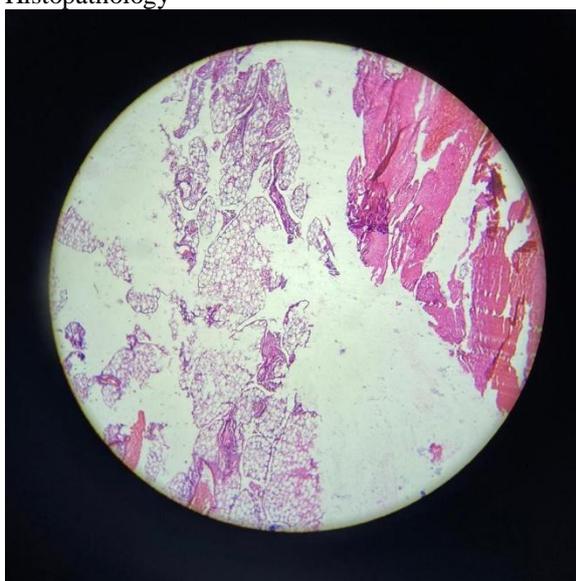


Figure 13

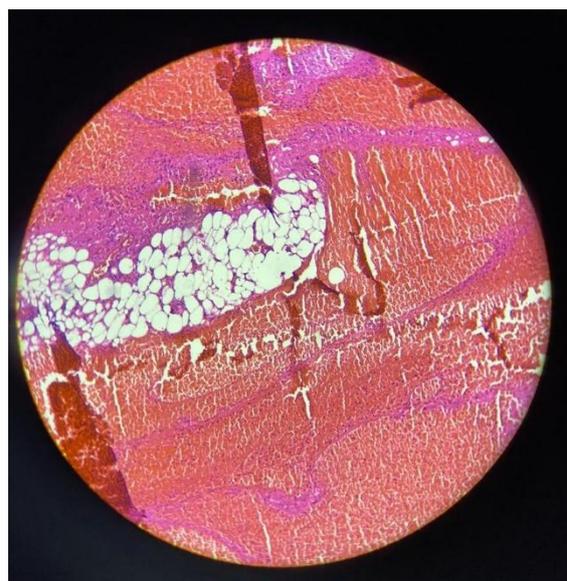


Figure 14

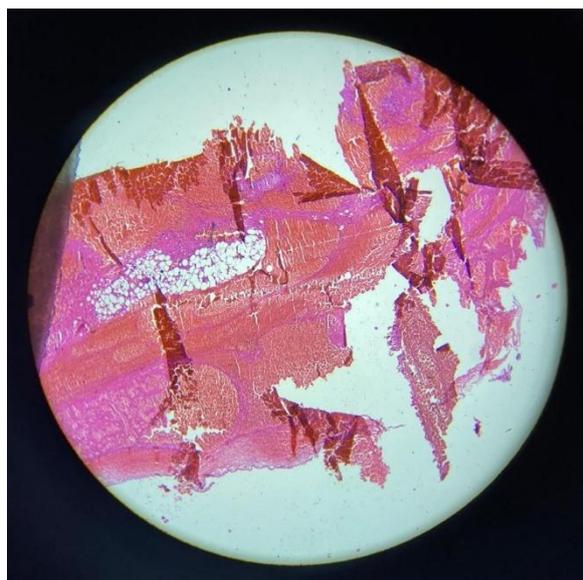


Figure 15

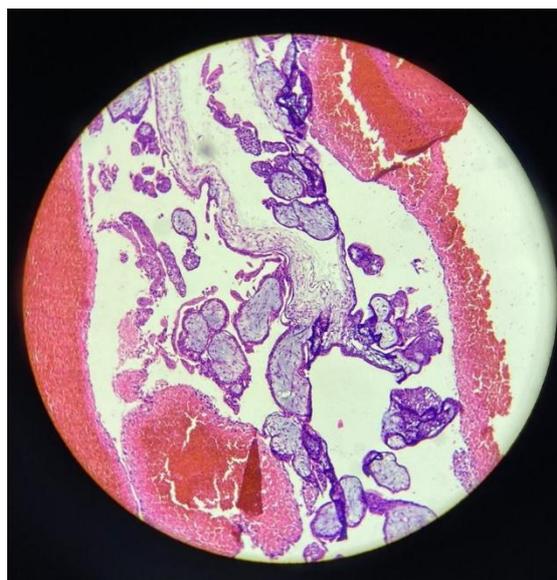


Figure 16

Figures 13 – 16 show chorionic villi lined by inner cytotrophoblasts and outer multinucleated syncytiotrophoblasts. Also noted fibroadipose tissue, fibromuscular tissue, occasional dilated blood vessels, large areas of hemorrhages and chronic inflammatory cell infiltrate comprised of lymphocytes. Suggestive of products of conception.

III. Discussion

Ectopic gestation in abdominal cavity is often misdiagnosed because of low incidence, nonspecific location and atypical clinical presentation.

In conclusion, for women of childbearing age with amenorrhea and elevated beta hCG levels, ultrasound examination showing heterogenous mass lesion with no fetal pole, yolk sac in the abdominal cavity, No intrauterine gestation, the possibility of primary omental ectopic should be considered.

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