Rare Case of Ruptured Ectopic Pregnancy with a Negative Urine Pregnancy Test

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ABSTRACT

Introduction: Ectopic pregnancy accounts for approximately 2% of all pregnancies and is the most common cause of pregnancy-related mortality in the first trimester. This case of a ruptured tubal ectopic without positive urine pregnancy test stresses the importance of clinical and ultrasonological decision making in such settings.

Case Report: A 27-year-old female presented to the emergency department with right lower abdominal pain for 24 hours. On palpation, there was tenderness to palpation in the left and right lower quadrants. Her last menstrual date was about 2 months ago. UPT test done was negative. Transabdominal ultrasonography minimal fluid in the POD. Transvaginal sonography (TVS) showed an ovoid thick walled hyperechoic lesion with central cystic component abutting the right ovary with peripheral vascularity and hemoperitoneum. With all the above findings, diagnosis of ruptured right tubal ectopic was made despite a negative pregnancy test. Intraoperative findings of a ruptured right tubal ectopic was confirmed by histopathological examination.

Conclusion: Obstetrician must not exclude this potentially life threatening condition in the presence of intraabdominal bleed or severe pelvic pain even with a negative urine pregnancy test.

Keywords: Ectopic, hCG

INTRODUCTION

Ectopic pregnancy refers to the implantation of a fertilised ovum outside of the uterine cavity. It has an incidence of 2% of all pregnancies and is the leading cause of maternal mortality. This can be prevented by early diagnosis and treatment which will also preserve the future fertility. Usually the diagnosis is relies on clinical history and examination, ultrasound findings, and lab findings of elevated beta—human chorionic gonadotropin (hCG). This case of a ruptured tubal ectopic without positive urine pregnancy test stresses the importance of clinical and ultrasonological decision making in such settings.

CASE REPORT

A 27-year-old gravida 2 para 1 living 1 female presented to the emergency department with right lower abdominal pain for 24 hours. Two weeks earlier she was evaluated for the same with ultrasonography at an outside centre, the report of which showed a small cyst in the right ovary with internal echoes which was given as a corpus luteal/hemorrhagic cyst. On examination, her temperature was 98.6 F, heart rate 93 beats per minute, blood pressure 127/60 mm Hg. On palpation, there was tenderness to palpation in the left and right lower quadrants. Her last menstrual

date was about 2 months ago. UPT test done was negative. She was referred to the department of radio diagnosis for a repeat ultrasonography examination. Transabdominal ultrasonography (TAS) of the abdomen was unremarkable. The pelvis showed a uterus of normal size and echotexture. Endometrial thickness was 12.1 mm. Both the ovaries were normal in size, shape and texture. No obvious adnexal mass

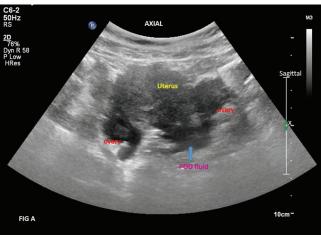


Figure-1: Transabdominal scan axial image showing uterus, ovaries and POD fluid.



Figure-2: Transabdominal scan sagittal image showing



Figure-3: TVS image showing right adnexal lesion adjacent to right ovary (Blue arrow)

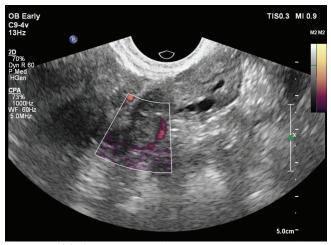


Figure-4: TVS power Doppler image showing peripheral vascularity in lesion.

was visualized. There was minimal fluid in the POD which appeared mildly hypoechoic (Fig 1 and 2). These findings prompted further evaluation with transvaginal sonography (TVS) after obtaining her consent. On TVS, an ovoid thick walled hyperechoic lesion with central cystic component was seen abutting the right ovary measuring 13x21.8 mm (AP x TD) in size (Fig 3). Doppler showed peripheral vascularity in the lesion (Fig 4). The POD fluid showed

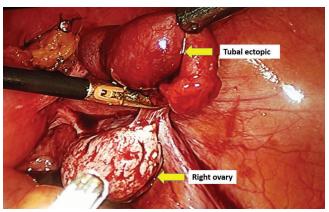


Figure-5: intra operative picture showing right tubal ectopic.

internal echoes suggestive of hemoperitoneum. With all the above findings, diagnosis of ruptured right tubal ectopic was made despite a negative pregnancy test. Following the scan, serum beta HCG assessment was done which was 95 mIU/ml. She was taken up for laparoscopic right salphingectomy. Intraoperative findings of a ruptured right tubal ectopic was confirmed by histopathological examination (Fig 5). The post operative period was uneventful was the lady was discharged with stable vitals.

DISCUSSION

Ectopic pregnancy are the ones in which the zygote is implanted outside the uterine cavity. Tube, cornua, ovary, cervix, caesarean scar, abdomen are the sites of ectopic in decreasing incidence. In the case of ruptured ectopics, the presentation is usually with abdominal pain and vaginal bleeding. However the symptoms are not necessarily severe sometimes, presenting with only mild pelvic pain and spotting. Hence, monitoring of hemodynamic status is paramount because internal hemorrhage can be fatal.

This is a rare diagnosis of a ruptured ectopic pregnancy with a negative urine pregnancy test and so far there have been only a few reported cases.²⁻⁶ Since 1987, there are about nine cases of ruptured ectopic pregnancy have been reported with a negative urine pregnancy test.⁷

Previous ectopic pregnancy, fallopian tube surgery, and pelvic inflammatory disease, endometriosis, IUCD, in vitro fertilization, salpingitis isthmica nodosa are risk factors for ectopic pregnancy. Ultrasound and beta hCG used in combination has a 96% sensitivity and 97% specificity for diagnosis of etopics.⁸

Ectopic pregnancy with a negative urine pregnancy test is seen in only 1% of the ectopic cases.

Usually in ectopic pregnancy, the hCG is elevated and increases abnormally. The ultrasound exam should be performed both transabdominally and transvaginally. The transabdominal scan provides wide view of the abdomen, whereas a transvaginal scan is important for diagnostic sensitivity. Ultrasonographic features include an empty uterine cavity, pseudogestational sac, complex adnexal cyst/mass,tubal ring sign, ring of fire sign etc.

CONCLUSION

This case suggest that the obstetrician must not exclude

this potentially life threatening condition in the presence of intraabdominal bleed or severe pelvic pain even with a negative urine pregnancy test.

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