Unruptured Second Trimester Tubal Pregnancy-A Case Report

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Abstract

Ectopic pregnancy is a major health risk for women of reproductive age group and is a major cause of death in the first trimester. While most cases of tubal pregnancy will present in the first trimester, advanced tubal pregnancy is rare and may be associated with diagnostic difficulty. We present the case of a 30 year-old primigravida who had total salpingectomy for unruptured mid-trimester tubal pregnancy with favorable outcome at 20 weeks gestation.

Introduction

Ectopic pregnancy is a major health concern for women of reproductive age. It causes an increased risk of maternal morbidity and mortality[1]. It is a major cause of maternal death during the first trimester, accounting for 9-13% of all pregnancy associated deaths[2]. Tubal pregnancies account for about 98.3% of all ectopic pregnancies. They are usually symptomatic just after implantation. Signs of intra-abdominal hemorrhage are observed within four to six weeks of gestation[3].

The incidence of ectopic pregnancy in the industrialized countries has increased by six fold between 1970 and 1992[4] but it had since remained stable in recent years[5]. It currently accounts for 2% of all births while in Nigeria, the incidence ranges from 0.9 to 4.3% [6]. The development of an ectopic pregnancy depends on a complex interaction between many factors. Contributory factors to ectopic pregnancy include sexually transmitted infections, tubal abnormalities, pelvic inflammatory disease, intra-uterine devices and in-utero exposure to diethylstilbesterol[7]. However, a significant proportion of women with ectopic pregnancy do not seem to have any identifiable risk factors[1].

Natural growth of an ectopic pregnancy gets arrested spontaneously with tubal rupture, tubal abortion, spontaneous resolution or development of chronicity. An advanced ectopic gestation is very rare and is often associated with diagnostic difficulties[2]. This report presents the case history of a patient who had successful salpingectomy for an unruptured tubal pregnancy at 20 weeks gestation.

Case Report

Miss A.B was a 30-year old G1P0 civil servant who presented with a 20 week history of amenorrhea and a week's history of colicky lower abdominal pain. There was no history of abdominal swelling, dizziness or fainting attacks. She denied history of recurrent vaginal discharge, sexually transmitted infection, urethritis or uterine instrumentation. The pregnancy was her first and she had not used any form of contraception before. Examination revealed a young woman who was mildly pale, not febrile, not icteric with no pedal edema. Her chest was clinically clear; the pulse rate was 98 beats per minute and the blood pressure 120/70 mmHg. The abdomen was full and moved with respiration. There was generalized tenderness and rebound tenderness. There was a supra-pubic mass consistent with 18-week cyesis. The liver and the spleen were not palpably enlarged and the kidneys were not bimanually palpable. Bowel sounds were present and normo-active. Vaginal examination revealed normal female external genitalia, cervix was posterior with os closed, cervical motion excitation tenderness was positive but the pouch of Douglas was free.

An assessment of acute abdomen to rule out abdominal pregnancy was made. She was admitted, placed intravenous infusion and blood samples taken for packed cell volume (27%) and four units of blood were grouped and cross-matched. She had emergency ultrasound scan done which revealed a normal sized-empty uterus, a well-defined complex mass overlying the uterus measuring 210 by 152cm in the widest diameter. There were complex solid echogenic densities occupying about two-third of the mass and a bony outline was visible on the upper part of this extra-uterine mass. An estimated crown-rump length of 98mm corresponding with a gestational age of 18-weeks and 3 days with neither fetal cardiac pulsation nor amniotic fluid was seen. No free fluid was seen in the peritoneal cavity.

An assessment of unruptured, non-viable, extra-uterine pregnancy was made. The findings were explained to her and she was counselled for exploratory laparotomy to which she consented. Right total salpingectomy was performed an hour later and operative findings include a right tubal mass measuring 20 x 18 x14.5 cm containing a well formed fetus, left hydrosalpinx, placenta attached to the wall of the right fallopian tube, normal uterus and ovaries and estimated blood loss of 350mls. She was placed on

parenteral antibiotics, analgesics and intravenous fluids. The post-operative period was uneventful. Oral medications, including hematinics were started on return of bowel sounds. The post-operative packed cell volume was 25%. Her wound healed well. The stitches were removed on the 7th post-operative day and she was discharged home on haematinics the following day to the gynecology clinic for follow-up.

On review at the clinic, the findings at surgery were explained to her with the possibility of a previous pelvic infection as the predisposing factor to the ectopic pregnancy. She was counselled on the need for safe sexual practice, prompt treatment of any genital tract infection and to report early in the next pregnancy for an ultrasound scan to localize the gestational sac.

Discussion

We present the case of advanced tubal pregnancy at 20 weeks gestation posing a diagnostic challenge. Most extra-uterine pregnancies are diagnosed in the first trimester and can be treated using conservative, medical or surgical means.

The pre-operative diagnosis of advanced extra-uterine pregnancy has been reported to be unsuspected in 50-90% of cases because of non-specific symptoms[1]. Though no pelvic ultrasonography was performed in Miss A.B before presentation, the diagnosis of extra-uterine pregnancy may be missed in 50% of abdominal and 10% of vaginal ultrasonography[1]. Usually, an advanced pregnancy cannot develop entirely inside the fallopian tube and the most frequent event in the first trimester is tubal rupture or tubal abortion. In the case presented, the fallopian tube did not rupture even though it was widely involved in the placentation.

While some patients may present without risk factors, the discovery of hydrosalpinx in the contra-lateral tube indicated that the patient might have had pelvic inflammatory disease in the past placing her at higher risk of developing ectopic pregnancy. The reason for delay in the diagnosis arises from the inability of Miss A.B to confirm her pregnancy by ultrasonography which might have revealed the extra-uterine location prompting definitive intervention. The benefits of booking early pregnancies in health facilities are not yet appreciated by women in developing countries[8]. Over 48% of patients who were

diagnosed with ruptured ectopic in a study in Ghana were aware of their pregnancy but never sought medical advice[8].

The ultrasound is an essential diagnostic and prognostic tool in obstetrics and gynecological practice. All pregnant women should have an early ultrasonography scan to confirm the location of the gestational sac a few weeks after a missed period and positive pregnancy test. Though transvaginal ultrasonography and serial human chorionic gonadotrophin remains the cornerstone for the diagnosis of ectopic pregnancy, magnetic resonant imaging has been used as a valuable adjunct in resolution of cases missed by ultrasonography scan[9].

While it may not be easy to diagnose unruptured ectopic pregnancy, it is important for healthcare providers to suspect it in cases of young women complaining of amenorrhea, lower abdominal pain and irregular vaginal bleeding in spite of a clinically stable condition. Judicious application of diagnostic aids i.e. serum B- hCG, ultrasonography and laparoscopy would eventually lead to the correct diagnosis. Early diagnosis of unruptured ectopic pregnancy will prevent blood transfusion with its attendant numerous risks and may allow for medical or conservative options of treatment.

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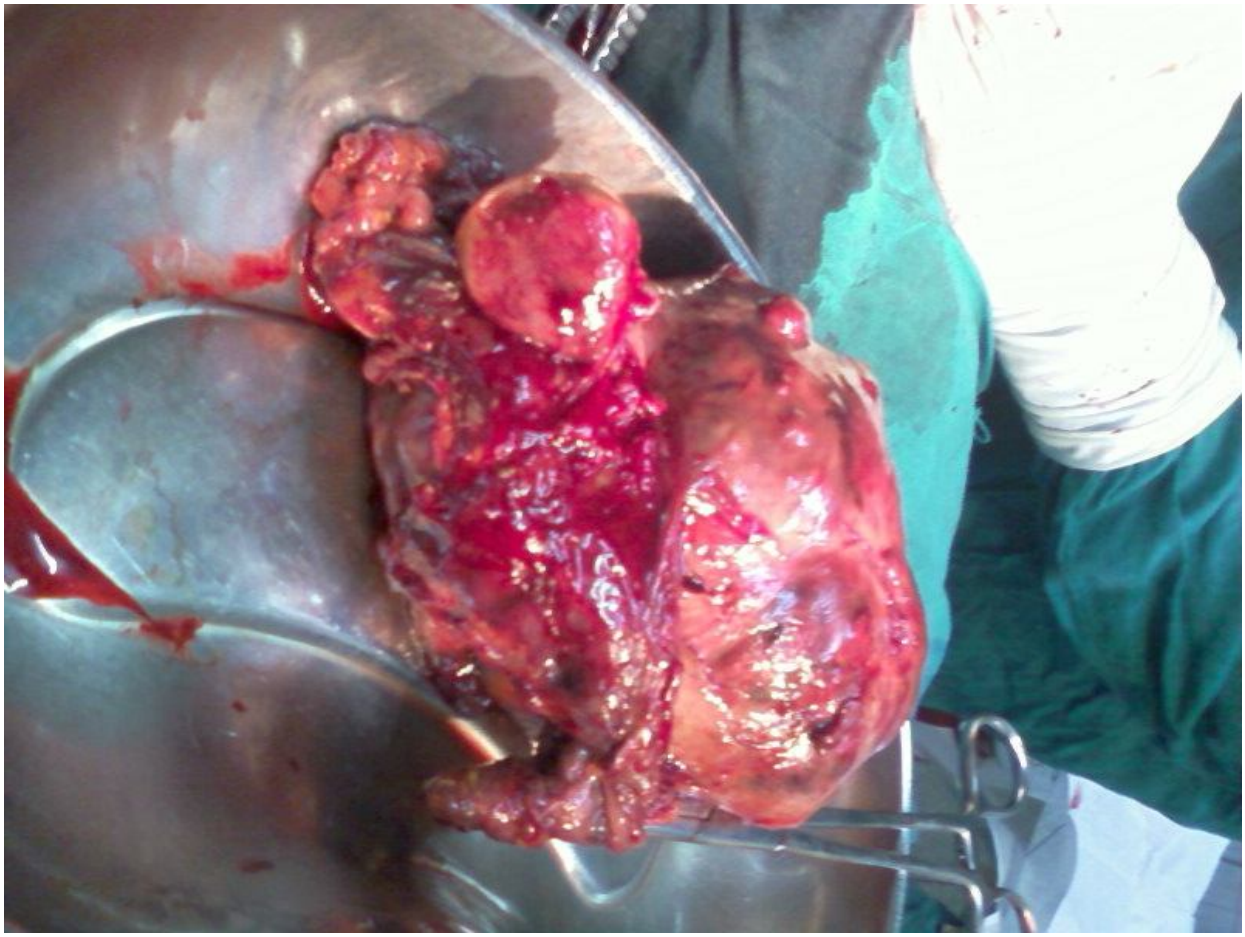

Figure 1: The excised right fallopian tube containing the fetus with the head protruding at 11 o'clock position.

Figure 2: The incised fallopian tube showing the fetus and placenta within.