SPONTANEOUS BILATERAL TUBAL ECTOPIC PREGNANCY

Himangini B*, Behera RC*, Sachdev S*

Abstract

Bilateral tubal ectopic pregnancy is very rare,and usually the result of an assisted reproduction technique. Pelvic inflammatory disease, advent of antibiotics and tubal surgery are also common determinig factors. However, spontaneous bilateral tubal ectopic pregnancy is exceedingly rare. Only about 250 cases of twin ectopic pregnancies have been reported in literature. We report a 22 year old woman without any high risk factor for ectopic pregnancy,who had spontaneous left intact tubal pregnancy and right tubal ruptured ectopic pregnancy. The diagnosis of ectopic pregnancy was made on clinical suspicion and positive urine pregnancy test. The diagnosis of bilateral tubal pregnancies was confirmed on histopathology examination. A high index of suspicion for pregnancy is required to avoid missing an ectopic pregnancy.

***Key words**: Bilateral ectopic pregnancy, Tubal ectopic pregnancy, Tubal abortion, Ruptured tubal pregnancy.*

Introduction

The rarest form of ectopic pregnancy is bilateral tubal ectopic pregnancy in which twinning occurs with pregnancy in both tubes. The fate of the two pregnancies are independent of each other. The common risk factors are pelvic infection, advent and use of better antibiotics and previous tubal surgery. In the past two decades there has been three fold rise in incidence of heterotrophic as well as tubal ectopic pregnancies with assisted reproduction techniques, but occurrence of bilateral tubal ectopic pregnancy is exceedingly rare.[1] The incidence is thought to be 1 in 2,00,000 intrauterine pregnancies and somewhere between 1 in 725 to 1 in 1580 ectopic pregnancies.[1,2] About 250 cases of twin ectopic pregnancies have been reported.[3] Of the handful of reported cases of spontaneous bilateral ectopic pregnancies, one happens to be from our Institute.

* Dept of Obs & Gynae, RMC, Loni

Address for correspondence:

Dr Himangini Bhole, Resident, Department of Obs & Gynae, Rural Medical College, PIMS, Loni, District-Ahmednagar, Maharashtra-413736,India

E-mail: drhimangini@yahoo.co.in

Case report

A 22 year old with gravida 2, para 1 and live 1 (G2P1L1) was admitted to hospital with a history of 7 weeks amenorrhoea and main complaints of, lower abdominal pain associated with vaginal bleeding of 8 days duration. Her menstrual cycles were regular. There was no past history of any risk factor for ectopic pregnancy. On clinical examination her pulse rate was 110/ min and blood pressure:110/60 mm of Hg. She was looking pale. Abdominal examination revealed tenderness in the hypogastric region but there was no muscle guarding, rigidity or rebound tenderness. On speculum examination per vaginum, there was slight blood stained discharge from the external os of the cervix. Pelvic examination revealed painful cervical motion, normal sized uterus with left adnexal mass ($7x4cm^2$) which was firm in consistency. Both lateral fornices were extremely tender. The mass was felt separate from the uterus. Cervical os was closed.

An urgent urine test for human chorionic gonadotrophin (HCG) was found positive. A diagnosis of ectopic pregnancy was made . Her haematological parameters were: Total white cell

count 7.6 × 10^9 cells/l, haemoglobin 6.5 g/dl and haematocrit 17.6%. Her blood group was 'O' positive. Ultrasound examination of pelvis revealed a 9.5 x 6.8 cm^2 left tubo-ovarian heterogenous hypoechoeic mass. There was also minimal collection of fluid in Morrison`s pouch, right lower quadrant and in cul-de-sac.

The patient underwent emergency exploratory laparotomy. There was haemoperitoneum of approximately 500 ml and presence of blood clot weighing 200gms.There was an intact ectopic pregnancy sac (6 × 3 cm^2) in the ampullary region, forming an organised haematoma at the left fimbrial end. On the right side there was a ruptured fimbrial ectopic pregnancy with active bleeding (Fig 1 & 2).

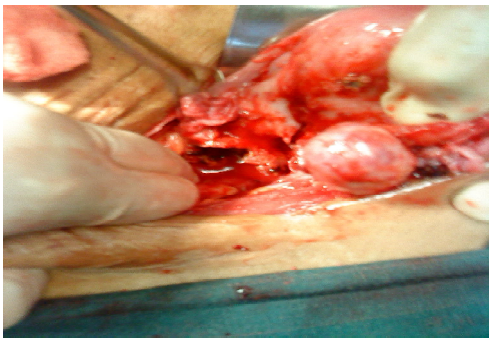

Fig 1: Intraoperative photograph: Ruptured right ectopic pregnancy

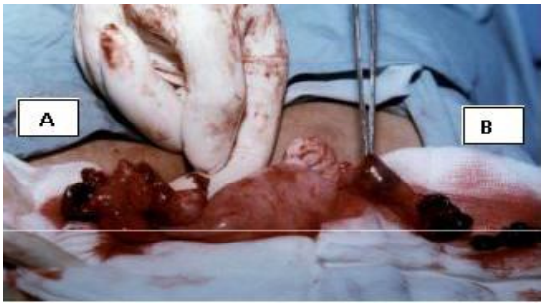

Fig 2: Intraoperative photograph: Bilateral ectopic pregnancies:
(A) Ruptured right (B) Unruptured left

In view of these findings, as well as three quarters of both the tubes being damaged, decision to undertake bilateral salpingectomies was taken. Relatives were informed and consent obtained for the same. Procedure was carried out without any complications. She was transfused 3 units of group 'O' Rh positive blood. Postoperative period was uneventful and the patient was discharged on the 7th post-operative day. Histopathological examination (Fig 4) confirmed the diagnosis of bilataeral ectopic pregnancy.

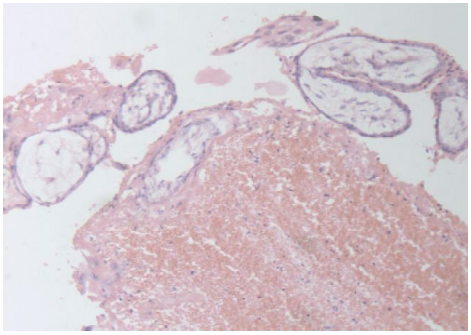

Fig 3: Histologic picture of left tube: Chorionic villi lined with cytotrophoblast and syncytiotrophoblast.

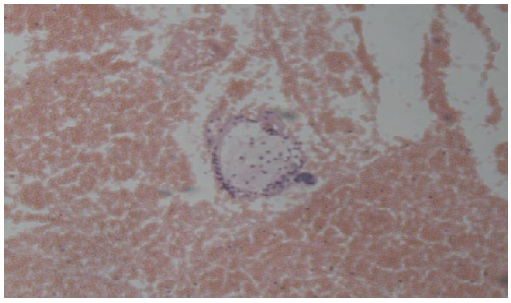

Fig 4: Histologic picture of right tube: Chorionic vilii.

A post operative USG after one month showed normal sized uterus with normal endometrial echoes and normal ovaries.

Discussion

Ruptured ectopic pregnancy is not an uncommon diagnosis in emergency admissions, but spontaneous bilateral ectopic pregnancies is a rare event which is difficult to diagnose preoperatively. A high index of suspicion for an ectopic pregnancy is of great importance.
The USG confirmation of echogenic fluid in lower abdomen along with non cystic adenexal mass

on left provided a diagnosis of ectopic pregnancy, but in our case failed to make a diagnosis of bilateral ectopic pregnancies. This is in agreement with other reports (i.e. the use of USG is not necessary in diagnosis of bilateral ectopic pregnancy).[4]

In the left fallopian tube there may have been decidual separation which finally led to tubal abortion as the tube was found intact on laparotomy. This formed an organised mass at the fimbrial end of the left tube. She became symptomatic as rupture of the right sided tubal pregnancy was followed by blood loss and peritonitis.This probably explains why the patient reported eight days after she developed pain abdomen and vaginal bleeding.

There have been very few case reports of spontaneous bilateral ectopic pregnancies. Our findings in this case is similar to those of G.A.AL Quraan et. al,who reported a right ruptured ampullary ectopic and left ruptured tubal ectopic pregnancy.[3,5] Surgical management by right salpingectomy and left salpingostomy with cautery were carried out, together with removal of products of conception.

Mehotra Ragini, Agrawal Parul; reported a case of bilateral tubal ectopic pregnancies after abdomoinal tuberculosis.[6] The patient underwent left salpingectomy as the left tube had ruptured. On the right side, intact tubal ectopic pregnancy in the process of tubal abortion with organised haematoma encroaching upto right ovary was seen.

In our case both fallopian tubes had to be sacrificed, but with the availibility of assisted reproduction techniques, she can still have future conceptions.The possibility of a uterine pregnancy in a patient with unruptured tubal ectopic pregnancy is around 24% to 60%.[2] However, no pregnancy has been reported after bilateral ectopic pregnancy.The continuing development in all arenas of medical technology has allowed easier and faster diagnosis of ectopic pregnancy as well as improvement in the quality of treatment and outcome. Rare forms like bilateral tubal ectopic pregnancies with rupture on one side and abortion on other side still pose peculiar problems with poor outcomes.

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