

A Case Study on Ruptured Tubal Pregnancy

*¹K. Saraswathy & ²Dr. Latha Venkatesan

¹Lecturer, Apollo College of Nursing, Chennai (India)

²Principal, Apollo College of Nursing, Chennai (India)

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Corresponding Author

Email: [contactsaras\[at\]gmail.com](mailto:contactsaras[at]gmail.com)

ABSTRACT

Mrs. A, 28 years old women presenting with abnormal menstruation without a period of amenorrhoea with severe abdominal pain, vomiting and fainting attacks was diagnosed to have ruptured left tubal ectopic pregnancy by the ultrasound and β hCG values. She has undergone emergency laparoscopy with left salpingectomy. After a year she had recurrent tubal pregnancy on the right side. She received treatment with Inj.Methotrexate, by which her right tube was preserved and was discharged in a good condition. The case illustrates the need for careful history taking and for considering ectopic pregnancy in reproductive age group women, who have abnormal menstruation.

1. Introduction

Ectopic pregnancy occurs when a fertilized egg implants outside the uterine cavity. One out of every 100 pregnancy is ectopic with the most common site being within a fallopian tube. Ectopic pregnancy is a potentially fatal emergency condition if early diagnosis is missed. Ectopic pregnancy continues to be a leading cause of maternal morbidity during the first trimester. The presentation varies widely from being asymptomatic to haemodynamically compromised.

2. Case study

Mrs A 28 year old infertile mother presented to emergency department with the complaints of sudden onset of severe abdominal pain for 4 hours, vomiting and fainting. Her LMP was 18 days back and had slight mid cycle spotting. She was

married for four years, has Poly cystic ovary disease and on treatment with Tab.Glycomet, Tab. Folvite. She had no history of contraceptive use and suggestive intake of ovulation induction drugs.

She was haemodynamically unstable, she had tachycardia 85beats/mt and hypotensive 100/70mmHg. Abdominal examination revealed lower abdomen tenderness, rigidity and guarding were present. Speculum examination revealed tenderness in bilateral fornices. Her β hCG levels was high, Hb-7gms/dl within 6 hours of pain. Her urine pregnancy test was positive, pelvic ultrasound revealed empty uterine cavity and hemoperitoneum with an anechoic area measuring 19.2X24.2X23.3 mm with embryo- like echo (18.8 mm in length) amidst the echogenic region. Possibility of ectopic pregnancy was explained to her and shifted to operation theatre.

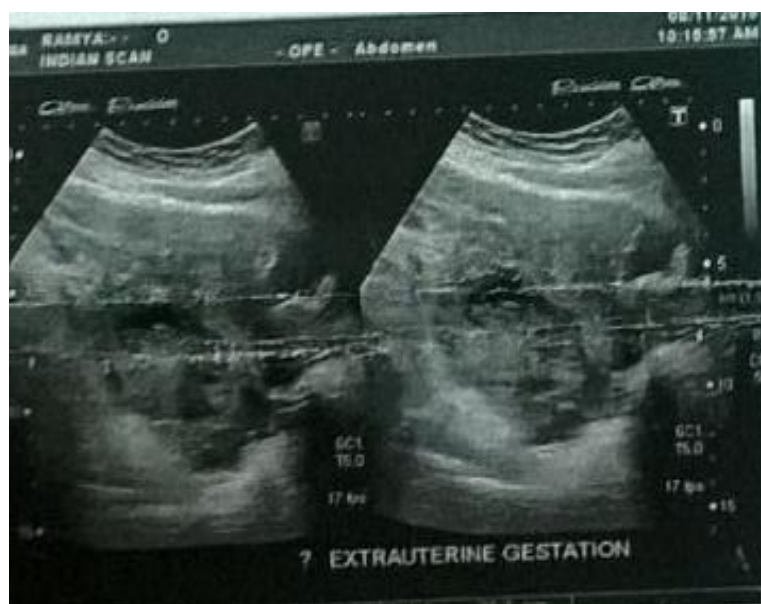


Fig.1 Trans-abdominal ultrasound showing extra uterine gestation

An emergency diagnostic laparotomy was done with a preoperative provisional diagnosis of ruptured left tubal ectopic pregnancy. Intraoperative the uterus was normal in size and right tube was normal. Abdomen was filled with 750 ml of fresh

blood clots. Right ovary was normal, left salpingectomy was carried out as the fresh bleeding vessels could not be secured even after plication and electro cauterization. Haemostasis was

secured by transfusing two pints of RBC. Patient had an uneventful post-operative course.



Fig.2 Trans-vaginal ultrasound showing right tubal ring

Patient was again admitted after a year with the midcycle bleeding without any abdominal pain with her LMP was 16 days back. Clinicians has asked to check B-hCG levels. β -hCG levels were raised up to 4500 mIU/mL and ultrasound was done which revealed right tubal ectopic pregnancy where tubal ring measuring 17.6X16.5mm. Endometrium appears thickened. In order to preserve the tube, Inj. Methotrexate 25mg/IM were given as medical management for ectopic pregnancy. Two days later β -hCG and CBC was done, where β -hCG levels was 4000 mIU/mL. On the third day as β -hCG levels was not reduced.

Obstetrician has planned for laparoscopy if β -hCG levels were not reduced even after one more dose of Inj. Methotrexate. Liver function test and Complete blood count was monitored before the second dose to assess the functions of liver. Methotrexate is broken down in the liver and excreted by the kidneys in the urine. Women who receive this medication need to have blood tests to check their kidney and liver function is normal. Blood tests will be done on the day of administration, then on the 4th and 7th days following administration. Injection Methotrexate was 25mg/IM was given and patient got discharged. Patient was asked to follow-up with β -hCG levels after a week which was reduced to 3500 mIU/mL and again after a fortnight it was checked and dropped to 300mIU/mL. She was on continuous follow up.

3. Discussion

Ectopic means "out of place". In an ectopic pregnancy, fertilized egg has implanted outside the uterus. The egg settles in the fallopian tube in more than 95% of ectopic pregnancy, that is the reason ectopic pregnancy was commonly called as tubal pregnancy. More rarely an embryo may implant in the cervix, in an ovary, on the spleen or liver, in the cul de sac, on the abdominal wall or within the broad ligament. Tubal pregnancy if not detected and treated earlier, fallopian tube can rupture and cause serious problems and sometimes death.

The highest rate of ectopic pregnancy occurs in women aged 35-44 years. One proposed explanation involves myoelectric activity in fallopian tube, which is responsible for tubal motility. Aging may result in progressive loss of myoelectric activity along the fallopian tube.

According to a study by Dr.Samiya Mufti(2008), in a multicentre case control study in India, the incidence of ectopic pregnancy is 3.12 per 1000 pregnancies or in every 250 pregnancies. Peak age of incidence is 26 to 36 years and primi were the most common suffers. Most of the patients that is 60.52 % were diagnosed as ruptured tubal pregnancy. As in this case study the patient was 28 years old and diagnosed to have ruptured tubal pregnancy.

Dr.Ajay Kumar on his case report stated that a young adult female of low socio economic status and a laborer by profession, was brought dead to the government Maternity centre and hospital, Chandigarh. History provided by her husband revealed that she had abdominal pain for last five days for which she was getting treatment from a private practitioner. She had been prescribed NSAID's and antispasmodics. She was not investigated upon to arrive at any diagnosis. The autopsy was conducted on the next day and at autopsy, about 2.5 litres of blood was present in abdomen and pelvic cavity. Careful internal examination revealed a ruptured tubal pregnancy as the source of bleeding.

However only 40-50% of patients with an ectopic pregnancy present with vaginal bleeding, 50% have palpable adnexal mass with 75% may have abdominal tenderness. Approximately 20% of patient with ectopic pregnancy are haemodynamically compromised at the initial presentation, which is highly suggestive of rupture. Fortunately, because of the modern diagnostic techniques, most ectopic pregnancy can be diagnosed prior to rupturing.

Early intervention carries significantly better prognosis. Even surgery can be avoided if management starts before tubal rupture and cardio vascular compromise. As illustrated in this case presentation of ectopic pregnancy vary from subtle abdominal pain to profound cardio vascular compromise. Approximately 43-55%of ectopic pregnancy doesn't present with classical triad of lower abdominal pain, period of amenorrhoea and vaginal bleeding. An early symptom such as abdominal pain although commonest was specific for first time whereas not in second time occurrence. A detailed menstrual history is important and any sudden change of menstrual pattern should alert the midwife to think of the possibility of tubal pregnancy.

This was a challenging case as the presentation was not the typical sequence of symptoms. Absence of typical symptoms tends to mislead the health professionals from possibility of an ectopic pregnancy .It also highlights the fact that first episode of abnormal vaginal bleeding and abdominal pain in a sexually active woman may be a clue to underlying diagnosis of ectopic pregnancy. Midwife should be vigilant in collecting the history should suspect the possibility of ectopic in the reproductive women.

4. Conclusion

Tubal rupture is encountered more often in women with no history of ectopic pregnancy and in those with at least one child. This suggests that the ectopic pregnancy is less suspected in these women. Adequate clinical experience and skills are essential prerequisites for the successful individualized

treatment of tubal pregnancy. Midwives are dependent and require appropriate training and significant experience in

diagnosing the ectopic pregnancy with history and clinical examination.

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