

# RESEARCH AND REVIEWS: JOURNAL OF MEDICAL AND HEALTH SCIENCES

## Interstitial Ectopic Pregnancy: A Rare Case.

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### Case Report

Received: 16/07/2014

Revised: 13/08/2014

Accepted: 24/08/2014

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**Keywords:** Interstitial  
pregnancy, extrauterine  
ectopic pregnancy.

#### ABSTRACT

Ectopic pregnancy in the interstitial part of fallopian tube is a rare event. It occurs when an embryo implant in the lateral angle of the uterine cavity medial to the internal ostium of the fallopian tube. Interstitial pregnancies account for 2-4% of all the tubal pregnancies.

#### INTRODUCTION

Ectopic pregnancy is a gestation in which implantation occurs at a site other than the uterine cavity. The terms extrauterine and ectopic pregnancies are often used synonymously [1]. Ectopic pregnancy is a comprehensive term than extrauterine or tubal pregnancy as it embraces all varieties of gestation outside the uterine cavity and also all implantations of zygote in uterus are not normal; implantation in the isthmus, cervix & in one of the corners of the uterus (angular pregnancy). So ectopic may be in the uterus itself [2].

Interstitial ectopic pregnancy is defined as any gestation that develops in the uterine part of fallopian tube, a distinguishing feature of cornual to interstitial pregnancy is the insertion of the round ligament which is always lateral to the cornual pregnancy [3].

Interstitial pregnancies account for 2-4% of all the tubal pregnancies and have been associated with 2-2.5% maternal mortality rate [4].

We present a rare case of interstitial pregnancy who reported to us in emergency with severe haemoperitoneum.

#### Case Report

A 21 years old woman PGR was referred to KNSHM&C with history of 2 ½ months amenorrhea and pain lower abdomen for 12 hours with patient in shock.

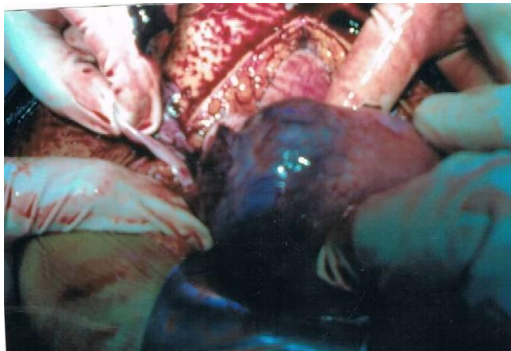
Her menstrual cycles had been regular every 28-30 days and POG was 9 weeks 5 days with UPT +ve.

The patient had no history of pelvic inflammatory disease, intrauterine device use, abdominal surgery or treatment for induction of ovulation.

On examination patient was conscious but disoriented. Patient was pale. Peripheral pulses were not palpable. BP was not recordable and after rushing 1 litre of fluid, her BP was 90/60 mm Hg. On P/A examination guarding, rigidity and rebound tenderness were present. On P/S examination nothing was significant. On P/V examination uterus was parous in size with cervical motion tenderness. A vague tender mass felt in Rt. Fornix adjacent to cornual end 3x3 cm size, boggy mass felt in posterior & right fornix with suspicion of ruptured ectopic pregnancy.

Decision taken for exploratory laprotomy, and on laprotomy there was about 1.5-2 litres of altered blood in peritoneal cavity with evidence of ruptured interstitial pregnancy in Rt. Fallopian tube projecting towards the fundus about 5x5 cm in size. There was trophoblastic tissue which was eroding the surface of the mass with increased vascularity seen on right side of fundus. Remaining tube was intact. Cornual resection with salpingectomy done. Approx. Blood loss was 2-2.5 litres.

Her postoperative period was uneventful and patient was discharged on 8<sup>th</sup> POD.



## DISCUSSION

The dictum to early diagnosis and successful management is to “Think Ectopic” but also not to “Over think Ectopic”. In ectopic pregnancy the clinical diagnosis is more on symptoms rather than signs (Negative physical signs should not be allowed to overrule symptoms) [3].

Risk factors associated with higher incidence of interstitial ectopic pregnancy are chronic pelvic inflammatory disease, prior tubal surgery, surgical sterilization, IUCD insertion, previous ectopic, DES exposure, progesterone only pill, ART, Infertility, developmental tubal anomalies, multiple sexual partners, early age of first intercourse, cigarette smoking, vaginal douching. However in our case none of the risk factors are noted, suggesting the role of natural causes as well [4]. The exact pathogenesis is unknown; however it is associated with abnormal transportation of the fertilized ovum within fallopian tube [5].

Unique to interstitial pregnancy is the location of the gestational sac in a highly vascular area, near the anastomosis of the uterine and ovarian vessels. Rupture and/or surgical intervention in this area may result in catastrophic haemorrhage because of its rich blood supply [6]. Thus Interstitial pregnancy is associated with higher risk of shock and haemoperitoneum than other forms of ectopic pregnancy as well as with higher risk of maternal mortality due to delayed diagnosis and high vascularity of the myometrium [7].

Traditionally, the treatment of interstitial pregnancy has been hysterectomy or cornual resection at laparotomy. As all surgical management has been associated with morbidity and unfavourable effects on fertility which may cause infertility or uterine rupture in subsequent pregnancies. More conservative approaches have been introduced into clinical practice. Medical treatment options for unruptured interstitial ectopic pregnancy include local injection or systemic therapy with methotrexate, local injection of potassium chloride, laparoscopic guided trans-cervical curettage, hysteroscopic gestation sac removal, conservative laparoscopic surgery and uterine artery embolisation and only in emergency situations, cornuectomy or hysterectomy [8,9]. The vascular supply of the interstitial area is rich and highly vascular, near the anastomosis of uterine and ovarian vessels. Thus a surgical procedure, in the interstitial area may result in catastrophic haemorrhage. For this reason other methods are used for treatment in case of the

unruptured interstitial ectopic pregnancy. Radical surgery is necessary only in cases where haemorrhage is life-threatening.

### CONCLUSION

Interstitial ectopic pregnancy is one of the most dangerous and hazardous types of ectopic gestation. The diagnosis and treatment are challenging and frequently constitute a medical emergency. It poses a significant diagnostic and therapeutic challenge and carries a greater maternal mortality risk than any other ectopic pregnancy. Because of myometrial distensibility, they tend to present relatively late, at 7–12 weeks of gestation. Significant maternal haemorrhage leading to hypovolaemia and shock leading to maternal mortality or morbidity.

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