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**Case Series** 

# Interstitial ectopic pregnancy: a case series

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#### **ABSTRACT**

Interstitial ectopic pregnancy is very rare with incidence of 2-5%. Their presentation is not uniform and hence may go unrecognized till complications develop. We present three cases of interstitial ectopic pregnancies presenting in our hospital in a span of 1 year. Only one of them had pain in the abdomen at the time of presentation. All cases presented at around five to six weeks of gestation. Ultrasonography confirmed the diagnosis. One case was managed medically while in other two cases, there was a need of surgical management. There were no complications in all the cases. Thus, early presentation of cornual ectopic pregnancy results in satisfactory outcome. Hence, all pregnant women should undergo regular antenatal checkups with early scans once the urine pregnancy test come positive to confirm whether it is an intra uterine pregnancy or not.

Keywords: Ectopic pregnancy, Case series, Diagnosis

#### INTRODUCTION

Ectopic gestation that takes place in the uterine part of the fallopian tube is known as interstitial ectopic pregnancy. The incidence varies from 2-5%. Thus it is a rare occurrence. Interstitial pregnancy is also called by similar names like cornual or angular ectopic pregnancy. But, basically when the gestational sac is located lateral to the round ligament in the uterotubal junction, it is the true interstitial pregnancy. Cornual or angular ectopic pregnancies should be considered as intrauterine pregnancies. Certain factors can predispose to interstitial/cornual ectopic pregnancy like past history of ectopic pregnancy, previous surgery on uterus, malformations of the uterus, partial salpingectomy, ipsilateral salpingectomy, pelvic inflammatory disease. etc. Interstitial/cornual ectopic pregnancy are not easy to diagnose. This is due to variability of symptomatology as well as low sensitivity and specificity of imaging techniques used. Ectopic pregnancy should present with amenorrhea, pain in the abdomen and bleeding per vaginum; but this is found in less than 40% of the cases.

As interstitial/cornual ectopic pregnancy is very close to normal uterine pregnancy, it becomes very difficult to differentiate among these two. However, with good skills and knowledge, it can be diagnosed. Usually, surgery is the traditional treatment of choice. But now-a-days more and more cases are being managed conservatively.<sup>1</sup>

Early presentation through either symptoms or regular antenatal check-up helps in early diagnosis thereby preventing complications associated with ectopic pregnancy. Hereby, we present three cases of interstitial ectopic pregnancies who presented early, prompt diagnosis was made and could be managed easily without any complications.

### **CASE SERIES**

#### Case 1

A 24-year-old prim gravida presented with pain in the abdomen since two days. Her urine pregnancy test was positive. There was no significant past history and no

history of similar complaints in the past. She was married at the age of 23 years and did not use any contraceptive methods. On examination, she was conscious, coherent, cooperative, well oriented in time and place with all her vitals stable. She looked thin built with body mass index of 22 kg/m<sup>2</sup>. Systemic examination did not reveal any significant positive findings. Ultrasonography was done which showed eccentric gestational sac with 5 weeks' gestation in the left cornual region (Figure 1). The USG also showed the presence of fetal heart with activity (Figure 2). Thus, she was diagnosed with interstitial pregnancy on left side. Emergency laparotomy was performed. Incision made on the cornua, sac removed and sent for histopathological examination which confirmed products of conception. There were no post-operative complications. The patient was discharged with all normal parameters. The patient expressed her satisfaction over the management of her case. She gave her written informed consent to publish her anonymous data.



Figure 1: Interstitial pregnancy outside endometrial cavity.



Figure 2: Fetal heart noted in interstitial pregnancy.

## Case 2

Another lady who was 28 years old came to the outpatient department for routine antenatal checkup with USG report.

She was gravida two, para one with one living child of age 18 months. Previous delivery was conducted by lower segment cesarean section. She had no complains. She was a known case of hypertension using labetalol 100 mg twice a day. She was married at the age of 25 years. She also did not use any contraceptive methods. She was well built with a body mass index of 25 kg/m<sup>2</sup>. Routine USG showed an eccentric gestational sac in the right cornual region away from the endometrial cavity, seen with fetal heart and yolk sac of 6 weeks' gestation. General and systemic examination was not significant. The patient was counseled for surgery. First a hysteroscope was introduced to confirm its interstitial pregnancy. There was no visible sac in the endometrial cavity. Thus, we proceeded for laparoscopy and an incision was made on the right cornual region, the sac was removed and sent for histopathological examination and the incision was closed with purse string sutures. There were no postoperative complications. The patient was well informed and counseled regarding her status irrespective of not having any complaints which went on well and the patient agreed for surgical intervention. The patient opinion about the approach to the diagnosis, communication and hospital care was positive and she also gave her informed consent to publish this report.

#### Case 3

The third case in this series was a 36-year-old lady who walked in with the ultrasonography report showing an eccentric gestational sac of five weeks' gestational age with a small yolk sac in the right cornual region. In the past she underwent laparoscopic left salpingectomy for left tubal ectopic pregnancy. She was married at the age of 26 years. She also did not use any contraceptive methods. She was overweight with body mass index of 25 kg/m<sup>2</sup>. Her general and systemic examination was normal. She was confirmed with right interstitial pregnancy. She was managed with medical management. She was given single dose injection methotrexate and beta hCG was regularly followed up till it dropped below 0.2. This patient also expressed satisfaction over medical management compared to the previous surgical management and gave her informed consent to publish this data.

# **DISCUSSION**

Present case series is a classic example of how early presentation by either symptoms or regular antenatal check-up with early ultrasounds help in early and prompt diagnosis thereby making it possible to manage the cases easily. Because as per literature, most of the ectopic pregnancies rupture after 12 weeks of gestations.<sup>2</sup> But, in present case series, all three cases presented to us by around six weeks of gestations and hence, there were no complications.

The classical triad of ectopic pregnancy is amenorrhea, metrohhragia and pelvic pain is said to have ectopic pregnancy in typical cases.<sup>3</sup> But, out of three cases in the

present series, only one case presented with severe abdominal pain and there were no symptoms in other two. Thus, emphasizing the need for careful regular antenatal examinations and not-depending upon the symptoms only. In some cases, the symptoms may be present like pelvic pain and amenorrhea, while in some cases there can be only bleeding episode once while as reported in one case report of having no bleeding but pain in epigastrium and lower abdomen. Thus, the symptoms can vary from case to case. Hence, high degree of suspicion only can direct the obstetrician for correct diagnosis.

In the present case series, out of two cases, in one case medical management was sufficient with good follow-up. Emergency laparotomy was performed in one case and one case was approached using hysterolaparoscopy. Traditionally hysterectomy, cornual resection or laparotomy are surgical methods of choice. But in cases with stable hemodynamics medical management and laparoscopy can be performed. The present case series is unique in terms of cases presenting very early with very good prognosis. It emphasizes importance of regular antenatal checkup with early scans for early diagnosis and management of any kind of ectopic pregnancy. Increasing awareness among pregnant women on importance of regular antenatal checkup will go a long way in reducing the morbidity and mortality associated with pregnancy complications.

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