

# Secondary Live Abdominal Ectopic Pregnancy: A Case Report

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## ABSTRACT

A 27-year-old primigravida, married for 3 months, was admitted in the All India Institute of Medical Sciences (AIIMS), Delhi, with the diagnosis of live abdominal ectopic pregnancy. She had a history of scanty menstrual flow since 2 months and brownish discharge since 15 days. The patient had a history of normal menses priorly. Urine pregnancy test done was positive. The gestational age of the present pregnancy was 12 weeks. The patient had no complaints of pain in her abdomen, nausea, and vomiting, was doing her daily activity, which included gym and yoga. Per abdomen examination revealed a soft nondistended abdomen. Per vaginam examination showed bulky, anteverted uterus with fullness in right fornix and tenderness in right fornix. Investigations revealed Hb-10.6 g%, ultrasound, and CT scan showed right-sided live abdominal ectopic pregnancy, and the vessels involved were a right uterine artery and a branch from the lower level of T11 vertebral level, fetal pole  $\approx$  12 weeks in Pouch of Douglas (POD). With this case report we highlighted the medical emergency that diagnosed should be managed promptly. Proper preoperative evaluation, use of systemic methotrexate, availability of multidisciplinary surgical team, and proper operative technique like minimal invasive surgery which is invaluable in modern era when incidence of ectopic pregnancy is increasing due to parallel increase in etiological factor-like sexually transmitted diseases and assisted reproductive techniques by early detection with transvaginal ultrasound and CT scan which can reduce maternal mortality and morbidity, offer the couple a more optimistic outlook for subsequent reproductive potential and reduce mental, emotional trauma to the patient.

**Keywords:** Abdominal ectopic, High-risk obstetrics, Laparoscopy.

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## INTRODUCTION

Abdominal pregnancy is defined as pregnancy anywhere within the peritoneal cavity, exclusive of tubal, ovarian, or broad ligament locations.<sup>1</sup> The POD is the most common location of abdominal pregnancy, followed by the mesosalpinx and omentum. However, implantation on other abdominal organs such as the spleen, liver, and appendix has also been reported.<sup>2-4</sup> The maternal mortality rate can be as high as 20%. Abdominal pregnancy is thought to represent around 1–1.5% of all ectopic pregnancies, with an estimated incidence of 1:8,000 to 10,000 pregnancies.

Abdominal pregnancies are either primary or secondary, secondary being the more common type. Secondary abdominal pregnancy almost always follows the early rupture of a tubal ectopic pregnancy into the peritoneal cavity, with the incidence being 1 in 10,000 live births.<sup>5</sup> It usually occurs following an extra uterine tubal or ovarian pregnancy that ruptures and gets reimplemented within the abdomen.

## CASE DESCRIPTION

A 27-year-old primigravida, married for 3 months, was admitted in All India Medical Institute, Delhi, with the diagnosis of live abdominal ectopic pregnancy. She had a history of scanty menstrual flow since 2 months and brownish discharge since 15 days. The patient had a history of normal menses prior. Urine pregnancy test done was positive. The gestational age of the present pregnancy was 12 weeks. The patient had no complaints of pain in her abdomen, nausea, and vomiting was doing her daily activity, which included gym and yoga. On examination, per abdomen examination revealed a soft nondistended abdomen. Per vaginam examination showed bulky, anteverted uterus with fullness in right fornix and tenderness in the right fornix. Investigations revealed Hb-10.6 g%, ultrasound, and CT scan showed right-sided live abdominal ectopic pregnancy, and the vessels involved were a right uterine artery and a branch

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from the lower level of T11 vertebral level, fetal pole  $\approx$  12 weeks in POD. Patient was taken to OT under general anesthesia, transvaginal ultrasound probe was introduced, and a needle was pushed into the heart of the fetus, and 2.3 mL KCl was introduced and observed for 1 minute, and no fetal cardiac activity was noticed post-procedure. On day 1,  $\beta$  hCG levels were 93,000; according to the formula 85 mg inj methotrexate was given IV. On day 2,  $\beta$  hCG levels were 93,610, on day 3—89,679, and on day 5, levels were—1,36,993, and inj methotrexate was repeated again. Day prior to the procedure, under general anesthesia, 6 F arterial catheter was placed in right femoral artery and selective catheterization of right iliac artery and right uterine artery was done on selective run 500  $\mu$ m PVA was used to embolize the gestational sac and its abnormal vascularity subsequently abnormal vascular, branch from lower level of T11 vertebral level was seen and was also embolized. Laparoscopic removal was planned. There were adhesions between the abdomen and anterior abdominal wall and evidence of secondary right abdominal ectopic pregnancy at the fimbrial end measuring 6  $\times$  6 cm gestational sac. Right-sided salpingectomy was done fimbrial end along with gestational sac was excised, which was

adherent to the lateral pelvic wall and sent for histopathology. Right ureter peristalsis visualized. Homeostasis was achieved. Abdominal drain was introduced. The postoperative period was uneventful (Fig. 1).

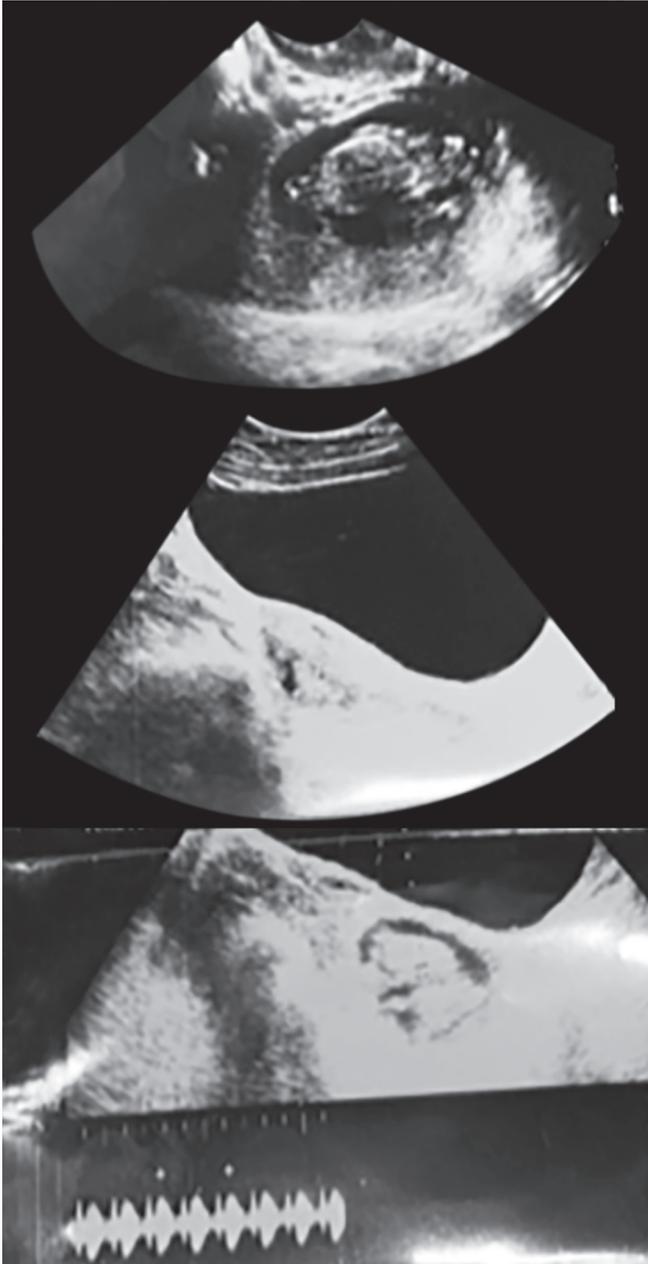


Fig. 1: Ultrasound films showing the gestational age of the fetus and its location

## DISCUSSION

During the past three decades, the incidence of ectopic pregnancy has increased exponentially from 20,000 to 70,000 cases per year (ectopic pregnancy-United States, 1995; Tait, 1884; Goldner et al.,<sup>6</sup> 1993; NCHS, 1994; Marchbanks et al., 1988).<sup>7</sup> While the case fatality rate has declined significantly. The analysis of different studies

(Fujishita et al.,<sup>8</sup> 1980; Vermesh et al.,<sup>9</sup> 1989; Brumsted et al., 1988<sup>10</sup>). Conclude that laparoscopic management of ectopic pregnancy results in less postoperative adhesions, significantly less blood loss, reduced postoperative analgesia, and reduced cost. Consequently, laparoscopy is the preferred option in the surgical management of ectopic pregnancy. However, in a critically ill patient, laparotomy may continue to have a role because of its swiftness to access the abdomen and securing bleeding vessels. Patients with ectopic pregnancy in the ampulla of the tube are the ideal candidate for salpingostomy. Linear salpingostomy can be tried out but not very successful in the management of a pregnancy lodged in isthmus because lumen is so small that it erodes muscularis. The prognosis of the patient with an ectopic pregnancy is good for those with an early diagnosis. The earlier the diagnosis is made, and treatment is administered higher the likelihood of subsequent fertility.

## CONCLUSION

With this case report, we highlighted, the medical emergency that diagnosed should be managed promptly. Proper preoperative evaluation, use of systemic methotrexate, availability of multidisciplinary surgical team and proper operative technique like minimal invasive surgery is invaluable in modern era when incidence of ectopic pregnancy is increasing due to parallel increase in etiological factor-like sexually transmitted diseases and assisted reproductive techniques by early detection with transvaginal ultrasound and CT scan which can reduce maternal mortality and morbidity, offer the couple a more optimistic outlook for subsequent reproductive potential and reduce mental, emotional trauma to the patient.

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