



## A CASE REPORT OF WELL MANAGED ADVANCED ABDOMINAL PREGNANCY WITH FAVORABLE FETOMATERNAL OUTCOME.

**Dr. Parth V. Hirpara\***

Second year post graduate student, Department of Obstetrics and Gynecology, B.J medical college and civil hospital, Ahmedabad, India.  
\*Corresponding Author

**Dr. Rinky Agrawal**

Assistant professor, Department of Obstetrics and Gynecology, B.J medical college and civil hospital, Ahmedabad, India.

**Dr. Prerak Modi**

Assistant professor, Department of Obstetrics and Gynecology, B.J medical college and civil hospital, Ahmedabad, India.

**Dr. A. U. Mehta**

Professor and Head of Department of Obstetrics and Gynecology, B.J medical college and civil hospital, Ahmedabad, India.

### ABSTRACT

An abdominal pregnancy is a form of an ectopic pregnancy where the fetus is developing within the abdominal cavity but outside the uterus[1]. Early diagnosis in developing nations is a challenge due to suboptimal prenatal care and insufficient resources. So a successful advanced abdominal pregnancy with favorable fetomaternal outcome is a remarkable occurrence in developing world. We presented a case of 35 year old 4<sup>th</sup> gravida female with previous history of tubal ectopic pregnancy with 33wk 1 day gestation age arrived in our setup with previous ultrasonography report suggestive of intraabdominal pregnancy. After all routine prenatal investigations and MRI pelvis report, laparotomy was performed and healthy live baby of 1.8 kg was delivered and placenta was left inside the abdominal cavity followed by discharge of a healthy mother and baby after stitch removal.

### KEYWORDS :

#### INTRODUCTION

A conceptus that implants outside of the uterine endometrium is defined as an ectopic pregnancy[2]. Pregnancy related deaths account for 4% to 10%, especially in developing countries[1]. Abdominal pregnancy is very uncommon and accounts for about 1.1% of ectopic pregnancy cases. It is said to occur when the conceptus is found inside the peritoneal cavity[4]. An advanced abdominal pregnancy is described as the pregnancy more than 20 weeks of gestation with signs of a living fetus in the mother's peritoneal cavity[3]. Placenta is attached to multiple sites like uterine cul-de-sac, omentum, and pelvic side wall. There is a perinatal mortality rate of 40% to 95% & maternal mortality rate of 0.5 to 18% associated with abdominal pregnancy. [4,5] There is insufficiency of standardized diagnostic measures and treatment procedure for abdominal pregnancy in developing countries. To improve newborn survival rate, reduce newborn complications, and mortality, there is a need of standard treatment principles for advanced abdominal pregnancy, peri-operative treatment choices, and post-operative management.

#### CASE REPORT

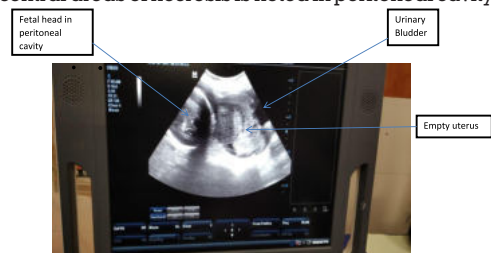
A 35 year old 4<sup>th</sup> gravida patient with 2 live births and previous history of tubal ectopic pregnancy came to the emergency ob-gyn department of Civil Hospital Ahmedabad referred from other government hospital with private ultrasonography report suggestive of single live extrauterine (intraabdominal) pregnancy with maturity of 31 weeks 4 days and placenta situated in peritoneal cavity with grade 1 placental maturity. Patient had no complain of abdominal pain, discharge p/v or bleeding p/v at the time of presentation. Patient was conscious, oriented and vitally stable at the time of presentation. All routine investigations were within normal limits. Ultrasonography and MRI pelvis was done and finding suggestive of fetus within amniotic sac in abdomen in right lumbar and right iliac fossa extending up to left lumbar with severe oligohydramnios.

Patient was electively taken for laparotomy after proper counseling and preoperative preparation with ureteric catheterization, surgical, medical and anesthetic assessment. Live premature baby of 1.8 kg was delivered out safely.

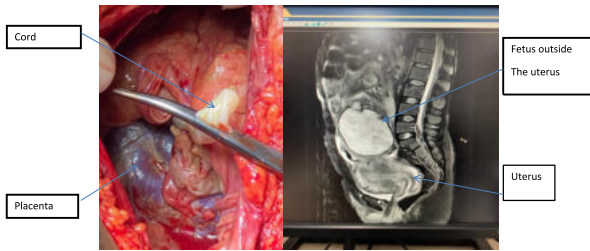
Intraoperatively placenta was adherent to many sites like omentum, pelvic side walls and retroperitoneal other organs, so placenta was left inside the abdomen without disturbing its vascularity for autolysis and abdomen was closed after achieving hemostasis. Post operatively two dose of tab Mifepristone 200 was given after patient stabilization

Patient was kept in ICU for postoperative monitoring. Patient was conscious, oriented and vitally stable for 2 days. After that, patient's condition began to deteriorate. Patient's pulse rate and respiratory rate started rising. Patient's hemoglobin and platelet count started to fall gradually. Patients bilirubin, urea, creatinine values became abnormal. Patients body temperature also started rising. Patient was gradually shifted from venti mask to NRBM to BiPAP mode of ventilation as patient became breathless. Chest x-ray, CECT abdomen, thorax and angiography of abdomen showed multiple areas of consolidations, ground glass opacities, centrilobular nodular opacities and some amount of fibrosis were seen.

Patient was started on higher antibiotics and blood replacement products such as PCV and PRC was given to the patient. Patients condition was started to improve. Respiratory rate, pulse rate, temperature, renal and liver function tests, CBC began to normalize after 5-6 days of close monitoring and treatment. Vitally settled patient discharged after stitch removal. Patient came for follow up after 15 days. In followup patient was vitally stable, baby with mother. On follow up USG, approx. 6.8x 15.3x 14 cms sized residual placental tissue with central areas of necrosis is noted in peritoneal cavity.



Trance abdominal ultrasonographic scan at 33 week of gestation



**Intra operative finding of Abdominal pregnancy after fetal delivery showing placenta outside the uterus in peritoneal cavity**

**MRI pelvis of abdominal pregnancy**

## DISCUSSION

Abdominal pregnancy, due to its rare nature, warrants high suspicion for quick diagnosis and optimal management.[4] In developing countries like India, the incidence of abdominal pregnancy is high. [6] Multiparous women and women of low socioeconomic status are found to be at higher risk of abdominal pregnancies.[7]

Abdominal pregnancy is classified as either primary or secondary. Implantation of fertilized ovum directly into the peritoneal cavity is known as primary abdominal pregnancy.[4] Primary abdominal pregnancy is rarely seen.[3] Secondary abdominal pregnancy, where there is a secondary implantation in peritoneum from a preexisting fallopian tubal pregnancy and is the more common of the two.[6]

The most common symptom of abdominal pregnancy is abdominal pain but clinical features range from being asymptomatic to acute abdomen, fetal malpresentation, easily palpable fetal parts, or fetal demise.[4] For extrauterine pregnancy, ultrasonography is a very important diagnostic tool while other radiologic studies such as MRI and computed tomography scan while helpful are not available for prompt diagnosis.[6]

Potential treatments of abdominal pregnancy comprises of surgery with termination of the pregnancy through laparotomy or laparoscopy, methotrexate, embolization, and their combinations. Klufio and Sapuri indicated that for conservative treatment, the following criteria need to be met: absence of congenital malformations; live fetus; there is continuous monitoring in a well-equipped hospital with optimally trained maternity staff which has facilities for urgent blood transfusion; there is careful monitoring of fetal well-being; and implantation of placenta is away from the liver and spleen in the lower abdomen.[8]

The most common cause of maternal mortality is major hemorrhage from placental implantation site. However, the decision to remove placenta depends on the extent of placentation and skills of the surgeon. [6] It is often advised to monitor the hCG levels while leaving the placenta in situ.[6] Successful use of MRI has been done to plan for surgery. Our patient underwent a preoperative MRI to ascertain the location of the fetus and the placenta and which served as a guide to ensure the availability of certain additional interventions to foresee complications.

## CONCLUSION

A healthy new born being delivered from an abdominal ectopic pregnancy is a very rare occurrence. For abdominal pregnancies diagnosed before 20 weeks, termination is advised; however, when fetal lung maturity is certain, an advanced abdominal pregnancy is managed expectantly to deliver at 34 weeks of gestation.

The removal of placenta is usually dependent on its location, findings during surgery as well as the skills of surgeon. In many cases, the placenta is left placenta in situ. However, to improve newborn survival rate and to reduce complications and mortality, standardized treatment principles for advanced abdominal pregnancy, perioperative treatment options, and adequate postoperative management would help.

## Patient's consent declaration

We certify that we have obtained all required patient consent forms. The patient has given her consent for her images and other information to be published in the journal. The patients have been made to understand that their names or initials won't be published and efforts to ensure that their identity will not be revealed, but anonymity is not guaranteed.

## Financial sponsorship

None.

## Conflicts of interest

There is absence of any conflicts of interest

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