



## A RARE CASE OF SECONDARY ABDOMINAL PREGNANCY AFTER SELF-ADMINISTERED MEDICAL ABORTION PILLS - A CASE REPORT

### Gynaecology

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### ABSTRACT

**Background:** Abdominal pregnancy accounts for up to 1-1.4% of all ectopic pregnancies. Most often the diagnosis is missed and the condition may remain undetected until advanced gestational age and often results in severe life-threatening haemorrhage.

**Case Presentation:** Our case was a 30-year-old Gravida 4, para 3 who came with the complaints of persistent nausea, vomiting and continuous lower abdominal pain, one and a half months after undergoing medical termination of pregnancy (MTP) along with laparoscopic tubal sterilisation. She had concealed a history of self-administered medical abortion pills 3 months back. USG revealed a live extra uterine pregnancy of 19 weeks gestation in Pouch of Douglas. Laparotomy was done and the secondary abdominal pregnancy along with the entire placenta could be removed due to its favourable location.

**Conclusion:** Abdominal pregnancy after self-administration of medical abortion pills and being further missed during laparoscopic tubal sterilisation is an extremely rare event. Sonographic confirmation of intrauterine pregnancy before administration of medical abortion and tracing the fallopian tube in its entire length, at the time of performing laparoscopic tubal sterilization, will help prevent the missed or delayed diagnosis of such life threatening condition.

### KEYWORDS

Secondary abdominal pregnancy, Medical abortion, Laparoscopic sterilization.

### BACKGROUND

Abdominal pregnancy is defined as the presence of gestational sac in peritoneal cavity excluding tubal, ovarian or intraligamentary pregnancy<sup>[1]</sup>. Abdominal pregnancies account for about 1.4% of all ectopic pregnancies<sup>[2]</sup>. Incidence of abdominal pregnancies ranges from 1:1000 to 1:30,000 pregnancies<sup>[3]</sup>. Abdominal pregnancy is a rare obstetric complication with high maternal mortality and even higher perinatal mortality. It can be primary or secondary with the latter being the most common type. Primary peritoneal implantation is rare. Secondary abdominal pregnancy is a condition where the embryo or foetus continues to grow in the abdominal cavity after its expulsion from the fallopian tube or other position of its primary development. Secondary abdominal pregnancy almost always follows early rupture of a tubal ectopic pregnancy into the peritoneal cavity with the incidence being 1 in 10,000 live births<sup>[4]</sup>. Advanced abdominal pregnancy is rare and accounts for 1 in 25,000 pregnancies<sup>[5]</sup>. The maternal mortality rate ranges from 0.5 % to 18 %. The perinatal mortality is very high ranging from 40 -95%<sup>[3]</sup>. The clinical presentation of an uncomplicated abdominal pregnancy is not specific<sup>[6]</sup>. The most frequent complaints are abdominal pain or suprapubic pain, no delay in menstruation, bleeding per vaginum, gastrointestinal symptoms, painful fetal movements and altered bowel movements<sup>[6]</sup>.

We report a rare case of secondary abdominal pregnancy after self-administration of medical abortion pills and missed subsequently during laparoscopic tubal sterilisation.

### Case Presentation

A 30-year-old Gravida 4 para 3 came with the complaints of persistent nausea, vomiting and lower abdominal pain, one and a half month after undergoing medical termination of pregnancy (MTP) along with laparoscopic tubal sterilisation. She had concealed an important history when she had presented to the family planning unit for seeking sterilization. On persistent questioning she gave a history of self-administration of oral pills for medical abortion of pregnancy four months back when she was overdue by a week. She gave a history of bleeding per-vaginum after that and had assumed that her pregnancy was aborted. She had a urine pregnancy test done as a routine when she reported for laparoscopic tubal sterilization. As the UPT was positive and uterus was just 6 weeks size on pervaginal examination, she underwent MTP by suction and evacuation followed by laparoscopic sterilisation. She had no urinary complaints. She had no history of hypertension or any other medical disorder.

On examinations, her blood pressure was 110/70 mm of Hg. Her pulse rate, respiratory rate and temperature were 90/min, 22/min, 36.8°C respectively. On abdominal examination, laparoscopy scar of tubal sterilization was visible. Abdomen was soft. No mass was palpable. On

per speculum examination Cervix was healthy, no bleeding or discharge PV was present. On pervaginal examination uterus was multiparous size, anteverted, soft, with restricted mobility. There was fullness in posterior and left fornix. Right fornix was free. On ultrasonography liver, gallbladder and kidneys appeared normal. Uterus was found to be anteverted measuring 91x40x50mm, cavity was empty. A live extra uterine pregnancy of 19 weeks gestation was seen in pouch of Douglas. Amniotic fluid appeared to be normal. Placenta appeared to be on the body of the uterus close to the adnexa posteriorly. A clinical diagnosis of secondary abdominal pregnancy was made.

Emergency laparotomy was decided. Upon opening her abdomen and entering the peritoneum, there was no haemo peritoneum. The foetus was present in an intact amniotic sac in the pouch of Douglas. [Fig 1] The sac was opened and foetus was delivered out. Placenta was about 5-6cm in diameter and was adherent to the fimbrial end of the left tube, ovarian ligament and adjoining broad ligament [ Fig -2]. There were no major vessel or bowel attachment. Placenta was removed along with the fimbrial end of the left tube. Haemostasis was achieved with sutures and compression. Fallopo rings were seen at the isthmic region of the tubes on both sides. Left side ovary had few bleeding points which was controlled. Right side ovary was normal. Patient recovered well and was discharged on 5<sup>th</sup> postoperative day.



**Figure 1: Secondary abdominal pregnancy in Pouch of Douglas.**



**Figure 2: Foetus along with placenta**

## DISCUSSION

An abdominal pregnancy is a type of ectopic pregnancy which is very rare. It accounts for about 1.4% of all ectopic pregnancies<sup>[2]</sup>. Abdominal pregnancy could be primary or secondary.<sup>[7,8]</sup> Secondary abdominal pregnancy is the commonest type. To consider abdominal pregnancy as primary, Studdiford three criteria needs to be met. (1) normal bilateral fallopian tubes and ovaries; (2) the absence of uteroperitoneal fistula, and (3) a pregnancy related exclusively to the peritoneal surface and early enough to eliminate the possibility of secondary implantation following a primary nidation in the tube<sup>[9]</sup>. Ours appears to be secondary abdominal because of the placental location involving the fimbrial end of the tube. Most often abdominal pregnancy is easily missed and diagnosed after significant intrabdominal bleeding. Patients with uncomplicated abdominal pregnancy have persistent abdominal pain which was also seen in our case. Abdominal pregnancy often leads to early spontaneous separation of the placenta from implantation site causing life-threatening haemoperitoneum. In very rare cases pregnancy can develop to late stages<sup>[8]</sup>. Ultrasonography is the main method for the diagnosis of extra uterine pregnancy. There is no uterine wall surrounding the foetus, fetal parts lie close to the abdominal wall. In our case the uterine cavity was empty and a live foetus of 19 weeks gestation was seen in the pouch of douglas.

Abdominal pregnancy after intake of pills for medical abortion is rare. Even rarer is to miss it during tubal sterilisation. In our case, the explanation could be, sometimes it may not be possible to trace the entire length of the tube before applying fallopo rings, due to small field of vision, omentum covering the lateral ends of tube and a lack of suspicion of an underlying ectopic pregnancy. We did not find a similar case in literature, may be due to underreporting or due to the rare nature of the pregnancy itself.

The most important aspect in managing abdominal pregnancy is the management of the placenta. During surgery, after placental separation, there occurs massive haemorrhage as the blood vessels do not constrict<sup>[9,10]</sup>. Sometimes the placenta attaches itself firmly to the parietal peritoneum, mesentery or bowel and needs to be left untouched so that bleeding doesn't occur<sup>[10]</sup>. In these cases, it is important to ligate the cord close to the placenta, trim the excess membranes and close the abdomen with a drain<sup>[10,11]</sup>. Placental separation may not occur in about 40% of cases<sup>[12]</sup>. Failed attempts of removing the placenta results in torrential haemorrhage and requires rapid surgical action to save the women's life<sup>[13]</sup>. Some local techniques like compression of the bleeding site, ligating vascular pedicles, use of systemic coagulation agents like tranexamic acid, use of absorbable gelatin sponge may be of value to stop bleeding<sup>[12]</sup>. Uterine artery embolization is an alternative option for placental management if left in situ. Sometimes organs to which placenta is adherent like uterus, tubes and ovaries or a portion of bowel may need to be removed to control haemorrhage<sup>[14,15]</sup>. Postoperative methotrexate has been administered by some for resorption of the placenta, but it leads to accumulation of necrotic debris due to accelerated placental resorption and associated morbidity<sup>[12]</sup>. Sepsis, Secondary haemorrhage, paralytic ileus, abscess formation and bowel obstruction have all been reported as the complications of leaving the placenta in situ. Resorption of placenta is a slow process and can be monitored by serial ultrasound, CT scan and MRI. However, there is no definite consensus regarding the management of the placenta and each case should be individualized based on the intra operative findings. In our case we were able to take out the entire placenta due to its favourable location ( fimbrial end of right tube, ovarian ligament and adjoining broad ligament).

This case highlights two important facts. First the unsupervised usage of medical abortion, over-the-counter availability along with atypical clinical history have increased the diagnostic dilemma. Ectopic pregnancy and secondary abdominal pregnancy with potentially life threatening complications remain undiagnosed in patients who have taken them without prior ultrasonographic confirmation of intrauterine gestation. Sonographic confirmation of intrauterine pregnancy before administration of medical abortion will help in decreasing the incidence of a missed or a delayed diagnosis of such life threatening condition.

Secondly, this case also illustrates that if one is not careful in tracing the fallopian tube in its entire length, at the time of performing laparoscopic tubal sterilization, an ectopic or a secondary abdominal pregnancy can be missed which can be fatal. Performing a transvaginal ultrasound prior to MTP is also helpful in picking up these rare cases.

The life threatening complications of secondary abdominal pregnancies occur mostly due to misdiagnosis.

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