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## Case Report

# Asymptomatic secondary abdominal pregnancy diagnosed 12 years after tubectomy

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### ABSTRACT

Abdominal pregnancy is a rare obstetric complication with high maternal mortality. Advanced abdominal pregnancy is rare and accounts for 1 in 25,000 pregnancies. 32 years' lady, P2L2, last child birth and interval tubectomy by modified Pomeroy's method 12 years ago, reported with Amenorrhoea of two months with vague lower abdominal pain since 2 days. Ultrasonography (USG) abdomen and pelvis showed an extrauterine viable pregnancy of 20<sup>+</sup> weeks POG with no hemoperitoneum. she travelled 4 hours by road to her hometown, for second opinion and was referred back to our institution. A laparotomy was done; hemoperitoneum of 1.5 litres was noted. The sac with the live foetus inside with placental implantation seen on entire left fallopian tube except the fimbrial end and a small portion of omentum was noted. Left salpingectomy with excision of the sac with the foetus along with partial omentectomy was performed. Patient received two units of PRBC postoperatively.

**Keywords:** Secondary abdominal pregnancy, Post tubectomy, Hemoperitoneum

### INTRODUCTION

Abdominal pregnancy is a rare obstetric complication with high maternal mortality. It is defined as an implantation of the embryo in the peritoneal cavity, exclusive of tubal, ovarian or intra-ligamentary pregnancy.<sup>1</sup> It can be primary or secondary. 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>1</sup> Advanced abdominal pregnancy is rare and accounts for 1 in 25,000 pregnancies.<sup>2</sup>

The maternal mortality rate can be as high as 20%. This is primarily because of the risk of massive haemorrhage from partial or total placental separation. In secondary abdominal pregnancy the placenta can be attached to the uterine wall, bowel, mesentery, liver, spleen, bladder and ligaments. There is a risk of massive haemorrhage from partial or total placental separation can occur at any time during pregnancy leading to torrential blood loss.<sup>3</sup>

Here we are presenting a rare case of advanced abdominal pregnancy diagnosed in asymptomatic condition in a patient who had undergone sterilization 12 years ago. Most of the abdominal pregnancies are reported within 2 years of sterilisation operation. Very few cases have been reported as late as 10 years after the operation. Our case reported 12 years after the sterilisation operation at 20 weeks POG in an asymptomatic condition. Ill now and there are no clearcut guidelines regarding management of advanced abdominal pregnancy.

### CASE REPORT

32-years lady, P2L2, Last child birth and interval tubectomy by modified Pomeroy's method 12 years ago, reported with Amenorrhoea of two months with vague lower abdominal pain since 2 days. The pain was in the suprapubic region, intermittent, dull aching, aggravated during micturition. No history of fatigue/generalised weakness/giddiness/fainting attacks/ increased frequency

of micturition/ burning micturition (UTI)/PV bleed/white discharge PV.

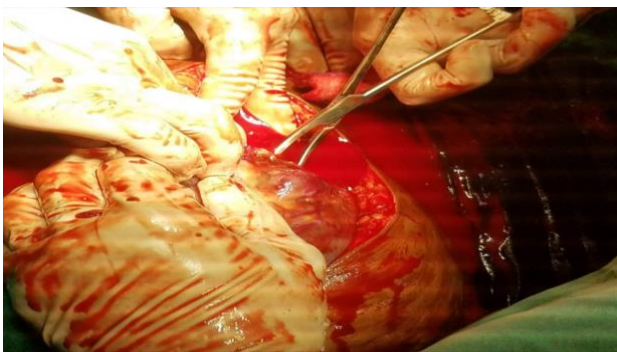
Obstetric history – both vaginal deliveries at term. No antenatal or postnatal complications. Underwent interval sterilization by Minilap (modified Pomeroy's method) two months after delivery.

Her cycles were regular. LMP- exact date not known - two months amenorrhoea. Patient refused UPT since she has been tubectomized 12 years ago and had no coitus in past 2 months.

Past medical, surgical and family history – nothing relevant.

An 80 kg lady, with BMI -33.7kg/m<sup>2</sup> conscious, cooperative, with no pallor or oedema; pulse 82/min, and BP 108/84 mm of Hg. On examination, thyroid – normal, breasts – bilateral mild galactorrhoea noted. Per abdomen examination revealed a tense cystic/firm mass, nontender arising from the pelvis corresponding to 20-weeks' gestation noted. Bimanual examination –cervix soft, nontender on movement, uterus could not be separately delineated. The lower pole of the mass felt with difficulty. USG abdomen and pelvis showed an extrauterine viable pregnancy of 20<sup>+</sup> weeks POG with no hemoperitoneum.

Despite explaining the gravity of the condition, need for immediate admission and a laparotomy, need for blood and blood products transfusion, need for partial bowel resection depending on placental implantation, the couple refused admission and left. 42 hours later she reported to the casualty at 06:42 hours, with complaints of severe lower abdominal pain and giddiness. On further questioning she revealed that she travelled 4 hours by road to her hometown, to the family gynaecologist for second opinion. Scan report at home town showed extrauterine live pregnancy with hemoperitoneum of 750 ml. Due to nonavailability of blood and blood products, and multidisciplinary approach, she was referred back to our institution. A laparotomy was done; hemoperitoneum of 1.5 litres was noted. The sac with the live foetus inside with placental implantation seen on entire left fallopian tube except the fimbrial end and a small portion of omentum was noted.

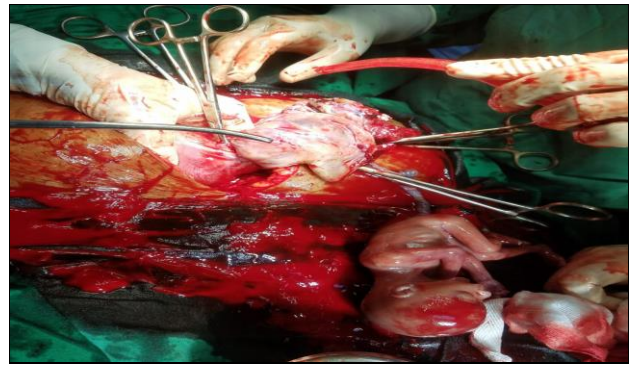


**Figure 1: Intact G sac seen through laparotomy.**

Left salpingectomy with excision of the sac with the foetus along with partial omentectomy was performed. Patient received two units of PRBC postoperatively.



**Figure 2: Clamp at left cornual end incision.**



**Figure 3: Cornual end, placenta and fetus.**



**Figure 4: Fetus, placenta and fimbrial end with haemostatic clamps.**

## DISCUSSION

Abdominal pregnancy can be classified as being primary or secondary. Primary abdominal pregnancy occurs when the fertilized ovum implants directly into the peritoneal cavity and secondary abdominal pregnancy occurs when the fertilized ovum first implants in the fallopian tube or ovary or uterus and then due to fimbrial abortion or rupture of the fallopian tube or rupture of ovary or uterus the foetus comes and attaches to abdominal structures for vascularity and continues to grow. Most often secondary abdominal

pregnancy occurs within 2 years of tubectomy and is diagnosed at early gestational age, as reported by Shah et al.<sup>4</sup> In a 10-year cumulative study conducted in USA the probability of pregnancy after sterilization was reported to be 18.5 per 1000 procedures. When pregnancy does occur in such cases, it is generally ectopic.<sup>5</sup> Ours is a rare case of secondary abdominal pregnancy which presented 12 years after sterilization and in an asymptomatic advanced stage. Our case was a primary tubal ectopic gestation which ruptured and developed subsequently as secondary abdominal pregnancy.

Abdominal pregnancy is very rare and presentation of patients varies in the form of spotting or irregular bleeding along with abdominal pain, nausea, vomiting. There may be delay in diagnosis because of varied atypical presentations. Diagnosis of advanced abdominal pregnancy requires a high index of suspicion.

Pouch of Douglas (POD) is most common location of abdominal pregnancy followed by mesosalpinx and omentum. However, implantation on other abdominal organs such as spleen, liver and appendix is also reported.<sup>6</sup>

Women who underwent elective non-postpartum partial salpingectomy had a much greater risk of ectopic pregnancy than those who underwent postpartum partial salpingectomy.<sup>7</sup> This patient underwent interval minilap sterilisation two months after normal delivery. Maternal deaths associated with abdominal pregnancy result from hemorrhage after inadvertent dislodgment of the placenta. Had our patient undergone laparotomy as advised on first visit hemoperitoneum could have been avoided. Except for excessive bleeding from placental separation site, the placenta did not encroach onto vital organs and intestines.

## CONCLUSION

This case report signifies that due to her sterilization status, and asymptomatic importance of routine antenatal checkups and first trimester ultrasound which were missed by our patient. Timely diagnosis and teamwork management plays important role for such a life-threatening condition to avoid maternal morbidity and mortality.

The presentation of a pregnant woman with an unusual clinical picture, especially with persistent or recurrent

abdominal pain in association with painful foetal movements or intrauterine foetal death, should alert the obstetrician to the possibility of abdominal pregnancy. Expertly performed and interpreted ultrasonography may be the definitive diagnostic technique. It is imperative to consider this diagnosis in the case of such patients and, once discovered, to initiate prompt treatment.

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