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**Case Report** 

## Ruptured tubal stump pregnancy: a rare case report

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#### **ABSTRACT**

Ectopic pregnancy occurring in tubal stump is exceedingly rare. The frequency of tubal stump pregnancy is approximately 0.4 % of all pregnancies. Early diagnosis and management is crucial for prevention of morbidity and mortality We reported a case of ruptured tubal stump pregnancy managed successfully in our institute.

Keywords: Tubal stump, Ectopic pregnancy, Haemo-peritoneum

#### INTRODUCTION

Ectopic pregnancy occurs in around 1-2% of all pregnancies.<sup>1</sup> The incidence of recurrent ectopic pregnancy is approximately 15% after one ectopic pregnancy.<sup>2</sup> A WHO analysis of maternal deaths showed ectopic pregnancy to be responsible for 6.1% of direct maternal deaths.<sup>3</sup> Ipsilateral ectopic pregnancy after partial salpingectomy is a rare occurrence with very few cases reported.<sup>4</sup> This type of ectopic pregnancy is associated with increased mortality rates due to delay in diagnosis and treatment. Here, we presented a case of ipsilateral tubal stump pregnancy in a 30-year-old woman with history of partial salpingectomy due to previous ectopic pregnancy.

#### **CASE REPORT**

A 30-year-old woman, gravida 3 para 1 ectopic 1, presented in the outpatient department with history of 6 weeks amenorrhoea, acute abdominal pain and syncope. She had one living issue 7 years of age by caesarean section followed by right sided ectopic pregnancy 4 years back, managed by laparoscopic partial salpingectomy. Her examination revealed moderate pallor, tachycardia (pulse rate-110 /min) and hypotension. Local examination revealed generalized tenderness over lower abdomen. Internal examination revealed forniceal and cervical

motion tenderness. Her urine pregnancy test was faintly positive. In view of high index of suspicion for recurrent ectopic, complete laboratory work-up and pelvic ultrasound was done. Her serum B-hCG was 825 IU/l. Ultrasound revealed an empty endometrial cavity, moderate haemo-peritoneum and a right adnexal mass (size 3 by 3 cm) arising from isthmic part of fallopian tube (Figure 2 and 3).



Figure 1: Intra-operative view.

The provisional diagnosis of ruptured ectopic pregnancy was made and the treatment options were discussed with the couple. The patient underwent laparotomy for the same. Intra operative findings are as follows-moderate haemo-peritoneum with ruptured ectopic mass in the right sided tubal stump (Figure 1). The mass along with tubal stump removed. Hemostatic sutures applied. Blood clots removed from the pouch of Douglas and saline wash done. Her post-operative period was uneventful and she was discharged on the third day in a stable condition. The serum B-hCG repeated on follow up visit after 2 weeks, was less than 5 IU/l. Histopathological examination of the specimen revealed products of conception with trophoblastic tissue in the tubal stump.

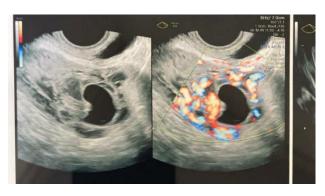


Figure 2: Doppler showing ring of fire sign.



Figure 3: Sonography showing empty uterine cavity.

#### DISCUSSION

The incidence of ectopic pregnancy is around 1-2%. The incidence is on the rise due to increased prevalence of pelvic inflammatory diseases and assisted reproductive techniques. Approximately 92% cases, the site is ampullary part of fallopian tube. The incidence of recurrent ectopic in ipsilateral tubal stump is very low. Only isolated cases were reported. Takeda et al reported an incidence of 1.16% in their study.<sup>5</sup> Isthmic ectopic pregnancy is a gynecological emergency with a mortality rate of 2.5%.<sup>6</sup> This location is associated with high risk of rupture and severe bleeding due to poor distensibility and rich vasculature of this area.<sup>5</sup> Ultrasound signs can be

confusing with no clear differentiating features between isthmic, cornual or angular pregnancy. The use of 3 D trans vaginal sonography may give more clarity. Simpson et al reported 46 cases of interstitial pregnancy after ipsilateral salpingectomy. The various hypothesis of occurrence included transperitoneal migration of spermatozoa, intrauterine migration of embryo followed by implantation in damaged stump. Management was usually surgical given that most patients present with haemo-peritoneum. Laparoscopic removal of ectopic mass along with tubal stump was the first line of management. However, our patient presented in shock with moderate hemoperitoneum in emergency hours, hence decision of laparotomy was taken with informed consent.

The suggestions to minimize recurrence of ectopic in the tubal stump include taking care not to leave a long tubal stump while doing partial salpingectomy and adequate fulguration of the residual stump.<sup>10</sup>

#### **CONCLUSION**

Diagnosis of tubal stump ectopic is difficult, hence high index of clinical suspicion is required. Efforts should be made to minimize the length of the tubal stump as much as possible during partial salpingectomy. However, there is dearth of data due to rarity of this site of ectopic pregnancy, so more case studies are required.

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