

# Delayed haemorrhage in conservative surgery for ectopic pregnancy

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## Summary

A case of delayed haemorrhage after conservative surgery for ectopic pregnancy is presented. Brief pathophysiology of the condition is presented. The importance of  $\beta$ -subunit human chorionic gonadotrophin monitoring of the serum in this patient is highlighted. Surgical procedures to prevent this complication are also discussed.

*Key Words:* Conservative surgery, ectopic pregnancy, haemorrhage.

## Introduction

Ectopic pregnancy is a life threatening situation; in 95% of cases the primary site of implantation is the fallopian tube. Complete or partial salpingectomy, as soon as the diagnosis is made, has continued to be the conventional management of tubal pregnancy. However, over the last 10 years, newer diagnostic aids viz. beta-subunit human chorionic gonadotrophin ( $\beta$ -HCG), ultrasonography and laparoscopy, have enabled early diagnosis of an unruptured tubal pregnancy. This permits conservative surgery for the condition, thus maintaining the potential for future childbearing.

Conservative tubal surgery is, however, not without complications. Remnants of gestational trophoblastic tissue may be left behind at the time of surgery, leading to delayed haemorrhage from the implantation site.

The purpose of this paper is to illustrate one such case, where the patient presented a month after conservative surgery (linear salpingostomy) with delayed haemorrhage. The importance of monitoring patient with serum  $\beta$ -HCG and the finer aspects of surgery in preventing this complication are discussed.

## Case History

Mrs. S.S.H., a 27 year old Chinese lady was a Gravida 2 Para 0. She had a left partial salpingectomy performed for ectopic tubal pregnancy in 1986. She had an unruptured right ectopic tubal pregnancy a month before her present admission, which was treated conservatively in another hospital by linear salpingostomy. There was documented evidence of this provided by the patient.

She presented at the Accident and Emergency Unit of the University Hospital, with a two day history of acute abdominal pain. She had intermittent vaginal bleeding since her earlier operation. She also experienced tenesmus and right shoulder tip pain which prevented her from lying down.

Clinically she was pale. Her pulse rate was 100 per minute and her blood pressure was 110/70 mm.Hg. Positive findings included a distended abdomen with a healed transverse surgical scar over the suprapubic area. There was extreme tenderness and guarding over the lower abdomen preventing satisfactory pelvic examination. A provisional diagnosis of persistent ectopic pregnancy was made. Laparoscopy confirmed the diagnosis. At laparotomy there was one litre of blood and clots in the peritoneal cavity. Active bleeding was observed from the ostium of the right tube. The ampullary end of the right tube was markedly distended, measuring 8 cm by 7 cm by 5 cm and was adherent to the back of the uterus.

The previous salpingostomy wound over the anti-mesenteric border had completely healed and the only evidence of her previous surgery was the presence of a continuous nylon suture over the anti-mesenteric border of the distended right tube.

Right salpingectomy was performed followed by peritoneal lavage. Post-operative recovery was excellent and the patient was discharged on the fifth post-operative day. Histopathological examination of the operative specimen showed the presence of chorionic villi and confirmed the diagnosis of an ectopic tubal pregnancy.

## Discussion

The concepts of management of ectopic pregnancy have progressed from unilateral salpingo-oophorectomy to salpingectomy alone and now to procedures which, in selected cases, preserve reproductive function. In our patient conservative surgery in the form of linear salpingostomy was performed as she had only one remaining fallopian tube.

However a new dilemma with performing a salpingostomy procedure, is the maintenance of satisfactory haemostasis during surgery. Many a time the products of conception can be overlooked or obscured by the haemorrhage and blood clots. Hence the concern as to whether all the gestational trophoblastic tissue has been removed exists. The functional residual trophoblastic tissue has been shown to penetrate the wall of the tube<sup>1</sup>, leading to recurrent haemorrhage as seen in our patient.

If one is not certain that the entire pregnancy has been enucleated, then one should evaluate the patient with serial determination of the  $\beta$ -HCG in the serum. This should become negative by two weeks, although prolongation of up to 24 days has been noted in some cases<sup>2</sup>. This was not done in our patient. She showed histologic evidence of persistent chorionic villi during the second laparotomy procedure.

Haemostasis during the primary surgery of linear salpingostomy can be maintained by some additional fine surgical procedures. Compression of adjacent tubal mesentery and irrigation of the implantation site facilitates electrocoagulation of the individual bleeding points. Alternatively, a dilute vasopressin solution may be injected into the tubal wall before making the linear incision on the anti-mesenteric edge of the tube. This is preferably done using a sharp micro-electrode and unipolar cutting current, as this achieves haemostasis of the tubal edges at the incision site. Another procedure that can be done is ligation of the mesosalpinx and suturing of the vascular arcades just beneath the fallopian tube. In the study by Hallatt<sup>3</sup>, of 200 cases none of the patients had to undergo a reoperation.

In conclusion, fertility of patients with ectopic pregnancy is compromised. Removal of the involved tube further diminishes their fertility. Thus conservation of the affected tube is justified. However, close monitoring with  $\beta$  -HCG in the serum and finer surgical approach during the primary surgical procedure, in these patients, is helpful in avoiding delayed haemorrhage and a repeat laparotomy.

## References

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