Gynaecological emergency in surgical theatre

A case report

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I received an emergency call from the surgical theatre in the early hours of the morning (01 - 30 hours). I saw the patient for the first time on the operation theatre table. The abdominal cavity was full of blood. The surgeons could not find any cause to explain the massive intraperitoneal hemorrhage. When pelvis was explored, a ruptured interstitial pregnancy was diagnosed. The fetus, within the intact gestation sac could be seen through the ruptured cornu of the uterus (Fig. 1).

Active bleeding continued and the patient suffered from haemorrhagic shock. She received 5 units of blood during the intraoperative period, whilst a subtotal hysterectomy was carried out. She had an uneventful post operative recovery and was discharged home on 6th post operative day.

Received 15-5-1995 from the
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Revised manuscript accepted for publication 18-7-1995.

This 29 year old parous woman was admitted from the casualty department at NRS Medical College Hospital, Calcutta. She presented with acute abdominal pain which had lasted for 10 - 12 hours mainly over the right iliac fossa. She looked pale, her pulse rate was 112 per minute, and B. P. was 100/60 m.m of Hg. It was associated with rebound tenderness and muscle guarding.

Bimanual examination was not informative because of extreme tenderness. There was no vaginal bleeding.

A provisional diagnosis of an acute ruptured appendix had been made and an urgent laparotomy was performed.

She had three previous spontaneous vaginal deliveris. Her menstrual cycles were at intervals of 6 - 8 weeks. and her last menstruation was 13 weeks ago. She had had bilateral tubal sterilisation laparoscopically with the Fallope ring two years before as an interval procedure. She did not have any other history of significance in the past, or in the family.

DISCUSSION

Interstitial pregnancy is the rarest variety (2%) of tubal pregnancy and carries a maternal mortality of 2 to 2.5% (Thompson and Rock, 1992). The terminology of interstitial, angular, and cornual

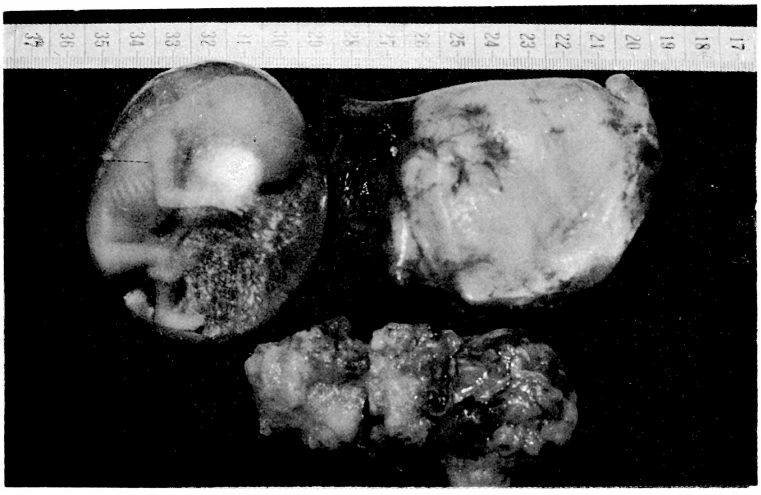

Fig. 1. – Ruptured interstitial pregnancy. The round ligament (right side) could be seen. Placental tissue is seen at the bottom.

pregnancy are often confusing. The author considers the first two conditions as one entity while the third one as a pregnancy that occurs in a rudementary horn of a bicornuate uterus. Diagnosis of interstitial pregnancy is difficult. Clinical examination is not helpful. Asymmetrical enlargement of the uterus is often confused with a fibroid, the lateral flexion of gravid uterus or with a cornual pregnancy. Sensitive B human chorionic gonadotrophin assays, improved sonographic techniques and laparoscopy can lead to an early accurate diagnosis. This patient was not diagnosed until she was on the operation theathre table as she did not have any symptoms suggestive of early pregnancy complications.

In this case, probably examination by a gynaecologist on the fist occasion could have raised the suspicion of an ectopic pregnancy. The history of sterilisation and an irregular menstrual cycle created a sense of complacency about the possibility of ectopic pregnancy. However the history of previous sterilisation does not exclude the diagnosis of an ectopic pregnancy. Higher rate of tubal ectopic pregnancy has been mentioned following laparoscopic (5.4/1000) sterilisation compared to open (2.4/1000) laparotomy procedures (Feltt *et al.*, 1988).

An increased incidence of interstitial pregnancy has been mentioned after ipsilateral salpingectomy (Auslendar *et al.*, 1983) and following in vitro fertilisation and embryo transfer (IVF-ET) (Perez *et al.*, 1993). But not a single case of interstitial pregnancy has been recorded before following Fallope ring sterilisation by the laparoscopic method.

In the majority of cases pregnancy continues up to 12 - 14 weeks. However continuation to term pregnancy has been reported (Stapleton, 1935; Grusetz *et al.*, 1944). This is due to the thick and vascular musculature of this region with great distensibility. In this case the size of the fetus corresponded exactly to the gestational age.

The management of interstitial pregnancy should be tailored according to the time of diagnosis, the extent of injury to the uterus, the condition of the patient

as well as her desire for future fertility. Salpingectomy with wedge resection of the horn is the traditional surgical procedure. In this case subtotal hysterectomy was carried out as an emergency procedure to reduce the effect of haemorrhagic shock. The increased vascularity with a dual blood supply from the ovarian as well as uterine vessels accounts for the rapid development of haemorrhagic shock following rupture. The extent of rupture involved a considerable area (4 cm.) adjoining the right cornu. Vaginal delivery of a full term infant without incident has been reported following salpingectomy and wedge resection (Malkasian *et al.*, 1959).

Conservative management of interstitial pregnancy has been described successfully in selected cases either medically (Tanaka *et al.,* 1982), or surgically (Confino and Glicher, 1989).

The round ligament was outside the gestation sac and occupied a position anterior and inferior to it.

ACKNOWLEDGEMENT

I would like to thank Dr. D. C. Dutta, professor and head, Dept. Obstet. & Gynaec., N.R.S. Medical College & Hospital, Calcutta, under whose primary care the patient was admittet.

My sincere thanks are also due to Mr. A. A. Brown, F.R.C.O.G. Consultant obstetrician and gynaecologist, City General and City Maternity Hospital, Carlisle, for his invaluable help in preparing the manuscript.

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