

Successful Laparoscopic Treatment of an Abdominal Pregnancy in the Broad Ligament

A Siow, B Chern, Y Soong

ABSTRACT

Laparoscopic management of tubal ectopic pregnancy is the ideal form of treatment in most tertiary centres. Approximately 1% of ectopic pregnancies are abdominal pregnancies and these are usually managed by laparotomy. We present the first report of successful laparoscopic treatment of a 6.5 cm abdominal pregnancy located in the broad ligament of a 25-year-old woman.

Keywords: broad ligament ectopic pregnancy, ectopic pregnancy, intraligamentous pregnancy, laparoscopy

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CASE REPORT

A 25-year-old asymptomatic woman presented at ten weeks amenorrhoea for routine antenatal care. She was in good health. Dating ultrasonography revealed an empty uterus with a 5.5 cm right adnexal mass containing a foetal pole of eight week two day gestation. No foetal cardiac activity was noted and her serum β HCG measured 55.8 IU. Laparoscopy was undertaken and a 6.5 cm abdominal pregnancy was found in the right broad ligament (Fig 1). The ectopic pregnancy was distinct from the uterus, fallopian tube, ovary and round ligament. Vasopressin was injected into the broad ligament. The ectopic pregnancy was excised and removed via a lapsac through the umbilical port site. There were no complications encountered during surgery. The patient required minimal analgesia post-operatively. She was ambulant on the first post-operative day and discharged the next day. Pathological examination confirmed an ectopic pregnancy from the broad ligament. She was well at four weeks follow-up.

DISCUSSION

Broad ligament ectopic pregnancy was first described in 1816 by Loschge⁽¹⁾. Champion and Tessitore⁽²⁾ summarised the largest series of 62 cases and reported the incidence as one in 183,900 pregnancies. They

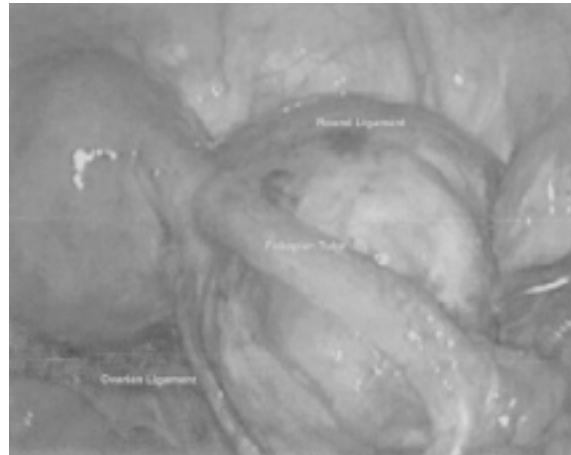


Fig 1. Intraoperative photograph shows a 6.5 cm abdominal pregnancy in the broad ligament.

also stated the required anatomical relationships to diagnose a broad ligament ectopic pregnancy, namely: location of the uterus medially, the pelvic side walls laterally, the pelvic floor inferiorly, and the fallopian tube superiorly. These were exactly the boundaries of the ectopic pregnancy in our case (Fig. 1).

In most cases of abdominal pregnancies, surgical management is via laparotomy because of the risk of massive intraoperative haemorrhage. Laparoscopic management of abdominal pregnancies at unusual sites, such as the uterovesical fold and caesarian section scar^(3,4), has been described with the advantages of less blood loss, lower surgical morbidity and faster recovery. With these advantages in mind, the decision for laparoscopic management in our case was made because the patient was haemodynamically stable, being managed in a tertiary centre, and in the presence of a team of highly proficient laparoscopic and anaesthetic specialists. Finally, there was always an option to convert to laparotomy had the need arisen.

Haemostasis at surgery was achieved with the use of vasopressin, bipolar electrodes and monopolar scissors. In addition, the laparoscopic bowel grasper that was applied across the cornual edge of the uterus was improvised as a haemostatic clamp. The lateral edge of the uterus was finally laparoscopically stitched to reinforce haemostasis.

Minimally Invasive
Surgery Unit
KK Women's and
Children's Hospital
100 Bukit
Timah Road
Singapore 229899

A Siow, MMed,
MRCOG,
MRANZCOG
Associate Consultant

B Chern, MMed,
MRCOG,
MRANZCOG
Consultant and
Departmental Head

Department of
General Obstetrics
and Gynaecology

Y Soong, MRCOG
Consultant

Correspondence to:
Dr A Siow
Tel: (65) 6394 1771
Fax: (65) 6298 6343
Email: tony1@
kkh.com.sg

A Medline search revealed only one other case of a small (1 cm) broad ligament pregnancy managed laparoscopically⁽⁵⁾. To our knowledge, this is the first successful laparoscopic management of such a large (6.5 cm) abdominal pregnancy in the broad ligament. We believe that with appropriate patient selection, advancement in laparoscopic setup and skills, laparoscopic management of abdominal pregnancy is a viable alternative.

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