Peritoneal Trophoblastic Implant

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Summary

A case of persistent trophoblastic tissue on the pelvic peritoneum is presented. While most cases are secondary to conservative surgery for tubal ectopic pregnancy, primary implantation can also occur as highlighted by this case. A brief pathophysiology of the condition is presented. The importance of monitoring the serum for beta subunit human chorionic gonadotrophin (HCG) is emphasised.

Key Words: Peritoneal, Trophoblastic, Implant

Introduction

The presence of persistent trophoblastic tissue within the fallopian tube is commonly seen to occur after conservative surgery in the form of salpingotomy or fimbrial expression for ectopic pregnancy. However, the occurrence of primary persistent peritoneal trophoblastic implants is a rare phenomenon[1]. Very few cases have been reported in the literature. It can present with acute abdominal haemorrhage and can be a life threatening situation. A case of peritoneal trophoblastic implant presenting as a case of acute abdomen is presented. The importance of regular beta HCG monitoring of the serum after conservative surgery for ectopic pregnancy is also highlighted.

Case History

Mrs. M.A., a 23-year-old Malay lady was a nullipara. She presented at the Emergency Unit of the hospital with history of abdominal pain for two days. She previously had regular monthly menstrual cycles. However, in the three months prior to her admission she had irregular periods with intermenstrual bleeding. On the day of admission she presented with frequency of urination and backache. The lower abdomen was tender and there was slight guarding. The urine pregnancy test was negative. The haemoglobin was 12.2 gm%. Total white cell and differential counts were within normal limits. A possible diagnosis of appendicitis was made and she was admitted for observation.

However the next day her condition worsened. On examination she was very pale. The pulse rate was 120bpm and the blood pressure was 80/50 mm Hg. Positive findings were a distended abdomen with extreme tenderness and guarding over the whole lower abdomen below the umbilicus. A diagnosis of acute intraperitoneal haemorrhage was made and an emergency laparotomy was performed through a midline subumbilical incision. There was two litres of blood and clots in the peritoneal cavity. The blood clots were removed and the uterus, tubes and right ovary were normal. Two small foci of bleeding were noted in the left ovary and over the peritoneum in the left lateral pelvic wall respectively. A possible diagnosis of bleeding from endometrotic foci was made. There was no other pathology noted in the abdomen. Biopsies of the two bleeding sites were performed and haemostasis secured. An appendectomy was performed as it was mildly inflamed. She was transfused two pints of whole blood. The post operative recovery was uneventful and the post operative haemoglobin was 8.8 gm%.

The histopathological examination of the biopsy from

the lateral pelvic wall showed normal mature chorionic villi with surrounding degenerated decidual tissue. The ovarian tissue exhibited a corpus luteum. The appendix showed mild reactive changes.

In view of the histopathological report the serum beta HCG was estimated and noted to be 105.4 mIU/L. It returned to normal at the end of two weeks. She has sisnce been well.

Discussion

The term "peritoneal trophoblastic implant" is referred to as the presence of persistent trophoblastic tissue on the peritoneal surface. It is also sometimes referred to as "persistent ectopic pregnancy". The occurence of persistent trophoblastic tissue within the fallopian tube has been more commonly reported since the introduction of conservative surgery for ectopic pregnancy in the form of salpingotomies, fimbrial expression or aspiration[1]. Persistent ectopic pregnancy in the fallopian tube in this country has been reported before where the patient presented one month after conservative surgery for tubal ectopic pregnancy with acute abdominal haemorrhage[2]. However the occurrence of persistent peritoneal trophoblastic implants is a very rare phenomenon with very few documented cases. In the case presented there was no history of a precedent pregnancy or any conservative surgery for ectopic pregnancy. The only significant history was irregular periods in the three preceeding months. The urine pregnancy test was however negative. Only after the histopathology showed trophoblastic tissue was the serum beta HCG estimated. This showed it to be 105.4 mIU/L. This further emphasises the fact that urine pregnancy test cannot be relied upon to rule out ectopic pregnancies and that even with very low levels of serum beta HCG there is risk of haemorrhage occuring with persistent trophoblastic tissue. Serum beta HCG must be estimated serially. This should become negative by two weeks, although prolongation of up to 24 days has been noted in some cases[3]. In patients who have had conservative surgery for ectopic pregnancy plateauing values of serum beta HCG should alert the possible diagnosis of persistent trophoblastic tissue and treatment instituted with methotrexate.

The trophoblastic implants on the peritoneal surface in the case presented could have been due to either an ectopic pregnancy in the tube with tubal abortion occuring with subsequent implantation of trophoblastic tissue or a possible primary abdominal pregnancy with implantation on the pelvic peritoneum. The latter seems to be the more plausible cause as both the fallopian tubes appeared very normal at laparotomy.

References

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