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Case Report

MASSIVE HAEMOPERITONEUM FROM ENDOMETRIOSIS MASQUERADING AS RUPTURED ECTOPIC PREGNANCY: CASE REPORT

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INTRODUCTION

Endometriosis is a puzzling disease affecting women of reproductive age[1]. Although it is diagnosed frequently, no consensus exists as to the aetiology of this enigmatic disease[2].

Common locations of ectopic endometrial growths are in the abdomen involving the pelvic structures. Like in the uterine lining, these extra-uterine endometrial growths usually respond to hormones of the menstrual cycle. The tissues build up each month, break down and cause bleeding. However, unlike the lining of the uterus, endometrial tissues outside the uterus have no way of leaving the body. The result is internal bleeding, which if moderate to severe, may lead to massive haemoperitoneum. Philip et al[2], report an unusual cause of acute haemoperitoneum in an asymptomatic woman with bleeding from the right uterine artery eroded by pelvic endometriosis.

A report of massive haemoperitoneum in pelvic endometriosis on progestogen treatment presenting as ruptured tubal ectopic pregnancy is presented.

Key Words: haemoperitoneum, endometriosis, ectopic pregnancy

CASE REPORT

Miss EU was a 34 year old Para 0+2 (both induced abortions). She was a single but sexually active woman. The induced abortions were of confirmed pregnancies in 1995 and 1998 at 8 and 10 weeks of gestation respectively. She was a known case of endometriosis for about 7 years, and had been on treatment for 6 years.

She was first seen in the medical department of the hospital and referred to the gynaecological department at 9:15 pm on the 28th of March, 2007, with the complaints of abdominal pain and distension, and vomiting of 3 days duration. She had developed generalised severe colicky abdominal pain which started from the lower abdomen and soon became generalised. The pain also radiated to the back and both shoulder tips, an evidence of irritation of the diaphragm. There was associated dizziness and she had collapsed on two occasions before presentation to the hospital. There was no history of trauma to the abdomen or a history of fall.

She had been seen at another hospital two days earlier and treated but there was no improvement so she had to come to this hospital for further evaluation and expert management.

Her menarche was at the age of eleven years, and she bled for 5 days in a regular cycle of 28 days.

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She had no history of dysmenorrhoea or dyspareunia. her last normal menstrual period was on 21st March 2007, and she bled for 5 days.

She developed cyclical pre-menstrual lower abdominal pain 12 years after menarche. She noticed brownish discharge from the umbilicus which occurred about 12 days of commencing menstrual period. This was stained her clothes and occurred regularly each month. She had been placed on Primolut-N (Norethisterone, a progestogen) tablets 10 mg twice a day for endometriosis of the umbilicus. She was asked to take the medication for 4-6 months continuously and to rest for 2-3 months to monitor the progress of the treatment. She had discontinued the medication for 6 days on presentation.

On examination, she was found to be young and well-nourished but acutely ill-looking. She was anicteric, afebrile but had marked conjunctival and buccal mucosal pallor. The pulse rate was 128 beats per minute, blood pressure 150/60 mmHg, but the jugular venous pressure was not raised. There was tachycardia, but the heart sounds were normal. The abdomen was full and more in the flanks. There was generalised tenderness and guarding; and shifting dullness was elicited. Vaginal examination showed normal vulva and vagina, but the pouch of Douglas was full. Cervical motion tenderness was positive.

Blood tests showed PCV of 13% and blood group was O Rhesus positive. She had 4 units of compatible blood grouped and cross-matched. Urinary pregnancy test was negative. Serum - HCG was not estimated as this is not available at the centre.

Ultrasound scan showed a uterus of normal size. There was the presence of free fluid in the abdominal cavity and pouch of Douglas, suspending the loops of bowel and uterus anteriorly.

A pre-operative diagnosis of ruptured tubal ectopic pregnancy with massive haemoperitoneum was made with a differential diagnosis of bleeding of non-gynaecological origin. A surgical consultation was sent to the surgeons to review the patient to rule out other possible causes of internal bleeding. This was because her last menstrual period was normal and pregnancy test was negative. She was reviewed by a surgeon who affirmed ruptured ectopic pregnancy, but was in attendance at the theatre for the surgery.

The operative findings included haemoperitoneum and blood clots of about 2,000 ml with active bleeding points in posterior aspect of uterine fundus, left fallopian tube, left ovary, anterior aspect of sigmoid colon and Pouch of Douglas, Figures 1 and 2.

The loops of small intestines, omentum, spleen, liver and other abdominal organs were inspected and found to be normal. The uterus was of normal size. Both fallopian tubes were intact with no evidence of ectopic pregnancy. The pouch of Douglas was partly obliterated by endometriotic deposits which were bleeding briskly. The anterior aspect of the sigmoid colon had endometriotic deposits which were also bleeding actively.

The bleeding points on the posterior aspect of the uterus and right fallopian tube were electro-coagulated with diathermy. The endometriotic deposits on the sigmoid colon were not coagulated for fear of fistula formation.

Pressure packs were applied to other bleeding sites until active bleeding was reduced to the barest minimum.

Figure 1: **Picture showing intact fallopian tubes, uterus and ovaries in the presence of bleeding endometriotic sites.**

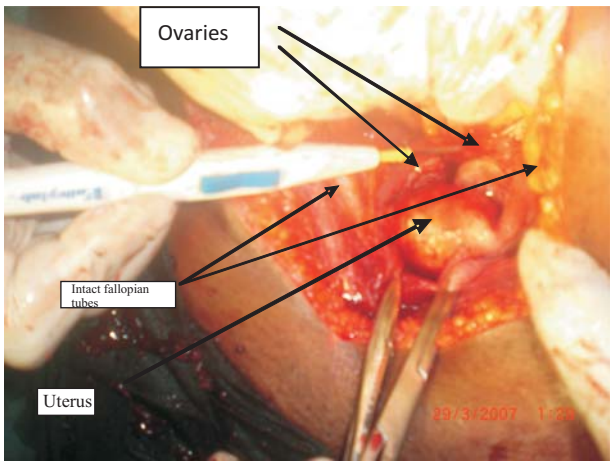
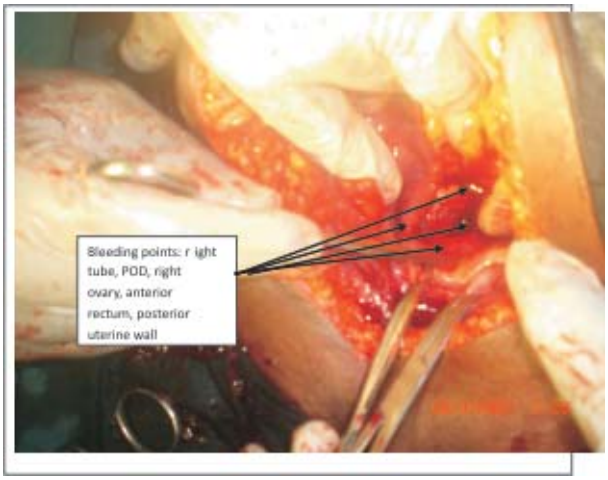


Figure 2: **Bleeding endometriotic deposits on the rectum, right ovary and posterior fundus of the uterus**



Key: POD = Pouch of Douglas

The post-operative condition was satisfactory. She had two units of blood transfused intra-operatively and one unit post-operatively. She was discharged home on the 7th post-operative day. The post-operative diagnosis was therefore changed to bleeding endometriosis with massive haemoperitoneum.

DISCUSSION

Endometriosis has been adjudged to be low in Africans[3,4] though some authors have advanced that the low prevalence is because of the inability of operating gynaecologists to look for endometriosis both at laparotomy and diagnostic laparoscopy in the patients[5].

Endometriosis may present as infertility, chronic pelvic pain, dysmenorrhoea, deep dyspareunia or bleeding at external sites like the umbilicus[6]. Massive intra-abdominal bleeding with haemoperitoneum is rare and has only been reported in the literature in two cases; one of them following erosion of the uterine artery by endometriosis[2].

This case was an emergency presenting with massive haemoperitoneum and therefore surgery was resorted to as a method of treatment. The main aim of the surgery was to identify the source of the bleeding, stop further bleeding, and evacuate the haemoperitoneum. The patient was young, single and nulliparous, and therefore conservation of the reproductive organs was the method of choice despite the fact that surgery was employed to control the bleeding. Local ablation of the endometriotic tissues was done in this patient.

Other management options for the treatment of endometriosis include laparoscopic cryo-reduction of endometrial implants, photocoagulation, cul-de-sac dissection and segmental resection of colon infiltrated by endometriosis[7,8]. The more modern $CO2$[9] or KTP/532 laser beam surgery has been shown to be superior to electrocautery[10]. These treatment options are not available in our centre. They might not have been useful as this was an emergency requiring prompt exploratory laparotomy.

The diagnosis of bleeding endometriosis causing massive haemoperitoneum was a retrospective diagnosis.

The patient was on medical treatment with Primolut-N, a progestogen-only, for over 5 years. Usually when treatment is discontinued abruptly, a withdrawal bleeding occurs and could be moderate to severe[2]. This scenario might have been a massive withdrawal bleeding from the endometriotic implants. This case therefore suggests caution with the use of progestogen-only for the treatment of endometriosis.

The patient may benefit from the use of Danazol, a synthetic testosterone derivative, the most commonly used hormonal drug for the treatment of endometriosis today[1]. It causes a hormonal state similar to chronic anovulation with atrophy of the remaining endometriotic deposits, and therefore no bleeding. Endometriosis can present in different shades including significant internal bleeding and a high level of clinical suspicion is necessary if the diagnosis is not to be missed. The abdominal surgeon should therefore be vigilant and alert to localize rare sites of internal bleeding due to endometriosis.

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