INTRODUCTION

Endometriosis is typically seen during the reproductive years and occurs in 6 - 10% of women. It is usually confined to the abdomen and pelvis. The sites of endometrium implantation include the ovaries, pelvic peritoneum, uterovesical pouch, pouch of Douglas, round ligaments, uterosacral ligaments, rectovaginal septum and the fallopian tubes. Other structures, which may be involved, are omentum, intestine, bladder, vagina and old scars of abdominal wall. The most common site is ovary (about 60%) where it is commonly known as the chocolate cyst of ovary. We describe here a unique case of huge endometrial cyst weighing 471 lbs or 214 kg.

CASE REPORT

A 50 years old diabetic and hypertensive woman presented with progressive abdominal distension for 8 years. According to her, she had started having lower abdominal pain, dysmenorrhea and polymenorrhea when she was about 40 years of age. Belonging to low socioeconomic class, she neglected her problems of lower abdominal distension and severe pain especially during menstruations. The symptoms progressed with episodes of on and off fever. For the few years, she went for various ultrasound scans and was diagnosed as having a cystic mass in pelvis. She had history of two abortions and given birth to one daughter in her thirties. She was advised surgery by various surgeons and gynaecologists but she kept ignoring this problem. On presentation, she was in state of ill health with huge abdominal distension and breathlessness, uncontrolled high blood pressure and diabetes. She was having difficulty in defecation and urination. She weighed 297 kg (655 lbs), was anaemic with enormously gross abdominal distension, umbilical hernia and positive fluid thrill. She underwent CT scan abdomen with much difficulty to fit in the gantry. Scan showed huge ill-defined cystic mass of 65 x 55 x 60 cm (approximate volume= 214 liters) with multiple thin septae, occupying the whole abdominal cavity and pelvis with severe pressure effects to adjacent structures. All other viscerae were found to be normal including uterus. Both ovaries were not well appreciated, might be due to atrophy or mass compression effects. (Figures 1a, b and c).

After proper counselling regarding the nature and hazards of operation, she underwent surgery (Figure 2). After making long midline incision, cavity of cyst directly entered with gush of brownish chocolate coloured fluid came out under high pressure. There were multiple septations with loculated fluid collection. The wall of cyst was adherent with anterolateral abdominal wall from xiphoid process to pubis and in pelvis it was tightly adherent with uterus, side walls of pelvis, rectouterine and uterovesical pouches and fallopian tubes. The wall was also adherent with posterior peritoneum in paracolic gutters on both sides, over the mesentery of ascending, descending and sigmoid colon, with under surface of liver, spleen and parts of diaphragm. It was also adherent with the mesentery of small bowel in between the loops which was compressed posterior to such huge cyst, transverse mesocolon and parts of omentum. Cyst wall gradually separated out from these structures by a sharp and blunt dissection. Multiple areas of haemorrhagic fluid were also found. Cyst wall was

Giant Intraabdominal Endometrial Cyst

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ABSTRACT

Endometriosis is the condition where endometrium gets implanted and flourishes outside the uterine cavity, most commonly in ovary and on the peritoneum which lines the abdominal cavity and viscera. Endometrial cells in areas outside the uterus are influenced by hormonal changes and respond in a way similar to the endometrium inside the uterus. Symptoms often worsen with the menstrual cycle. We present a case of 50 years old female who presented with gross abdominal distension and abdominal pain over years. CT scan showed a huge intraabdominal cyst of unknown origin which was compressing adjacent structures. Patient underwent a high risk operation and whole cyst weighing 214 kg (471 lbs) was removed along with both ovaries and uterus. Histopathologically, it was reported as endometrial cyst.

completely removed along with ovaries, uterus and omentum (Figure 3). All other viscera were checked and found normal. After proper peritoneal lavage and placing three drains, abdomen was closed with prolene suture. Patient recovered smoothly and she was allowed orally on second postoperative day when bowel sounds returned.

The wall of the cyst was sent for histopathological examination which was reported as multiloculated endometrial cyst filled with blood clots and mucinous material, uterine endometrioma, a fibroid and small endometrial cysts in both ovaries. Patient developed incisional hernia on follow-up, which was repaired 10 months later.

**DISCUSSION**

The pathophysiology of endometriosis is likely to be multifactorial and involves an interplay of several factors. Broadly, the aspects of the pathophysiology can basically be classified as underlying predisposing factors, metabolic changes, formation of ectopic endometrium etc. Common predisposing factors are age (peak incidence in 30 - 40 years), race (common in Caucasians than in Asians and Africans), primary infertility, genetics (7% of first degree relatives of affected women have the disease) and autoimmune mechanisms (deficiency in cellular immunity). Pregnancy protects against endometriosis by suppressing ovarian activity. Recently, it is suggested that oxidative stress plays an important role in the pathogenesis of endometriosis. The main theory for the formation of ectopic endometrium is retrograde menstruation also called as the implantation theory or transplantation theory, is the most widely accepted theory for the formation of ectopic endometrium in endometriosis. In addition, at least one study found that endometriotic lesions are biochemically very different from artificially transplanted ectopic tissue. Clinical features of endometriosis depend upon the site of the disease. There may not be any symptoms related to it, which may be found on routine check-up or investigations for some other disease. Usual symptoms include dysmenorrhoea (60 - 80%), dyspareunia, lower abdominal and pelvic pain, menorrhagia and infertility. There may be intermittent pyrexia with malaise. Cystic and nodular masses may be palpable on abdominal palpation or on pervaginal examination, retroversion of uterus and tenderness. In many cases, diagnosis can be reached on the basis of a typical history and physical findings. This condition can be investigated and diagnosed on ultrasound (especially transvaginal), CT abdomen, examination under anaesthesia, laparoscopy or laparotomy.

Surgically, endometriosis can be staged as I-IV according to the revised classification of the American Society of Reproductive Medicine. A patient with stage-I may have little disease and severe pain, while a patient with stage-IV may have severe disease and no pain or vice versa.

Treatment depends upon the reproductive age of the patient. The goal is to provide pain relief, to restrict the progression of the process and to restore or preserve fertility where needed. The medicine which is being prescribed is danazol. It produces pseudo-menopause based on the principle that following menopause, the symptoms of endometriosis improves. Surgical treatment is usually prescribed to those patients who fail to
respond to medical treatment or have severe and advanced disease. Surgical procedures are classified as conservative (when reproductive organs are retained), semi-conservative (when ovarian function is allowed to continue) and comprehensive (where both ovaries and uterus are removed). Conservative therapy consists of the excision of cyst, adhesions, resection of endometriomas and restoration of normal pelvic anatomy as much as possible. Comprehensive surgical treatment is a curative procedure and is carried out if the patient is over 40 years of age and has completed her family or the disease is so widespread that conservative surgery is not possible.

REFERENCES