

# Massive ascites due to omental endometriosis

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**Summary:** Endometriosis associated with massive ascites is an unusual combination. Only 12 cases have been reported since its first description by Brews in 1954. The authors report the first case where radical surgery was avoided because of successful hormonal therapy.

## Introduction

Massive ascites associated with endometriosis is very rare. Since its first description by Brews in 1954, only 12 cases have been reported (Jenks *et al.*, 1984). Because the bloody ascites is sometimes associated with a pelvic mass, it has frequently been mistaken for ovarian malignancy (Chervenak *et al.*, 1981). Increased awareness of this rare condition may facilitate diagnosis and avoid unnecessary surgery. We recently encountered a case where the diagnosis was suspected at laparotomy and confirmed histologically thus avoiding oophorectomy or hysterectomy.

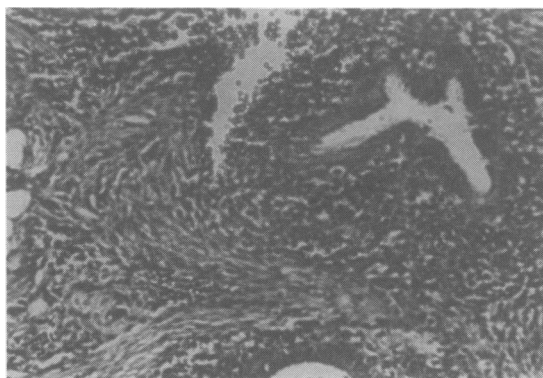
## Case report

A 24 year old negro female, gravida 0, para 0, noticed gradually progressive abdominal distension over the previous 7 months. She had mild lower abdominal discomfort and dysmenorrhoea but was otherwise normal.

Though anaemic, she was well looking, fully ambulant and had moderate abdominal distension. There was obvious free fluid in the abdomen but no mass or tenderness could be appreciated. Because she was virgo intacta vaginal examination was deferred. Laboratory investigations revealed a microcytic hypochromic anaemia, haemoglobin, 8.3 g/dl, white blood count  $4.9 \times 10^9/l$ , albumin 43 g/l, globulin 24 g/l, bilirubin  $15 \mu\text{mol/l}$ , prothrombin time and partial thromboplastin time were normal. Paracentesis produced 2300 ml blood stained fluid which on cytology showed no evidence of malignancy. Vaginal examination under anaesthesia revealed an intact hymen, normal uterus and adnexae. Chest X-ray, barium meal and barium enema were all normal. No

definite diagnosis was made and the patient was followed up in the outpatients clinic.

Over the next 3 months she noticed that the distension of the abdomen was worse during her periods but persisted to a lesser extent throughout the menstrual cycle. Repeat paracentesis, 4 months after initial presentation, again revealed blood ascites with no malignant cells. At laparotomy, 6000 ml of bloody fluid was found in the peritoneal cavity. Though both ovaries and tubes were adherent to the posterior surface of a normal sized uterus, there was no evidence of tumour. Fine nodules, about 2 mm diameter, were extensively distributed throughout the greater omentum. There was no other evidence of tumour in the abdominal cavity or viscera. Biopsy of the omentum confirmed the presence of omental endometriosis (Figure 1). The abdomen was closed and the patient recovered uneventfully. Depot Provera given intramuscularly every 2 weeks for 6 months completely alleviated her symptoms. She has been followed for 4 y with no recurrence of the problem.



**Figure 1** Omental biopsy showing endometrial glands and stroma. (H & E  $\times 200$ ).

### Discussion

Massive ascites due to endometriosis is so rare that most clinicians will never encounter a single case. However, the condition is important because massive bloody ascites in the young female can be mistaken for malignancy and treated inappropriately. Of the 8 reported cases where treatment is described 6 have had oophorectomy and 2, radiotherapeutic menopause (Jenks *et al.*, 1984). This may be regarded as a particularly aggressive line of therapy, especially since most patients are nulliparous at the time of diagnosis. The successful use of medical therapy in our patient demonstrates for the first time that oophorectomy is not necessary for treating massive ascites due to endometriosis. The only other previous attempt at

hormonal control in this condition was in the case reported by Chervenak *et al.* (1981), but even this patient had bilateral salpingo-oophorectomy.

In this rare disorder, most of the patients are nulliparous, of African descent and young (average age 32 y; Jenks *et al.*, 1984). The commonest clinical features are abdominal distension, dysmenorrhoea and brown or bloody ascites. If these findings are present and paracentesis reveals bloody fluid with no evidence of malignant cells, laparotomy or laparoscopy and biopsy may still be necessary to exclude malignancy. If, however, endometriosis is suspected or confirmed by frozen section histology, radical surgery should be avoided as hormone therapy may be as successful with less morbidity to the patient.

### References

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