

Endometriosis: A Rare Presentation as Hemorrhagic Ascites

by Ankur Lodha, Thomas Klein, Diana Elish, Regina Tarkovsky

Endometriosis is defined as the presence of endometrial glands and stroma outside the uterine cavity. It is a rare cause of hemorrhagic ascites. The possibility should be kept in mind for a young patient presenting with hemorrhagic ascites. It can prevent unnecessary diagnostic testing and is very simple to treat as an outpatient by primary care physicians.

CASE REPORT

Hemorrhagic ascites as a complication of endometriosis is an extremely rare condition. We present a case of a 30-year-old patient and review the past literature.

A 30-year-old black woman from Trinidad presented to our hospital with chief complaint of extremely painful abdominal distention. The distention began around the time of her menses two months prior to presentation and was associated with epigastric pain and constipation. At that time she visited a gastroenterologist who prescribed laxatives, which relieved the constipation and pain. Around the time of her next cycle she noticed the recurrence of pain and increasing abdominal distention. With her most recent menstrual period, which began three days prior to admission, the distention became so painful that she could not walk. At that time she presented to the ER.

The patient reported a history of dysmenorrhea, menorrhagia and bloating with menses for more than 10-years and a five-year history of infertility. She denied any alcohol use. The patient was not taking any medications and denied any family history of cancer. Physical examination was remarkable for a grossly distended abdomen that was tense and tender to palpation. The remainder of physical examination was normal.

Ankur Lodha, M.D., Diana Elish, M.D., Regina Tarkovsky, M.D., Department of Medicine, Maimonides Medical Center, Brooklyn, NY. Thomas Klein, Ph.D., Mount Sinai School of Medicine, New York, NY.

Routine blood studies (CBC, SMA24) were normal. CT scan of the abdomen revealed a massive ascites and a fibroid uterus with a normal appearing liver. Paracentesis obtained four liters of grossly hemorrhagic fluid with no evidence of malignant cells. Diagnostic laparoscopy was performed and found significant bowel adhesions, a frozen pelvis and numerous widespread beefy red lesions that were biopsied and later diagnosed as endometrial tissue by pathology. The patient was diagnosed with pelvic endometriosis and treated with oral contraceptive pills. She continues to do well on them with no recurrence of symptoms in a five-month follow-up period.

DISCUSSION

Hemorrhagic ascites has been defined as ascitic fluid with greater than 50,000 RBC/cubic mm (4,5). The most common causes include hepatoma, ovarian cancer and tuberculous peritonitis (5). Endometriosis is defined as the presence of endometrial glands and stroma outside the uterine cavity. It is most commonly seen in women of reproductive age and occurs in similar proportions among all races. Areas of endometriosis appear as cyst like structures that may be bluish gray or red in color (endometrioma). Endometriosis presenting as hemorrhagic ascites is an extremely rare presentation and is seen more commonly in black nulliparous women (7).

Possible mechanisms of abdominal pain include rupture of endometrial cysts and subsequent irritation of serosal surfaces by free blood causing ascites and

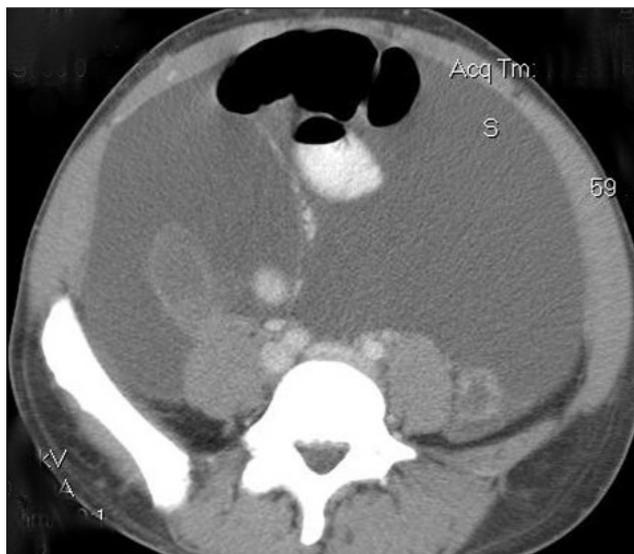


Figure 1. CT scan of abdomen demonstrating massive ascites.

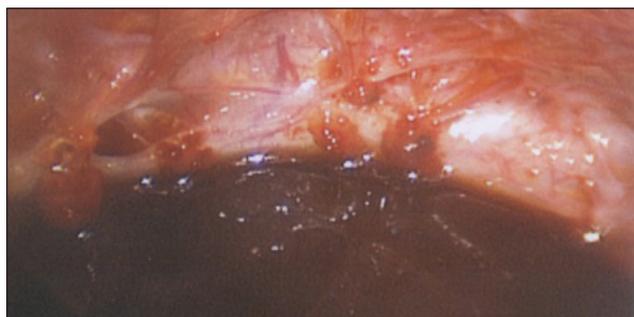


Figure 2. Laparoscopy showing hemorrhagic fluid in the peritoneal cavity.

adhesions (1,2). Patients present most commonly with abdominal distention, dysmenorrhea, abdominal pain and anorexia (2). The ascitic fluid is typically exudative in nature (3).

Diagnostic laparoscopy is the preferred technique to make an appropriate diagnosis. Biopsies should be taken and histologically analyzed if the diagnosis is questionable.

Treatment options include estrogen-progesterone combination therapy and GnRH analogues (e.g. Danazol) that interrupt the cyclic ovarian hormone production. A six month course of medroxyprogesterone acetate is also appropriate (6).

A diagnosis of endometriosis should always be considered in a young patient of childbearing age who presents with hemorrhagic ascites. It is often forgotten

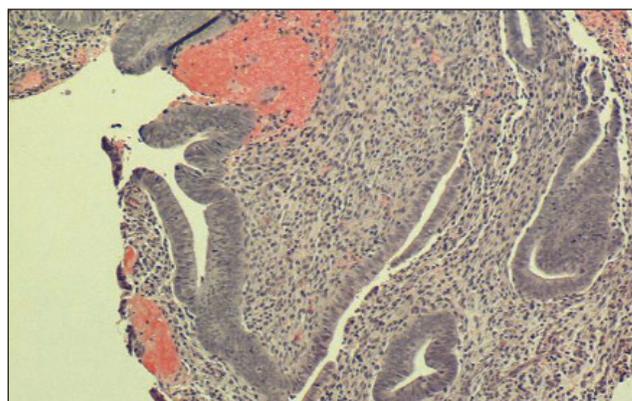
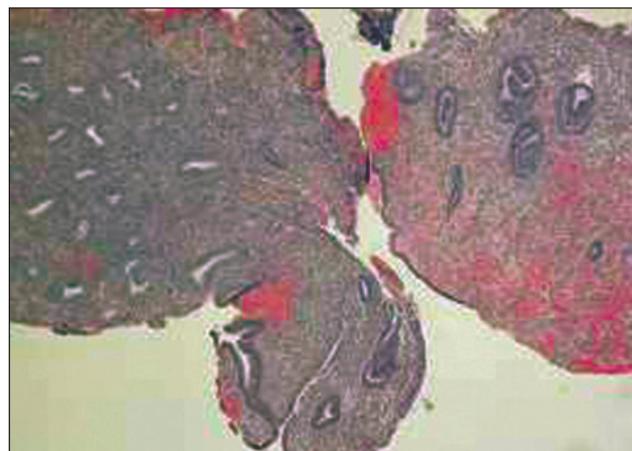


Figure 3a and Figure 3b. showing epithelial cells with fibro-connective tissue and hemosiderin laden macrophages consistent with endometriosis.

since the presentation (bloody ascites, weight loss and pelvic mass) can simulate malignancy. Hemorrhagic ascites secondary to endometriosis is a potentially treatable cause of bloody ascites. ■

References

- Bernstein JP, Perlow V, Brenner JJ. Massive ascites due to endometriosis. *Am J Dig Dis*, 1961; 6:1-7.
- Dias CC, Andrade JM, et al. Hemorrhagic ascites associated with endometriosis. A case report. *J Reprod Med*, 2000; 45(8):688-690.
- Brosens IA. Endometriosis: Current issues in diagnosis and medical management. *J Reprod Med*, 1998; 43:281-286.
- Natelson EA, Allen TW, Riggs S, Fred HL. Bloody ascitis: diagnostic implications. *Am J Gastroenterol*, 1969; 52:523-527.
- Taub WH, Rosado S, et al. Hemorrhagic ascites secondary to endometriosis. *J Clin Gastroenterol*, 1989; 11:458-460.
- Naraynsingh V, Raju GC, Ratan P, Wong J. Massive ascites due to omental endometriosis. *Postgrad Med J*, 1985; 61:539-540.
- el-Newihi HM, Antaki JP, Rajan S, Reynolds TB. Large bloody ascites in association with pelvic endometriosis. *Am J Gastroenterol*, 1995; 90:632-633.