Hemoperitoneum: a rare complication caused by a leiomyoma

Hemoperitoneu: uma complicação rara causada por um leiomioma

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Abstract

Uterine leiomyomas are the most common gynecologic tumors and occur commonly in women of reproductive age¹. Frequently they are asymptomatic, but they can present with abnormal uterine bleeding, abdominal pain and pressure symptoms if there is a large tumor size¹. Hemoperitoneum due to spontaneous bleeding from a uterine leiomyoma is an extremely rare situation, with less than 100 cases described in literature¹. We report a case of a 46-year-old woman presenting acute abdominal pain with a spontaneous hemoperitoneum caused by a uterine leiomyoma.

Keywords: Hemoperitoneum; Leiomyoma.

INTRODUCTION

Uterine leiomyomas are benign tumors arising from smooth muscle cells of the myometrium and commonly affect women of reproductive age¹,⁴. There are many risk factors associated with fibroids like black race, increased estrogen exposure, obesity, alcohol consumption, vitamin D deficiency, diets high in red meat, hypertension, and underlying genetic predispositions⁵. Patients can be asymptomatic or may present with abnormal uterine bleeding, abdominal pain and pressure symptoms, depending on the number, size, and location of the tumors. Acute complications of uterine leiomyomas requiring surgical intervention are exceptionally rare⁶.

Treatment includes expectant management, medical and surgical approaches, including Gonadotropin releasing hormone analogues, myomectomy, hysterectomy and uterine artery embolization⁷.

The authors report an hemoperitoneum with active extravasation from a surface vessel of a leiomyoma on a 46-year-old woman that required prompt intervention.

CASE REPORT

A 46-year-old nulliparous Caucasian woman presented in the emergency department with acute abdominal pain. Her past medical and surgical history was unremarkable and she was not under any medication or contraception. Abdominal pain began, suddenly, about 2-3 hours before observation, associated with nausea and vomiting. On our examination, the patient looked pale, hemodynamically stable (blood pressure 103/49 mmHg, heart rate 89 bpm) and abdomen showed mild tenderness. Gynecological exam exhibited an enlarged uterus.

At admission, patient's hemoglobin was 9.9 g/dL (reference values 12-15 mg/dL) and serum beta human chorionic gonadotropin was negative.

It was decided to perform a transvaginal ultrasound that revealed an enlarged retroverted uterus, with a subserous posterior leiomyoma (FIGO type 6) of homogeneous echogenicity of roughly 97 × 68 × 52 mm, with no pelvic free fluid.

She was then submitted to an abdominal and pelvic CT scan. The exam exposed a large hemoperitoneum and a bulky pelvic mass protruding from the posterior uterine wall with 87 × 76 mm, with active bleeding of unknown origin (Figure 1 and 2).

During the administration of analgesic therapy, the patient started experiencing symptoms and signs of hy-
Broid was not visualized. Adnexa were macroscopically normal. It was tried to control active hemorrhage from the vessel, without success. As patient had no desire of future pregnancy, a total abdominal hysterectomy with ovarian preservation was executed (Figure 3 and 4).

Following the surgery, the patient was transferred to the recovery unit in stable condition and was transfused two units of packed red blood cells on the first postoperative day. The patient had an uncomplicated postoperative course and was discharged home three days after the surgery with no further complications.

Histological examination of the surgical specimen revealed a leiomyoma.

**DISCUSSION**

Uterine leiomyomas are the most common pelvic tumors in females and originate from smooth muscle. They constitute a usual cause of hysterectomy. Rarely, acute complications may arise and include urinary re-
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A detailed clinical history, excluding pregnancy. Imaging with ultrasound and CT scan are good allies in making the diagnosis. In this case, contrast enhanced CT was chosen because of its high sensibility for pelvic and abdominal etiologies of hemoperitoneum and acute abdomen. Early suspicion and prompt surgical intervention is recommended to resuscitate and control bleeding, minimizing patient morbidity.

CONFLICTS OF INTEREST
None.

CONSENT
Informed written consent has been obtained and all identifying information is omitted.

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