Unusual case of spontaneous pyomyoma in a perimenopausal woman

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DESCRIPTION

Pyomyoma is a rare but life-threatening condition that results from the infarction and infection of uterine leiomyoma.¹ The most likely cause of pyomyoma is vascular compromise, followed by bacterial seeding from direct, haematogenous or lymphatic spread. Cases in postmenopausal women result from immune or vascular compromise, such as diabetes, hypertension or atherosclerotic disease.

Diagnosis of pyomyoma is difficult; it is a relatively rare condition and may develop over an extended period, which contributes to delayed diagnosis and mortality.² A serious complication of a pyomyoma is its spontaneous rupture, which presents as an acute abdomen with septicemic shock.³ Patients typically present a triad of symptoms: sepsis, presence of leiomyoma and the absence of any other source of infection associated with abdominal pain and fever. However, it may present with other silent or non-specific symptoms. In perimenopausal and postmenopausal women, a large pyomyoma can be difficult to distinguish from a gynaecological malignant tumour, particularly in perimenopausal, cachectic women with non-specific clinical presentation and without a history of leiomyoma.¹ The patient in the case presented here, a perimenopausal woman who presented with anaemia, severe inflammatory reaction and abdominal pain, experienced a rare example of large uterine pyomyoma.

A 51-year-old nullipara woman was referred to the intensive medical care unit due to gradual-onset abdominal pain, fever and diarrhoea which had started 3 days previously.

The patient had a personal history of obesity (body mass index >40 kg/m²) and a cognitive deficit secondary to childhood bacterial meningitis and,

Figure 2 Gross specimen of the uterus shows: (A) the dark green serosal surface of the pyomyoma (white arrow); (B) the mass that compresses the uterus, as shown in the open uterine cavity (asterisk). (C) The content of the infected myoma is seen spread in the table (arrowheads). It is mainly haemorrhagic but has a foul odour due to infection. Histology confirmed an extensive necrotic and infected leiomyoma.

in addition, had a diagnosis of bipolar disorder. Because of this background, the patient did not have previous routine examinations, namely, transvaginal ultrasound. The patient had no sexual activity and her last period would have been about 6 months ago.

At admission, the patient presented a body temperature of 38°C, distended abdomen with a painful mass that was palpable at the abdomen (hypogastric zone). There was no vaginal discharge. Blood tests were performed and revealed a haemoglobin level of 98 g/L, white cell count was $12.3 \times 10^9/L$ and C reactive protein was elevated to 526 mg/dL, renal dysfunction (creatinine value of 1.7 mg/dL).

A contrast CT scan was performed, revealing a 21 cm bulky pelvic mass containing air and air in the periphery. An axial CT scan showed that the mass probably corresponded to a large infected myoma, as demonstrated by the presence of large amounts of air inside the mass. The air and infection had already migrated to the peritoneal cavity (figure 1). The patient underwent an exploratory

Figure 1 Axial CT scan shows that the mass corresponds to a large infected myoma, as demonstrated by the presence of large amounts of air inside the mass. The air and infection has already migrated to the peritoneal cavity (outline arrows). The uterine body is compressed by the mass (asterisk). The beak sign is present (large solid arrow). CECT, contrast-enhanced CT.

Learning points

- ▶ A high index of suspicion is required because pyomyomas are rare. They result from infarction and infection of a leiomyoma.
- ▶ In the present case, contrast CT contributed to the diagnosis. The presence of gas in uterine leiomyoma, as seen in this patient, is diagnostic for pyomyoma.
- ▶ Most of the described cases in literature required abdominal exploration and total abdominal hysterectomy or myomectomy and aggressive antibiotic treatment.

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Images in...

laparotomy with a total abdominal hysterectomy and bilateral salpingo-oophorectomy. An unperforated mass was observed on the back wall of the uterus. Intraoperative findings confirmed a solid tumour. The resected uterus weighed 4770 g and measured 24×21×28 cm, the anterior wall was coated with greenish smooth serosa (figure 2A). The anterior wall was deformed by a 21×18 cm extensively necrotic, softened, foul smelling nodule (figure 2B). Histological examination revealed leiomyomas with almost complete infarction, widely necrotic with an inflammatory peripheral border in the transition between the preserved and necrotic tumour (figure 2C). The patient was hospitalised for 23 days (5 days in intensive care, 1 day in intermediate care, 17 days in the gynaecology department). The patient was discharged from the hospital well.

The images contained in this report demonstrate an unusual case of spontaneous pyomyoma in the absence of risk factors (no history of diabetes mellitus, hypertension, prior uterine instrumentation, or recent childbirth).

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