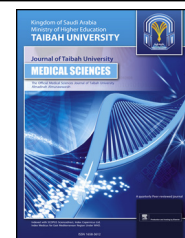




Taibah University

Journal of Taibah University Medical Sciences

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Case Report

A case of parasitic leiomyoma with serpentine omental blood vessels: An unusual variant of uterine leiomyoma



Ahmed S. Elagwany, MS*, Helmy A. Rady, MD and Tamer M. Abdeldayem, MD

Department of Obstetrics and Gynecology, El-shatby Maternity University Hospital, Faculty of Medicine, Alexandria University, Alexandria, Egypt

Received 24 August 2013; revised 11 May 2014; accepted 17 May 2014; Available online 23 August 2014

المخلص

يعتبر الورم الأملس الحميد أكثر أورام المجرى التناسلي انتشاراً. يعرض هذا التقرير حالة امرأة حملت عدة مرات، ولديها تاريخ مرضي لتمدد بطني مترقى. لوحظت كتلة متحركة غير محددة بالفحص، متمركزة داخل البطن. شوهد أثناء فتح البطن ورم ليفي متطفل ملتصق في الثرب الكبير. استؤصلت الكتلة وجزء من الثرب الكبير وشخصت الحالة نسيجياً على أنها ورم أملس حميد. كانت فترة النقاهة بعد العملية طبيعية. توبعت الحالة لمدة ١٢ شهراً دون عودة أو تبقي جزء من المرض.

الكلمات المفتاحية: ورم أملس حميد متطفل؛ رحم؛ الثرب الكبير؛ متطوي

Abstract

Leiomyoma is considered as the commonest benign tumor of the genital tract. This case represents a multiparous woman who presented with a history of progressive abdominal distension. On examination, a mobile ill-defined centrally located intra-abdominal mass was noticed. At laparotomy a parasitic fibroid attached to the greater omentum was seen. Resection of the mass and partial omentectomy was performed which was reported as leiomyoma by the histological examination. The patient had an uneventful post-operative recovery. She has

been followed up for twelve months with no evidence of recurrence or residual disease.

Keywords: Greater omentum; Parasitic leiomyoma; Serpentine; Uterus

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Introduction

Leiomyomata (uterine fibroids) are the most common tumors of the female pelvis.¹ When a subserous fibroid becomes adherent to other structures, especially the omentum, they obtain their blood supply from such structures and the uterine pedicle either disappears completely or becomes avascular. The resultant tumor is known as “parasitic or ectopic leiomyoma”.

Imaging studies such as Magnetic Resonance Imaging (MRI) and Ultrasonography aid in the diagnosis of uterine fibroids, but in some circumstances, as in the present case, they can be misleading or may not help to ascertain the diagnosis. The omentum is composed principally of fat, but also contains blood vessels and lymphatics. The omentum is lined by mesothelial cells and within its abundant stroma are lipocytes, fibroblasts, lymphoreticular bodies and pericytes.²

Case report

A 37-year old woman, mother of two children, presented to the gynecology clinic of El-shatby maternity university hospital Alexandria with a history of bloating during feeding, abdominal pain and distention. The patient had normal and regular menstrual cycles. There was no associated vaginal discharge, respiratory difficulties or

* Corresponding address: Assistant Lecturer, Department of Obstetrics and Gynecology, El-shatby Maternity University Hospital, Faculty of Medicine, Alexandria University, Alexandria, Egypt.

E-mail: ahmedsamyagwany@gmail.com (A.S. Elagwany)

Peer review under responsibility of Taibah University.



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gastrointestinal symptoms. The patient had a previous myomectomy six years ago.

On examination, the abdomen was distended upto the xiphisternum. Multiple masses were felt all over the abdomen. There was a combination of firm and cystic masses, and no tenderness was elicited. Other organs could not be felt. There was no ascites.

The hemoglobin was 10.6 g/dl. The abdominopelvic ultrasound showed a bulky uterus with nearly 15×15 cm query large fundal subserous fibroid. Doppler blood flow study showed that the blood supply was away from the uterus. Ovaries, spleen, liver and pancreas were all normal.

She underwent exploratory laparotomy which revealed a multi-lobulated fibroid like mass densely adherent to the greater omentum. It derived its blood supply from the greater omentum with a huge serpentine and spider shaped blood vessels of nearly 1 cm diameter. It was attached to the fundus of the uterus by a thin avascular stalk (Figures 1 and 2).

The intestines were pushed to the upper half of the abdomen. All other organs including the ovaries were normal. Resection of the mass that was nearly 15×15 cm and partial omentectomy were done. The patient had a smooth recovery. The histology report confirmed leiomyoma with degenerative changes and a normal omental tissue.

Discussion

Leiomyomata (uterine fibroids) are the most common tumors of the female pelvis¹ and in most cases the diagnosis is straightforward but when they undergo pathological changes they pose diagnostic and management difficulties.³ Our patient falls into the latter group. When a subserous leiomyoma outgrows its blood supply from the uterus it acquires new blood supply from the structures it is adherent to. Such structures include the omentum,⁴ common iliac artery⁵ and inferior mesenteric artery.⁶ Its connection with the uterus is severely attenuated or completely severed. It is now known as “parasitic leiomyoma”. Most of the reported cases of parasitic

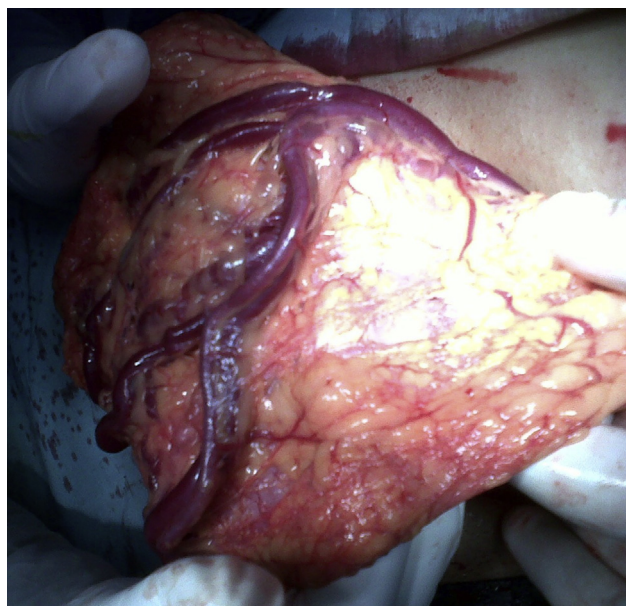


Figure 2: The huge omental blood vessels supplying the fibroid.

leiomyoma, the diagnosis was made at surgery. Some cases will require histological or immunohistochemical studies to confirm the diagnosis.⁶

Therefore, even though parasitic leiomyoma are rare tumors, they should be included in the differential diagnosis of pelvic or abdominal tumors in female subjects. Furthermore, when the parasitic fibroid attains a large size it might outgrow its new blood supply and undergo further pathologic changes known as degeneration. The common types of degeneration are hyaline, cystic, mucoid and red.⁷⁻¹⁰ In the case presented the degeneration was cystic in some areas and hyaline in others. Calcification was also observed.

Another important problem identified in this presentation is the recurrence of leiomyoma. More parasitic myomas may be iatrogenically created after surgery, particularly surgery using morcellation techniques. With increasing rates of

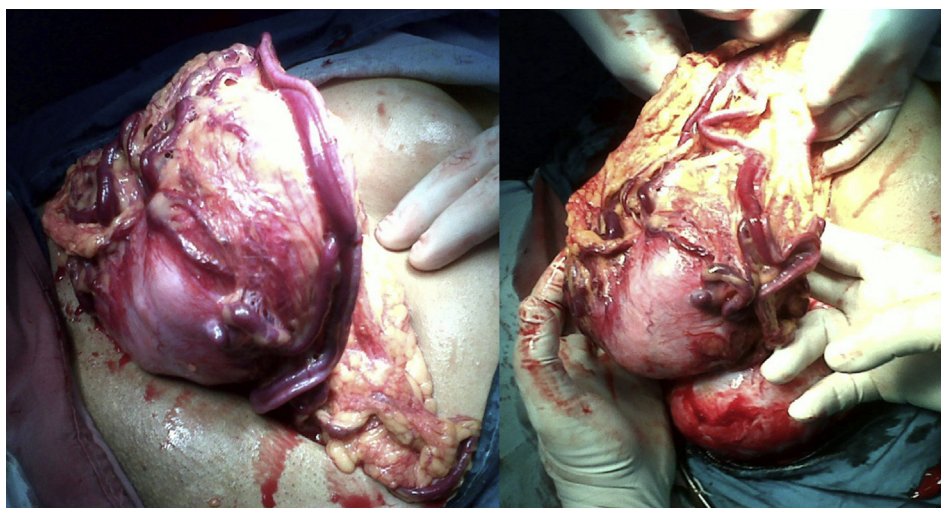


Figure 1: Fibroid mass receiving blood supply from huge omental blood vessels.

laparoscopic procedures, surgeons should be aware of the potential for iatrogenic parasitic myoma formation, their likely increasing frequency, and intraoperative precautions should be taken to minimize occurrence of the type of myoma. There is a growing evidence that the risk is higher in laparoscopic than open pelvic operations. This can be attributed to the better awareness on detached pieces of uterus, and the ability to wash out the field more adequately in case of open surgery.¹¹

Conclusion

Diagnosis of a parasitic leiomyoma should be considered if it is separate from the uterus and a pedicle is not visible connecting the uterus and the mass with blood flow away from the uterus. When the mass is very large, occupying the entire pelvis, the diagnosis becomes more difficult and MRI imaging is needed. Although it looks suspicious, it is totally benign.

Conflict of interest

The authors have no conflict of interest to declare.

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