

Spontaneous Rupture of Tubal Leiomyoma Causing Haemoperitoneum

Zeynep Ozkan¹, Ayse Nur Gonen¹, Seyfi Emir¹, Fatih Mehmet Yazar¹, Evrim Gul²,
Zeynep Dogan Artas³, Ozgen Aslan⁴ and Hakan Artas⁵

ABSTRACT

Leiomyomas are benign tumours that usually originate from the genital tract organs, particularly from the uterus. Spontaneous rupture of leiomyomas is a relatively rare condition. Herein, we report a 70 years old lady who was admitted through the emergency room with sudden abdominal pain. A ruptured mass originating from the fallopian tube, causing haemoperitoneum was revealed at laparotomy. Pathological examination revealed cellular leiomyoma.

Key Words: *Leiomyoma. Fallopian tube. Haemoperitoneum.*

INTRODUCTION

Leiomyomas are common tumours of the uterus.¹ They can be found in extra-uterine organs as well. Spontaneous rupture of leiomyomas is relatively rare so that it is a rare cause of haemoperitoneum. The number of reported cases of leiomyoma rupture causing haemoperitoneum is less than 100. Rupture of leiomyomas is usually secondary to trauma.²

We describe this rare occurrence in an old lady which lead to an emergency presentation.

CASE REPORT

A 70 years old postmenopausal female was admitted to the emergency room with sudden abdominal pain and debility with a duration of 10 hours. She had cardiac arrhythmias and hypertension. She was pale and had a diffuse abdominal guarding with tenderness on physical examination.

Laboratory investigations revealed leukocyte count of 17000/ μ L, haemoglobin at 11.6 g/dL; haematocrit of 36% and platelet count of 194 x 10³ cells/ μ L. Biochemical parameters were unremarkable. There was a 13 x 9 cm solid mass lesion with cystic and solid components in the pelvic region and diffuse free fluid in the abdomen on ultrasonography (Figure 1 and 2). A gynaecological consultation was held and no gynaecological emergency was found. On explorative laparotomy, diffuse intra-abdominal haemorrhage was found to be caused by the rupture of a pedunculated 15 cm mass originating

from the left fallopian tube. She had two units of erythrocyte suspension transfusion because of massive haemorrhage (approximately 1500 mL). Pathology revealed cellular leiomyoma (Figure 3 and 4).

DISCUSSION

Extra-uterine gynaecological leiomyomas are rare.^{3,4} Tubal leiomyomas are rare and usually asymptomatic. They are generally diagnosed incidentally during another surgical procedure. These leiomyomas are generally solitary, small and unilateral.⁵

This patient's mass was macroscopically considered to be a tumour originating from pelvic structures or mesenteric tissue other than leiomyoma. Laparoscopic exploration could not be performed because of insufficient technical facility at the hospital. In this case, leiomyoma was solitary and unilateral like found in the literature but it was huge. Rupture of leiomyomas is rare and it is almost a rare cause of haemoperitoneum.² The correct diagnosis is difficult pre-operatively.⁶

Surgical removal of the tumour is the treatment of choice.⁷ Myomectomy, haemostatic sutures and hysterectomy can be preferred according to clinical condition of patient.⁸ This patient had concomitant cardiac diseases and was considered as American Society of Anesthesiologist class IV-E by the anaesthesiologists. Hysterectomy or oophorectomy was not



Figure 1: On transabdominal ultrasonography, a 13 x 9 cm solid mass lesion with cystic components seen in the pelvic region.



Figure 2: Free fluid in the Morrison's pouch.

Department of General Surgery¹ / Emergency² / Obstetrics and Gynaecology³ / Pathology⁴ / Radio-diagnostics⁵, Elazig Training and Research Hospital, Elazig, Turkey.

Correspondence: Dr. Zeynep Ozkan, General Surgery Department, Elazig Training and Research Hospital, Elazig, Turkey.

E-mail: drzeynepozkan@yahoo.com

Received: March 13, 2012; Accepted: February 27, 2013.

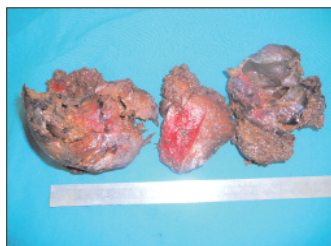


Figure 3: Macroscopic image of the ruptured mass (leiomyoma) excised during surgical operation.

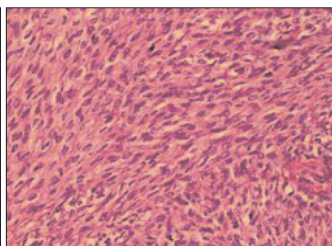


Figure 4: Microscopic image of the cellular leiomyoma.

performed since the ruptured mass was not considered as malignant macroscopically during surgery. It was round-shaped, had regular margins and there was no invasion to the adjacent tissues. However, the pathological examination revealed a cellular leiomyoma. The frequency of cellular leiomyomas is < 5%.⁹ It is a histopathologic subtype of myolevicellular myoma and it can be identified only by microscopic evaluation because its clinical and imaging features are similar to other leiomyomas.¹⁰

In conclusion, keeping extra-uterine leiomyomas in mind, in addition to ovarian and mesenteric pathologies as a cause of haemoperitoneum may lead to better treatment modalities.

REFERENCES

1. Lotterman S, Massive haemoperitoneum resulting from spontaneous rupture of uterine leiomyoma. *Am J Emerg Med* 2008; **26**:974.
2. Danikas D, Theodorou SJ, Kotrotsios J, Sills C, Cordero PE. Haemoperitoneum from spontaneous bleeding of an extra uterine leiomyoma: a case report. *Am Surg* 1999; **65**: 1180-2.
3. Fasih N, Prasad Shanbhogue AK, Macdonald DB, Fraser-Hill MA, Papadatos D, Kielar AZ, *et al.* Leiomyomas beyond the uterus: unusual locations, rare manifestations. *Radiographics* 2008; **28**:1931-48.
4. Huang KG, Adlan AS, Lee CL, Lertvikool S. Isolated broad ligament leiomyomatosis. *J Obstet Gynaecol Res* 2011; **37**: 1510-4.
5. Yang CC, Wen KC, Chen P, Wang PH. Primary leiomyoma of the fallopian tube: Pre-operative Ultrasound Findings. 2007; **70**: 80-3.
6. Buttery BW. Spontaneous haemoperitoneum complicating uterine fibromyoma. *Aust NZ J Obstet Gynaecol* 1972; **12**:210-3.
7. Escoffery CT, Fletcher H. Leiomyoma of the fallopian tube: an unusual cause of abdominal pain. *Int J Gynecol Obstet* 1992; **38**:128-9.
8. Gupta N, Dadhval V, Misra R, Mittal S, Kiran S. Atypical presentation of a leiomyoma as spontaneous massive haemoperitoneum. *Eur J Obstet Gynecol Reprod Biol* 2008; **138**:120-1.
9. Chmaj-wierzochowska K, Buks J, Wierzchowski M, Szymanowski K, Opala T. Leiomyoma cellular in the broad ligament of the uterus: case report and review of literature. *Ginekol Pol* 2012; **83**:301-4.
10. Banaczek Z, Sikora K, Lewandowska-Anruszuk I. The occurrence of leiomyomacellular in the surgical material in the Department of Obstetric and Gynaecology of the District Specialty Hospital Radom. *Ginekol Pol* 2004; **75**:858-62.

.....☆.....