

Case of an atypical located leiomyoma arising from rectus sheath

Rektus kılıfından kaynaklanan atipik yerleşimli leiomyom olgusu

Görker Sel¹

¹ Bülent Ecevit University, Department of Obstetrics and Gynecology, Kozlu, Zonguldak, Turkey

ORCID ID of the authors:
GS: 0000-0001-8653-5687

Abstract

Fibroids or leiomyomas are the commonest benign tumor of the female reproductive tract, occurring most commonly in the uterus. Abdominal wall fibroids are uncommon; we present a rare case of an isolated leiomyoma of the anterior abdominal wall in a patient with no previous history of any abdominal surgeries. We present a case of a 54-year-old female. She was first admitted to the general surgery clinic with a complaint of vague abdominal pain. Abdominal ultrasound and computed tomography revealed the mass, measuring 10x9x7cm, located at the left adnexal area, reported as complex ovarian cyst. She had no history of an abdominal surgery. Laparoscopic surgery was planned. We located the mass, with the help of abdominal palpation and laparoscopic observation at the same time that located anterior to the abdominal parietal peritoneum, beneath the rectus muscle. We extracted the mass, which was capsulated, fine bordered, tender, slightly mobile; with sharp and blunt dissection without any complication. Leiomyomas are the commonest benign tumor of the reproductive tract and found in 20-40% of women of reproductive age. Abdominal wall fibroids are really rare, thought to follow seeding following surgical resection of uterine fibroids. There are very few reported cases of isolated abdominal wall fibroids in the literature, without having previous abdominal surgeries or presence of uterine fibroids as reported in our case.

Keywords: Abdominal wall, Fibroids, Leiomyoma, Rectus sheath

Öz

Fibroidler veya leiomyomlar, en sık uterusda izlenen, dişi üreme sisteminin en yaygın benign tümörüdür. Abdominal duvar fibroidleri nadirdir. Bu olgu sunumunda, herhangi bir abdominal cerrahi öyküsü olmayan bir hastada anterior abdominal duvarda izole bir leiomyom vakasını sunuyoruz. 54 yaşında bayan olgu, ilk önce genel cerrahi kliniğine müphem karın ağrısı şikayeti ile başvuran hastanın abdominal ultrasonografi ve bilgisayarlı tomografi ile sol adneksiyal alanda 10x9x7 cm boyutlarında kitle imajı veren over kisti saptanmıştır. Geçirilmiş batın ameliyatı öyküsü yoktu. Laparoskopik cerrahi planlandı. Abdominal paryetal peritonun ön tarafında, rektus kasının altında yerleşen; abdominal palpasyon ve laparoskopik gözlem yardımıyla kitle lokalize edildi. Kapsüllü, düzgün sınırlı, yumuşak kıvamda, kısmen mobil kitle; herhangi bir komplikasyon olmadan keskin ve künt diseksiyon ile çıkartıldı. Leiomyomlar üreme sisteminin en sık görülen benign tümörüdür ve üreme çağındaki kadınların % 20-40'ında bulunur. Abdominal duvar fibroidleri nadirdir ve uterin fibroidlerinin cerrahi rezeksiyonunu takiben, seeding, oluştuğu düşünülmektedir. Literatürde; bizim olgumuzdaki gibi daha önce batın operasyonu geçirmediği halde batın ön duvarında izole fibroid saptanması, az rastlanan bir durumdur.

Anahtar kelimeler: Karın duvarı, Fibroidler, Leiomyom, Rektus kılıfı

Introduction

Fibroids or leiomyomas are the commonest benign tumor of the female reproductive tract, occurring most commonly in the uterus, estimated incidence of 20%–40% in women during their reproductive years [1,2]. The commonest site is the uterus, but they are also found in the broad ligament, ovaries, vagina and rarely on the anterior abdominal wall like our case [3-7]. Uterine fibroids are associated with infertility, menorrhagia, pain and compression symptoms when very large [3,8]. Abdominal wall fibroids are uncommon; we present a rare case of an isolated leiomyoma of the anterior abdominal wall in a patient without having history of any abdominal surgeries.

Corresponding author / Sorumlu yazar:

Görker Sel

Address / Adres: Bülent Ecevit Üniversitesi,
Kadın Hastalıkları ve Doğum Kliniği, Kozlu,
Zonguldak, Türkiye
e-Mail: gorkersel@gmail.com

Informed Consent: The author stated that the written consent was obtained from the patient presented in the study.

Hasta Onamı: Yazar çalışmada sunulan hastadan yazılı onam alındığını ifade etmiştir.

Conflict of Interest: No conflict of interest was declared by the authors.

Çıkar Çatışması: Yazarlar çıkar çatışması bildirmemişlerdir.

Financial Disclosure: The authors declared that this study has received no financial support.
Finansal Destek: Yazarlar bu çalışma için finansal destek almadıklarını beyan etmişlerdir.

Received / Geliş tarihi: 10.07.2018

Accepted / Kabul tarihi: 28.08.2018

Published / Yayın tarihi: 28.08.2018

Copyright © 2018 The Author(s)

Published by JOSAM

This is an open access article distributed under the terms of the Creative Commons Attribution-Non Commercial-NoDerivatives License 4.0 (CC BY-NC-ND 4.0) where it is permissible to download, share, remix, transform, and buildup the work provided it is properly cited. The work cannot be used commercially without permission from the journal.



Case presentation

We present a case of a 54-year-old (parity: 4) female. She was first admitted to the general surgery clinic with a complaint of vague abdominal pain. Abdominal ultrasound and computed tomography (CT) revealed the mass, measuring 10x9x7cm, located at the left adnexal area, reported as complex ovarian cyst. She had no history of an abdominal surgery. Ca-125 was at normal range. After preoperative evaluation and preparation for anesthesia and surgery was done and informed consent was taken, she was taken to the operating room for surgical evaluation. Laparoscopic surgery was planned. The abdomen was entered via Veress needle and pneumoperitoneum was created, then 5-mm optic was inserted through the 5 mm trocar. General observation of the abdominopelvic organs was done, but no ovarian cyst or pelvic mass were observed, also uterus was observed as normal. We looked for the mass, which was revealed by ultrasound and CT. We located the mass, with the help of abdominal palpation and laparoscopic observation at the same time, located anterior to the abdominal parietal peritoneum, beneath the rectus muscle. Laparotomy via transverse 4 cm incision was performed. Subcutaneous tissues were normal, and transversalis fascia was incised, beneath the left rectus muscle and also beneath the pubic bone we figured out the mass (Figure 1). There was not any connection to the uterus or any pelvic structure, since while dissecting the mass we also observed if any connection existed or not, via laparoscope. We extracted the mass, which was capsulated, fine bordered, tender, slightly mobile; with sharp and blunt dissection without any complication. Layers of the abdomen were closed and abdomen was desuffed, operation was done. The immediate post-operative period was uneventful. Patient was discharged on the postoperative 3th day. Pathology revealed the mass as leiomyoma.

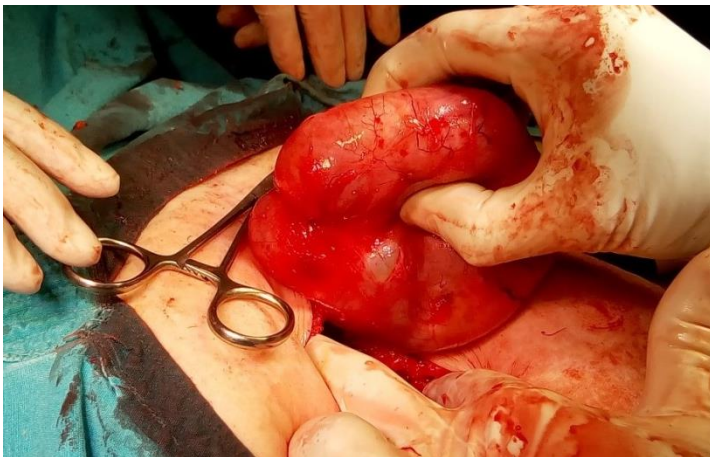


Figure 1: Extraction of the mass located beneath the rectus sheath and anterior to parietal peritoneum

Discussion

Leiomyomas are the commonest benign tumor of the reproductive tract and found in 20-40% of women of reproductive age [1,2]. They are usually asymptomatic, but if symptomatic, are associated with cyclical pain in relation to the menstrual cycles. A combination of hyper-responsiveness to estrogen and progesterone, and a variety of secondary paracrine

and autocrine mediators is responsible for the increased pain and growth of the fibroid [9].

Leiomyomas are commonly seen in the uterus, but they are also found in the broad ligament, ovaries, and vagina and rarely on the anterior abdominal wall [1-3]. Abdominal wall fibroids are really rare, thought to follow seeding following surgical resection of uterine fibroids. There are very few reported cases of isolated abdominal wall fibroids in the literature without previous abdominal surgeries or presence of uterine fibroids as reported in our case [6,7].

The commonest primary diseases of the rectus muscle sheath are desmoid tumor and rectus sheath hematoma. Leiomyoma of the rectus muscle sheath is extremely rare [10]. Our case differs with its counterparts with the patient's non-surgery history, which is thought to be important for seeding process for this kind of rare localizations of leiomyomas.

Also we would like to mark the importance of intraoperative decision making in these kind of extraordinary cases. For instance if we did not search for the mass, which was reported on the CT scan, and thought that the mass that mentioned at CT had been a misdiagnosed image; then we would close the patient without identifying and extracting the mass. In these kinds of issues it is really important for a surgeon to be skeptical and obsessive about the inconsistent intraoperative and preoperative findings. If abdominal palpation or bimanual physical examination does not work, then intraoperative vaginal or abdominal ultrasound scanning could be another alternative in these kinds of odd situations not to disregard the preoperatively diagnosed mass.

As a conclusion, while evaluating a patient with an abdominal mass, which was revealed prior to the operation, extraordinary located leiomyomas such as in the vicinity of rectus sheath should be kept in mind.

References

1. Stewart EA. Uterine fibroids. Review Lancet. 2001;357(9252):293-8. doi: 10.1016/S0140-6736(00)03622-9.
2. Moon HS, Koo JS, Park SH, Park GS, Choi JG, Kim SG. Parasitic leiomyoma in the abdominal wall after laparoscopic myomectomy. Fertil Steril. 2008 Oct;90(4):1201.e1-2. doi: 10.1016/j.fertnstert.2007.08.068..
3. Muffly T, Vadlamani I, Weed JC. Massive leiomyoma of the broad ligament. Obstet Gynecol. 2007;109(2 pt 2):563-5.
4. Igbese GO, Mabiaku TO, Ebeigbe PN, Abedi HO. Solitary anterior abdominal wall leiomyoma in a 31-year-old multipara woman: a case report. Cases Journal. 2009;2:113. doi:10.1186/1757-1626-2-113.
5. Andersen J. Growth factors and cytokines in uterine leiomyomas. Semin Reprod Endocrinol. 1996;14(3):269-82.
6. Lambroza A, Tighe MK, DeCosse JJ, Dannenberg AJ. Disorders of the rectus abdominis muscle and sheath: a 22-year experience. Am J Gastroenterol. 1995;90(8):1313-7.
7. Ryan GL, Syrop CH, Van Voorhis BJ. Role, epidemiology, and natural history of benign uterine mass lesions. Clin Obstet Gynecol. 2005;48(2):312-24.
8. Wallach EE, Vlahos NF. Uterine myomas: an overview of development, clinical features, and management. Obstet Gynecol. 2004;104(2):393-406.
9. D'souza C, Bhat S, Purushothaman, Dhanej. De novo growth of leiomyoma from rectus sheath: A rare presentation. Ann Trop Med Public Health 2012;5(4):390-2.
10. Khan AT, Shehmar M, Gupta JK. Uterine fibroids: current perspectives. International Journal of Women's Health. 2014;(6):95-114. doi:10.2147/IJWH.S51083.