Isolated Metastasis of Uterine Leiomyosarcoma to the Small Bowel Diagnosed Initially as Uterine Leiomyoma: A Case Report and Review of the Literature

Semmar A*, Mouden K, Laanaz S, ELallam O, Kabdani T, Elkacemi T, Majjaoui SEL and Benjaafar N

1Department of Radiotherapy, National Institute of Oncology, University Mohammed V, Rabat, Morocco
2Department of Medical oncology, National Institute of Oncology, University Mohammed V, Rabat, Morocco

Abstract

Introduction: Uterine sarcoma is rare, Leiomyosarcoma is the main type of sarcoma that may resemble to leiomyoma. Metastasis to small bowel is extremely rare, treatment is chemotherapy and the prognosis is unfavorable.

Case presentation: A 41-year-old Moroccan women, with no significant past medical history, was diagnosed with intracavitary myoma. The patient underwent subtotal hysterectomy with bilateral salpingectomy. Pathology findings indicated high grade leiomyosarcoma. The patient was re-operated, she underwent bilateral oophorectomy, omentectomy, segmental small bowel resection and excision of uterus cervix. Histopathology revealed a metastatic lesion of the primary uterine leiomyosarcoma of the small bowel. The patient was treated by chemotherapy: Doxorubicin 75 mg/m² every 3 weeks for 6 cycles. The follow-up of this patient is 10 months and her ECOG is 0.

Conclusion: Leiomyosarcoma is the main type of sarcoma that may resemble to leiomyoma. Metastasis to small bowel is rare, treatment is chemotherapy and the prognosis is poor.

Keywords: Uterine leiomyosarcoma; Small bowel; Surgery; Chemotherapy

Introduction

Uterine sarcoma is rare, Leiomyosarcoma is the main type of sarcoma that may resemble to leiomyoma. Lungs, liver, bones, and brain are the common sites of metastases through hematogenous dissemination [1]. Metastasis to small bowel is extremely rare, treatment is chemotherapy and the prognosis is unfavorable [2,3].

Case Report

A 41-year-old Moroccan women, with no significant past medical history, presented abdominal pain and uterine bleeding. Physical examination revealed an enlarged uterus. A pelvic ultrasound showed echogenic intracavitary myoma finely calcified measuring 5 × 6 × 7 cm. Preoperative Magnetic resonance imaging MRI was not realized. The patient was operated, she underwent subtotal hysterectomy with bilateral salpingectomy. Pathology findings indicated high grade leiomyosarcoma submucosal extensive and necrotic. Postoperative magnetic resonance imaging MRI of abdomen and pelvis revealed sequelae of subtotal hysterectomy with a cervix with a normal signal (Figure 1). Chest CT was normal. The patient was re-operated, she underwent bilateral oophorectomy, omentectomy, segmental small bowel resection the jejunum and excision of uterus cervix.

Histopathology revealed a metastatic lesion of the primary uterine leiomyosarcoma of the small bowel (Figure 2). It seems to be a metastasis and not direct extension. Chemotherapy treated the patient: Doxorubicin 75 mg/m² every 3 weeks for 6 cycles. Follow-up of this patient is planned for every 3 months for 2 years, every 6 months for 3 years, and annually for life. Her follow-up is 10 months and her ECOG is 0.

Discussion

Benign uterine leiomyomas are the most common pelvic neoplasm in women estimated lifetime risk of 70% in white women and 80% in black women [4,5]. Uterine sarcoma is a rare heterogeneous group of tumors of mesenchymal origin, 3 to 7/100,000 in the United States

*Corresponding author: Afaf Semmar, Department of Radiotherapy, National Institute of Oncology, University Mohammed V, Rabat, Morocco, Tel: +22371990282; E-mail: semmar.afaf@gmail.com

Received November 02, 2016; Accepted December 12, 2016; Published December 17, 2016


Copyright: © 2016 Semmar A, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.
population, it represents 8% of uterine malignancies. They comprise
leiomyosarcoma, endometrial stromal sarcoma, undifferentiated
endometrial sarcoma, and Aden sarcoma [6] and has a poor prognosis
[7]. Leiomyosarcoma is the most common histological subtype of
uterine sarcomas. it may result from a sarcomatous transformation in
a benign leiomyoma in 0.2% of cases but the great majority arise de
novo [8].

For both leiomyomas and sarcoma, the primary presenting
symptoms are abnormal uterine bleeding, pelvic pain or pressure, or
a pelvic mass, making the difference between leiomyoma and sarcoma
difficult [9-11].

Leiomyosarcoma is the main type of sarcoma that may resemble
to leiomyoma. Metastatic neoplasm may be found in women with
sarcoma but not with leiomyomas. Uterine sarcomas spread via intra-
abdominal, lymphatic, or hematogenous routes. Hematogenous spread
is most often to the lungs. Uterine leiomyosarcoma can invade small
bowel by direct extension, hematogenous dissemination, implantation,
or by lymphatic route [12].

There is no pelvic imaging modality that can reliably differentiate
between benign leiomyomas and uterine sarcomas. Leiomyomas and
uterine sarcomas appear similar; both are focal masses within the
uterus and both can have central necrosis. Pelvic ultrasound followed
by MRI is the most useful imaging strategy [13].

Uterine sarcomas is a histologic diagnosis, and they are most
commonly diagnosed following surgery for presumed leiomyomas.
Anatomopathology criteria to the diagnosis of uterine sarcomas are:
mitotic index, cellular atypia, cellularity, mitotic index and geographic
areas of coagulative necrosis separated from viable neoplasm. The more
features exhibited by the lesion, the more likely it is to have clinically
aggressive behavior [14,15].

Leiomyosarcoma of small bowel metastasis from uterine
leiomyosarcoma is treated by chemotherapy: doxorubicin alone,
gemcitabine alone, or gemcitabine plus docetaxel [16]. Surgical
resection is the treatment for lesions confined to the uterus. small
bowel leiomyosarcoma secondary to uterine leiomyosarcoma is a sign
of advanced disease with poor prognosis, with a five-year survival rate
ranging from 18.8% to 68% [17].

Conclusion

Leiomyosarcoma is the main type of sarcoma that may resemble
to leiomyoma. Metastasisis to small bowel is rare, treatment is chemotherapy
and the prognosis is unfavorable.

References
leiomyosarcoma of the uterus: unusual presentation of a case with late
small bowel metastasis from uterine leiomyosarcoma. Israel Med Assoc J 12:
309-310.
leiomyoma in black and white women: ultrasound evidence. Am J Obstet
Gynecol 188: 100.
5. Serden SP, Brooks PG (1991) Treatment of abnormal uterine bleeding with the
and end results analysis of 2677 cases of uterine sarcoma 1989-1999. Gynecol
Oncol 93: 204.
role of MR imaging in treatment stratification of patients with gynecologic
malignancies: What the radiologist needs to know. Radiology 266: 717-740.
patients with leiomyosarcoma of the uterus: Prognostic indicators, surgical
management, and adjuvant therapy. Gynecol Oncol 89: 460.
cases over a 16-year period analysis. Eur J Gynaecol Oncol 29: 129.
uterine sarcomas. Lancet Oncol, 10: 1188.
18: 535.
smooth muscle tumors from transcriptional profiling. Genes Chromosomes
Cancer 40: 97.
gemcitabine, docetaxel plus gemcitabine, doxorubicin, or trabectedin in
inoperable, locally advanced, recurrent, or metastatic uterine leiomyosarcoma: