HEALTH RESEARCH IN AFRICA
High Quality Research with Impact on Clinical Care

Case Report

Leiomyomas of the Abdominal Wall: A Case Report

Léiomyomes de la Paroi Abdominale : A Propos d'un Cas

Yao Evrard Kouame[1,2,3], Abraham Hognou Yao[1] Yeo Donafologo[1,2], Coulibaly Noel[1,2]

Affiliations
1. Urology Department, Treichville University Hospital
2. Department of Surgery and Specialties, Felix Houphouët Boigny University
3. Department of Surgery, Abidjan Military Hospital

Auteur correspondant
Yao Evrard Kouamé,
assistant professor (Urology)
University of Felix Houphouët Boigny,
BP 903 Abidjan 01
Tel : (225) 0767977540
Email: evrardkouameyao@gmail.com

Key words : Leiomyoma, Abdominal wall, Abidjan

Mots clés : Léiomyome, Paroi Abdominale, Abidjan

Article history
Submitted: 20 September 2024
Revisions requested: 6 October 2024
Accepted: 15 October 2024
Published: 26 October 2024

ABSTRACT

Leiomyoma is a benign tumor of the smooth muscle fibres. It is usually found in the gynacological and digestive tracts. Extra uterin locations in women are rare. These locations cause pre operative diagnosis problems. We report a case of leiomyoma of the right flank wall. The patient was 43 years old with 3 pregnancies and 3 child births. She consulted for a hard, painless tumor of the right flank that had apearred 3 months ago. Radiological exams concluded that it was a mass of the wall extending into the retroperitoneum. The radiological exam could not determine the organ affected. Cytopuncture of the mass did not reveal any malignant cells. During intervention we realised that the mass depended on the muscles of the anterolateral wall of the flank and extended into the iliac fossa and into the pelvis. Excision was performed in 2 sections, and histology revealed a leiomyoma. The post-operative course was straightforward, with no recurrenced after 10 months. There are extra uterin localisations of leiomyomas whose diagnosis is based on histology.

RÉSUMÉ

Le léiomyome est une tumeur bénigne des fibres musculaires lisses. On le retrouve généralement dans les organes gynécologiques et digestives. Les localisations extra-utérines sont rares chez les femmes. Toutefois, localisations posent des problèmes de diagnostic préopératoire. Nous rapportons un cas de léiomyome de la paroi du flanc droit. La patiente était âgée de 43 ans avec 3 grossesses et 3 accouchements. Elle a consulté pour une tumeur dure et indolore du flanc droit apparue il y a 3 mois. Les examens radiologiques ont conclu à une masse de la paroi abdominale s'étendant dans le rétropéritoine. Par ailleurs, cet examen radiologique n'a pas permis de déterminer l'organe touché. La cytoponction de la masse n'a pas révélé de cellules malignes. En per opératoire, nous avons réalisé que la masse dépendait des muscles de la paroi antéro-latérale du flanc et s'étendait dans la fosse iliaque et dans le bassin. L'excision a été réalisée en 2 sections et l'histologie a révélé un léiomyome. L'évolution post-opératoire a été simple, sans récidive après 10 mois. Il existe des localisations extra utérines de léiomyomes dont le diagnostic repose sur l'histologie.

INTRODUCTION

Leiomyoma is a benign tumor arising from smooth muscle cells. In women, the uterus is one of most affected organs [1]. The extra-uterin location of uterin leiomyomas is rare and the physio-pathogenesis is poorly understood. This location causes diagnosis problems, especially preoperative diagnosis, intraoperative and post operative management, evolution and prognosis [2].
We report a case of an atypical location of a leiomyoma in the right flank wall in a female patient.

CASE PRESENTATION

Mrs O.M 43 years old. She had 3vaginals deliveries. She still had regular menstrual cycles.
She consulted for a mass on her right flank. The mass was hard, painless and had apearred 3 months ago. There was no fever reported, neither digestive or urinary signs, and no weight loss.
Physical examination revealed hard, regular, roughly oval mass on the right flank, 10 cm long.

Copyright © 2024. The Authors. This is an open access article published by HRA under the CC BY NC ND 4.0 license

The mass was fixed deep down. The surrounding skin was not affected. The lymph nodes were free.

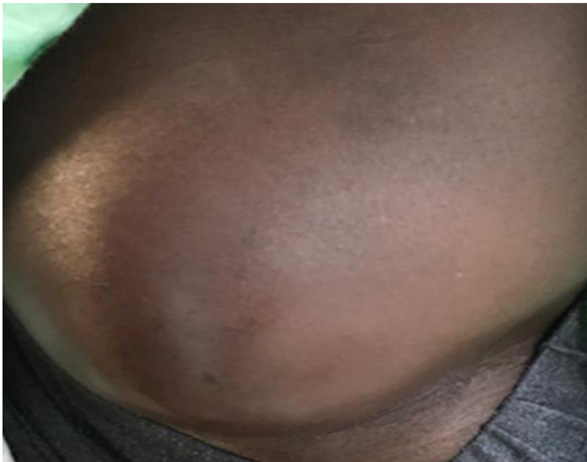

Figure 1: mass of the right flank

Radiological examinations revealed a tumor in the right flank that had developped in the wall muscles. The tumor extended into retroperitoneal and pelvis. The digestive tracts and bone framework were not affected.

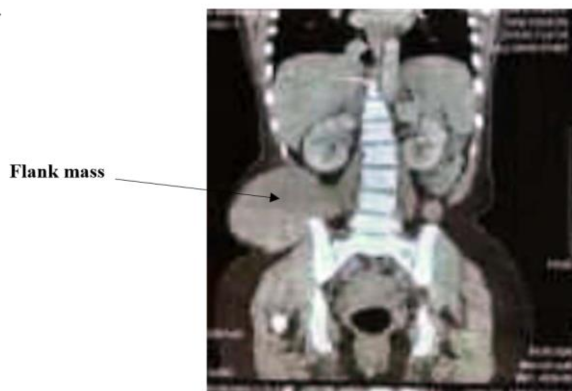

Figure 2: CT scan of a mass in the right flank extending into the retroperitoneum

Cytopuncture of the mass was not contributory.
During intervention, it was a hard, fixed mass with no real cleavage plane. The mass was removed in two sections. Post-operative management was straightforward.

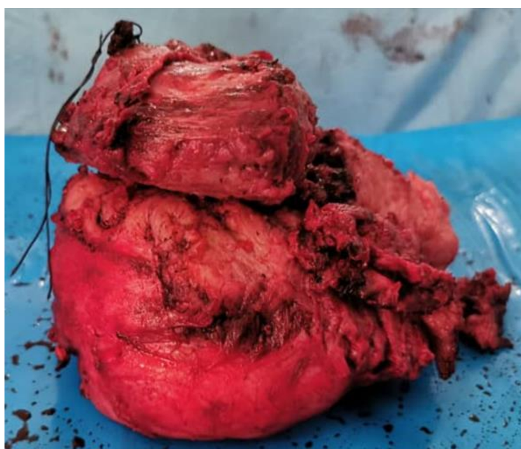

Figure 3: Surgical specimen of the mass

We did not realised any recurrency, with a follow-up time of 10 months.

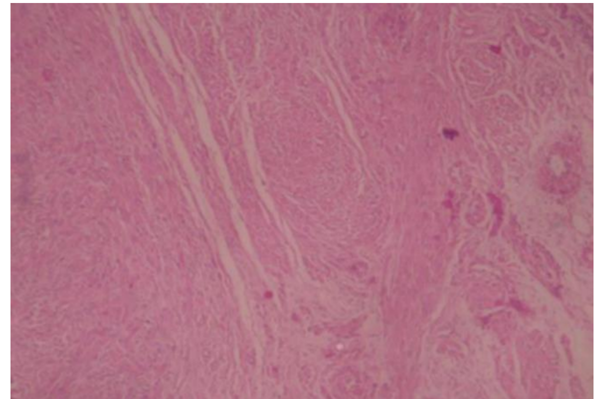

Figure 5: spindle cells (histology)

DISCUSSION

The presentations of ectopic leiomyomas most frequently reported in the literature are diverse. Benign metastatic leiomyomas, parasitic leiomyomatosis and retroperitoneal masses are described [3]. Retroperitoneal leiomyomas are rare. In their review, Poliquin et al identified 105 cases of retroperitoneal leiomyomas reported between 1941 and 2007 [4]. Preoperative diagnosis can be difficult due to the rarity of this tumor and it's non-specific clinical presentation. Surgical excision can be performed either by laparotomy or laparoscopy [5].
Benign metastatic leiomyomas are a progressive form. Yanoush described pulmonary, pelvic and retroperitoneal metastases. [6].
Recurrent forms are due to incomplete tumor excision. [7]. Non-operable forms may be treated with LHRH analogue hormonotherapy. [8].
The diagnosis of extra uterine leiomyoma is histological. However, various imaging techniques can help to make the diagnosis. The hypodense, circumscribed lesion with heterogeneous enhancement seen on CT scan can be an important element of diagnosis orientation. [9]
Four main diagnoses can sometimes be confused in pelvic-abdominal forms of leiomyoma. These are ovarian fibroma, fibrothecoma, fibrosarcoma, and stromal tumours of the digestive tract. [10]

CONCLUSION

Leiomyomas are rare benign tumors. The diagnosis is often only made postoperatively after resection of the mass. They can occur in a variety of locations. It is important not to under estimate the diagnosis in order to ensure appropriate treatment.

CONFLICT OF INTERESTS

The authors declare that they have no conflicts of interest in relation to this article.

REFERENCES

1. Islam, M. S., Protic, O., Giannubilo, S. R., Toti, P., Tranquilli, A. L., Petraglia, F., … Ciarmela, P. (2013). Uterine Leiomyoma: Available Medical Treatments and New Possible Therapeutic Options. The Journal of Clinical

Copyright © 2024. The Authors. This is an open access article published by HRA under the CC BY NC ND 4.0 license

Endocrinology & Metabolism, 98(3), 921–934. doi:10.1210/jc.2012-3237

2. Robboy, S. J., Bentley, R. C., Butnor, K., & Anderson, M. C. (2000). Pathology and Pathophysiology of Uterine Smooth-Muscle Tumors. Environmental Health Perspectives, 108, 779. doi:10.2307/3454306
3. Fasih N, Shanbhogue AKP, Macdonald DB, et al. Leiomyomas beyond the uterus: unusual locations, rare manifestations. Radiographics 2008;28(7):1931—48.
4. Poliquin V, Victory R, Vilos GA. Epidemiology presentation and management of retroperitoneal leiomyomata: systematic literature review and case report. J Minim Invasive Gynecol 2008;15(2):152—60.
5. Olive, D. L. (2000). Review of the Evidence for Treatment of Leiomyomata. Environmental Health Perspectives, 108, 841. doi:10.2307/3454316
6. Yasunobu F, Noriyoshi S. Pulmonory benign metastasizing leiomyoma from the uterus in postmenopausal woman: report of a case. Surg Today 2004; 34:55–7.
7. Paal E. Retroperitoneal leiomyomas. Am J Surg Pathol 2001; 25:1355–63.
8. Goyle K, Moore D. Benign metastasizing leiomyomatosis: case report and review. Am J Clin Oncol 2003; 26:473–6
9. Warshauer DM, Mandel SR. Leiomyoma of the extraperitoneal round ligament: CT demonstration. Clin Imaging 1999 ; 23 :375–6.
10. 10- Stevens L. In: Anatomie pathologique générale et spéciale. Paris : De Boeck and Larcier s.a; 1997. p. 361–86.

Copyright © 2024. The Authors. This is an open access article published by HRA under the CC BY NC ND 4.0 license