International Journal of Academic Health and Medical Research (IJAHMR)
ISSN: 2643-9824
Vol. 7 Issue 12, December - 2023, Pages: 115-119

Myoma of the round ligament: a case report and literature review

EL Moctar Mohamed Abdellahi[1]*, Sara Boudhas[1],M.B Idrissi[1], K. Saoud[1], N. Mamoun[1]1, S. Errarhay[1], C. Bouchikhi[1], A. Banani[1], EL Malih Sara[2], M. Boubbou[2]

[1]Obstetrics Gynecology I Department of the CHU HASSAN II, Faculty of Medicine, Sidi Mohamed Ben Abdellah University, FES, Morocco
[2]Mother and Child Radiology Department of the CHU HASSAN II, Faculty of Medicine, Sidi Mohamed Ben Abdellah University, FES, Morocco

Abstract: *Leiomyoma is a benign tumor of the uterus, developed from smooth muscle cells. Leiomyoma of the round ligament is a rare form of leiomyomatosis with an atypical location. We report in this article the clinical case of a leiomyoma of the round ligament discovered by chance during a standard spinal X-ray, in a 63 year-old patient, with a history of subtotal hysterectomy for a polymyomatous uterus, and analyze, through a review of the literature, the epidemiological, diagnostic and therapeutic aspects of this pathology.*

Keywords*: round ligament myoma, Radiology, histology.*

Introduction :

Uterine leiomyoma is the most frequently encountered benign tumor in women with an estimated frequency of 30% in patients over 35 years of age [1-2]. Typically located in the uterus, in its typical location (uterine), it can cause pelvic pain, infertility and metrorrhagia in case of endocavitary myomas. Ultrasound has a sensitivity of 69% (examiner dependent), whereas MRI has a sensitivity of 100% with a specificity of 91% [3]. Their ectopic localization is rare but poses many problems, especially in terms of preoperative diagnosis and intraoperative management [4]. We report a clinical observation of an ectopic location of a myoma in the round ligament, in a patient with a history of subtotal hysterectomy for a polymyomatous uterus. We then discuss a review of the literature on ectopic locations of these lesions.

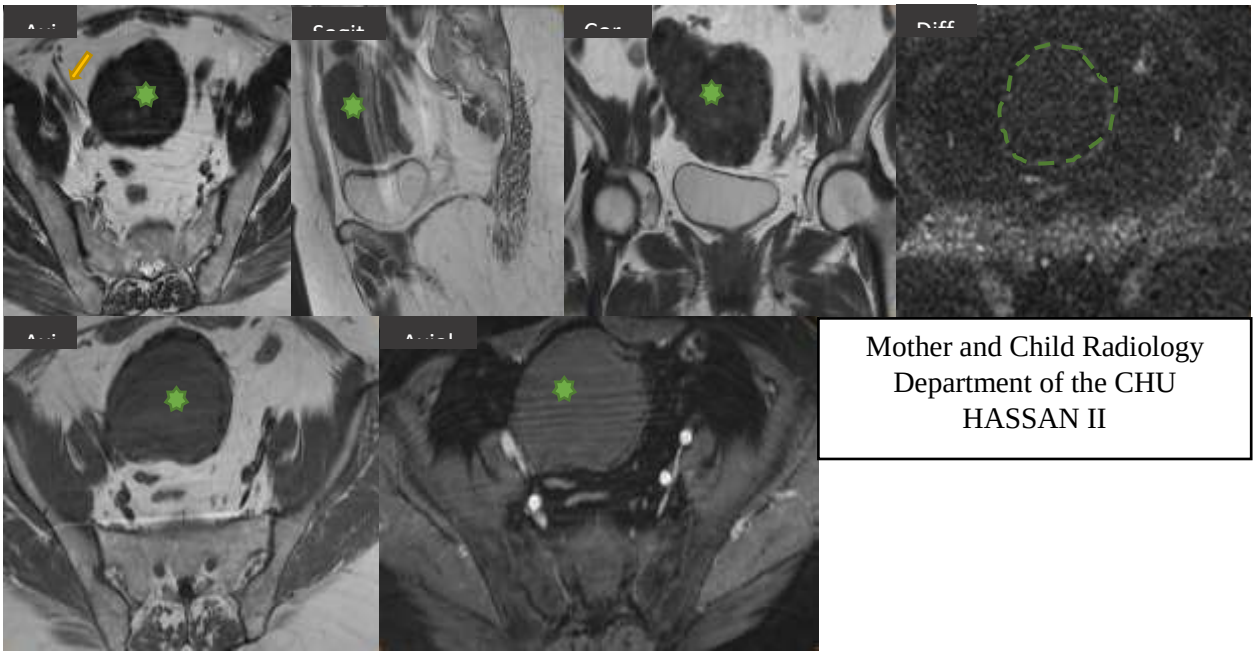
Observation :

This is a 60 year old patient, single, postmenopausal, with a history of a subtotal hysterectomy, who consulted for the management of a calcified pelvic mass of fortuitous discovery, during a standard radiography of the lumbar spine, no palpable mass on physical examination, the rest of the examination was without particularity.

Pelvic ultrasound: a hypoechoic pelvic mass, homogeneous, containing calcification, taking the color Doppler in periphery of 08 x 08 cm, the uterus and ovaries not seen (subject to an ultrasound made by a suprapubic probe)

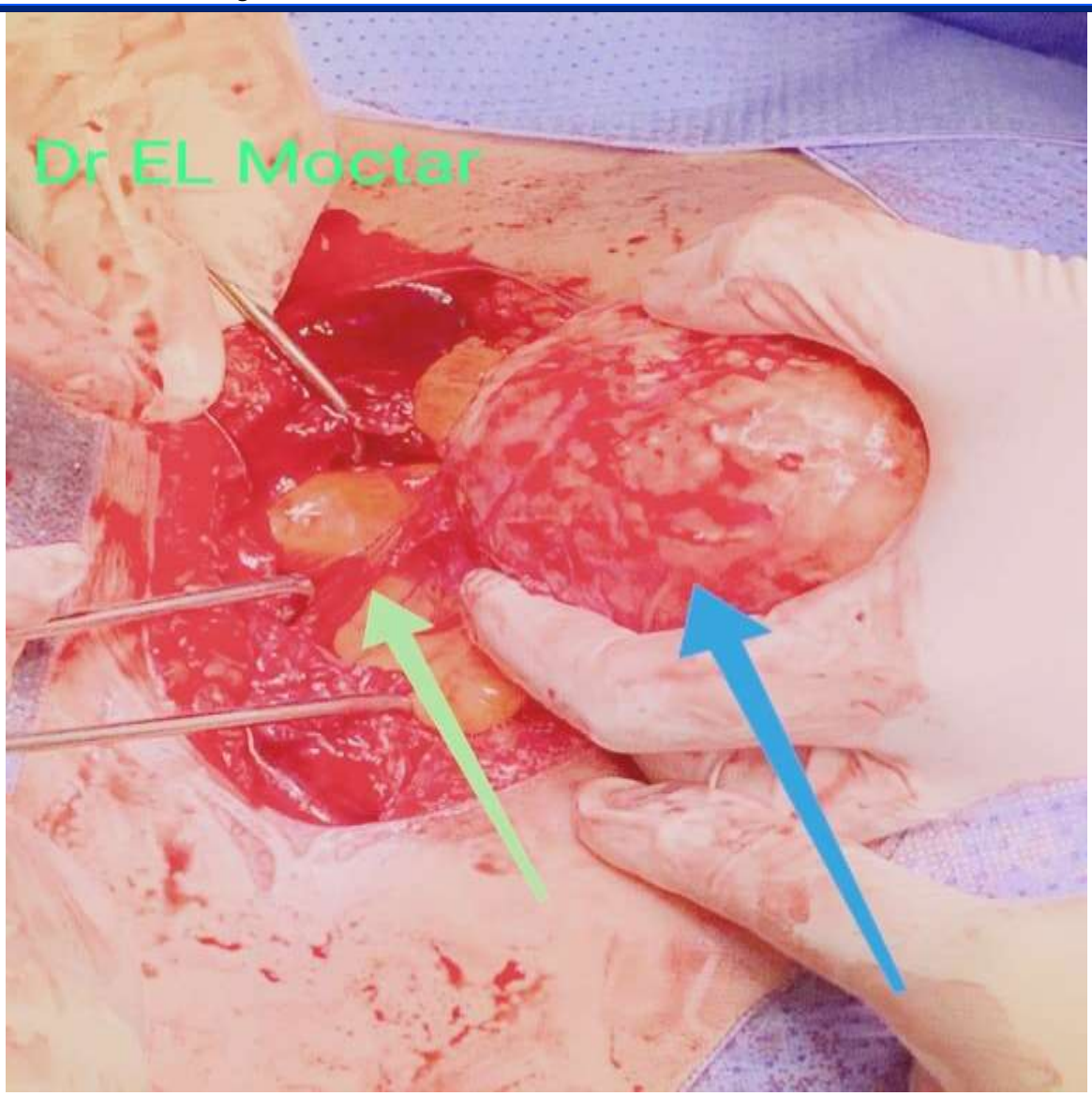
Pelvic MRI: in favour of a round ligament myoma

The patient underwent laparotomy, with exploration: a whitish tissue mass of hard consistency, bumpy depending on the round ligament measuring 10 x 08 cm; uterus not seen, a resection of this mass was carried out, the histological examination of the operative part confirmed the diagnosis of leiomyoma, the postoperative course was simple



Mother and Child Radiology
Department of the CHU
HASSAN II

Myome du ligament rond, chez une patiente ayant bénéficié d'une hystérectomie sub-totale:



Myoma of the round ligament in a patient undergoing subtotal hysterectomy:

A pelvic mass (*blue arrow*) at the expense of the right round ligament (*green arrow*).

Discussion

The ectopic locations of myomas reported in the literature are the benign metastatic leiomyomas (BML) first described by Steiner in 1939 [5]. Just over 100 cases have been published in the literature since then [7,8,9,10]. It is manifested by atypical locations of leiomyomas (skin, bone, heart, brain, marrow, mediastinum, ovary, round ligament...) [6-8,9,11,12]. LMB preferentially affects premenopausal women with an average age of 47 years [5,11,13].

Generally they present a previous history of uterine leiomyoma, operated or not (myomectomy or hysterectomy) and this is the case of our patient who had a previous subtotal hysterectomy for a polymyomatous uterus [6,7,11]. More than 80% of these patients would have a history of uterine surgery [1,11].

The average duration between the first surgery and the diagnosis of LMB varies greatly from one study to another, ranging from 8.8 years [11] to 23 years [7] and 14 years in our patient. Its etiology remains uncertain but several hypotheses have been described. The most commonly accepted is the hematogenous dissemination of uterine leiomyoma emboli during uterine surgery [1,6,14,8], disseminated peritoneal leiomyomatosis, intravenous leiomyomatosis, and retroperitoneal leiomyoma. Roue et al [15] described three cases of ectopic leiomyomas in the round ligament, broad ligament and ovary. Ziouziou et al [16] report a case of retroperitoneal leiomyoma (RPL), while Poliquin et al [8] in a review of the literature report 105 cases of RPL between 1941 and 2007.

Conclusion :

We reported the case of an ectopic localization of a myoma developed at the round ligament, in a patient with a history of subtotal hysterectomy for a polymyomatous uterus. We discussed the origin of these lesions. An updated literature review should describe the incidence of these tumors in order to remove the controversy about their existence, as they are increasingly revealed in the literature.

Conflicts of interest :

The authors declare no conflict of interest

References:

1. Yoon J, Spies JB, Caridi TM. Benign Metastasizing Leiomyomas Following Myomectomy and Uterine Artery Embolization. Cardiovasc Intervent Radiol. 2017;40: 1796–1799. doi:10.1007/s00270-017-1696-z
2. Meddeb M, Chow RD, Whipps R, Haque R. The Heart as a Site of Metastasis of Benign Metastasizing Leiomyoma: Case Report and Review of the Literature. Case Rep Cardiol. 2018;2018: 7231326.
3.Pritts FS 2009 Soares FS 2009
4.Christin-Maitre S, Wirthner D. Fibromes utérins: classification et physiopathologie. J. Gynecol Obstet Biol reprod. Novembre 1999; 28(7): 707-14.
5. Steiner PE. Metastasizing fibroleiomyoma of the uterus: Report of a case and review of the literature. Am J Pathol. 1939;15: 89-110.7.
6. Fasih N, Prasad Shanbhogue AK, Macdonald DB, Fraser-Hill MA, Papadatos D, Kielar AZ, et al. Leiomyomas beyond the uterus: unusual locations, rare manifestations. Radiogr Rev Publ Radiol Soc N Am Inc.
7. Miller J, Shoni M, Siegert C, Lebenthal A, Godleski J, McNamee C. Benign Metastasizing Leiomyomas to the Lungs: An Institutional Case Series and a Review of the Recent Literature. Ann Thorac Surg. 2016;101: 253–258. doi:10.1016/j.athoracsur.2015.05.107
8. Mahmoud MS, Desai K, Nezhat FR. Leiomyomas beyond the uterus; benign metastasizing leiomyomatosis with paraaortic metastasizing endometriosis and intravenous leiomyomatosis: a case series and review of the literature. Arch Gynecol Obstet. 2015;291: 223–230. doi:10.1007/s00404-014-3356-8
9. Asumu H, Estrin Y, Mohammed TL, Verma N. Benign Metastasizing Leiomyoma. Curr Probl Diagn Radiol. 2017;46: 257–259. doi:10.1067/j.cpradiol.2016.07.002
10. Abu Saadeh F, Riain CO, Cormack CM, Gleeson N. Lung metastases from benign uterine leiomyoma: does 18-FDG-PET/CT have a role to play? Ir J Med Sci. 2018; doi:10.1007/s11845-018-1876-0
11. Barnaś E, Książek M, Raś R, Skręt A, Skręt-Magierło J, Dmoch-Gajzlerska E. Benign metastasizing leiomyoma: A review of current literature in respect to the time and type of previous gynecological surgery. PloS One. 2017;12: e0175875. doi:10.1371/journal.pone.0175875
12. Psathas G, Zarokosta M, Zoulamoglou M, Chrysikos D, Thivaios I, Kaklamanos I, et al. Leiomyomatosis peritonealis disseminata: A case report and meticulous review of the literature. Int J Surg Case Rep. 2017;40: 105–108. doi:10.1016/j.ijscr.2017.09.016

13. Sawai Y, Shimizu T, Yamanaka Y, Niki M, Nomura S. Benign metastasizing leiomyoma and 18-FDGPET/ CT: A case report and literature review. Oncol Lett. 2017;14: 3641–3646. doi:10.3892/ol.2017.6609
14. Vaquero ME, Magrina JF, Leslie KO. Uterine smooth-muscle tumors with unusual growth patterns. J Minim Invasive Gynecol. 2009;16: 263–268. doi:10.1016/j.jmig.2009.01.013
15. Roue A, Laboisse C, Winer N, Darnis E, Bouquin R, Lopes P, Philippe HJ. Léiomyome pelvien extra-utérin : diagnostic et prise en charge. J Gynécol Obstet Biol Reprod. Juin 2007; 36(4):403-8.
16. Ziouziou I, Bennani H, Zouaidia F, Ghaouti M El, Haddan A, Mahassini N et al. Léiomyome rétro-péritonéal: à propos d'un cas. Prog Urol. Avril 2014 ; 24(5) :262-65.