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Retrorectal cystic hamartoma: A case report

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ABSTRACT

Retrorectal tumors are a rare group of tumors that can be of benign or malignant origin, the differential diagnosis concerns all retrorectal tumors. We report a case of a huge retrorectal cystic hamartoma in which surgical excision was performed.

A 58 years-old female presented with a low back pain and constipation. Digital rectal examination found a renitent cystic mass compressing the posterior wall of the rectum. Colonoscopy showed a tumor compressing the rectum. Magnetic resonance imaging (MRI) scan showed a presacral cystic formation. Surgical resection using laparotomy was performed. The patient made a full recovery and was released eight days after the surgery. Histological examination of the mass revealed a retrorectal cystic hamartoma.

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1. Introduction

Retrorectal tumors are a rare group of tumors that can be of benign or malignant origin; they are asymptomatic in most cases [1]. Most of these lesions are palpable on digital rectal examination. Once detected, radiologic evaluation (especially pelvic magnetic resonance imaging [MRI]) is invaluable in surgical planning. Most retrorectal tumors ultimately require surgical resection (without preoperative biopsy). Although biopsy can be considered for unresectable lesions or in patients who will not tolerate surgery [2], we report a case of Retrorectal Cystic Hamartoma in which surgical excision was performed. This work has been reported with respect to the SCARE 2020 criteria [3].

2. Case presentation

A 58 years-old female with a medical history of end-stage renal disease on hemodialysis operated for renal lithiasis and for post-operative eventration. She consulted for a 7-months course of evolution of low back pain and transit disorders such as constipation. Abdominal examination was normal digital and the rectal

examination found a renitent cystic mass compressing the posterior wall of the rectum.

Pancolonoscopy showed a rounded, extrinsic, non-stenosing tumor compressing the rectum. Enhanced computed tomography (CT) scan showed a regular pre-sacral cystic mass of 13 × 12 × 10 cm (Fig. 1). Magnetic resonance imaging (MRI) scan showed a presacral cystic formation measuring 13 × 11 cm compressing the posterior wall of the rectum (Fig. 2). The fine needle aspiration was not performed in order to avoid the risk of tumor seeding. The patient underwent surgical resection using laparotomy. The exploration of the retrorectal space confirmed the presence of a 12 cm cystic mass that was carefully separated and resected (Fig. 3). The patient made a full recovery and was released eight days after surgery. Histological examination of the mass revealed a retrorectal cystic hamartoma.

3. Discussion

Tumors of the retrorectal space are uncommon. The majority of lesions are benign, and malignancy is found in 15% of the cases. There is a high recurrence rate after surgical resection for malignancy [4]. The differential diagnosis of masses within this space is broad and includes primary tumors of neurogenic, osteogenic, and congenital origin; in addition to metastatic and inflammatory processes [5]. Symptoms of retrorectal tumors are often nonspecific and are related to the location and size of the lesion. Most benign cystic lesions are asymptomatic and are discovered on routine rectal examination. Infection or bony invasion may produce

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Fig. 1. Enhanced computed tomography (CT) scan of the abdomen revealing a large presacral cystic mass.

pain. Large masses (cystic or solid) may cause obstruction, leading to constipation, straining, or overflow incontinence. In our case the symptomatology was made of low back pain and constipation.

Evaluation begins with a careful rectal examination. Almost all retrorectal masses can be palpated, as in our case, and the location, size and proximal extent of the tumor are critical for surgical planning. Flexible sigmoidoscopy or colonoscopy are useful for detecting full-thickness rectal involvement. In this case colonoscopy showed tumor compressing the rectum. Computed tomographic scans and endo-anal ultrasound have been used extensively, however, pelvic MRI is regarded as the most sensitive and specific imaging exam to determine the multiple cyst character of the tailgut and its relation to the adjacent structures. Typically, the cyst will be hypointense in T1w and hyperintense in T2w sequence, heterogeneous content can also be seen [2,6]. In our case, MRI scan showed a presacral cystic formation compressing the posterior wall of the rectum. Preoperative biopsy should not be

attempted (unless the mass is surgically unresectable at presentation) due to risk of spreading dysplastic cells through weakened cyst walls [5]. Treatment is based on complete resection of the lesion to avoid recurrence, infection or malignant degeneration. The approach of the retrorectal space is latero-sacral, abdominal or perineal. The latero-sacral parasacroccigeal approach is heavily relied on, because it allows a good exposition of the anus and the levator ani muscle plan. The abdominal approach, either laparotomy or laparoscopy, is indicated only when large tumors are present or if the tumors grow upwards instead of downwards toward the pelvic area. The abdominal laparoscopic approach gives us the advantage of a finer mesorectum dissection. The perineal access is done with the patient in lithotomy position. Incision is performed on the perineal raphe to reach the retrorectal space [6]. In this case, a surgical resection using laparotomy was performed. Histological examination of the mass revealed a retrorectal cystic hamartoma.

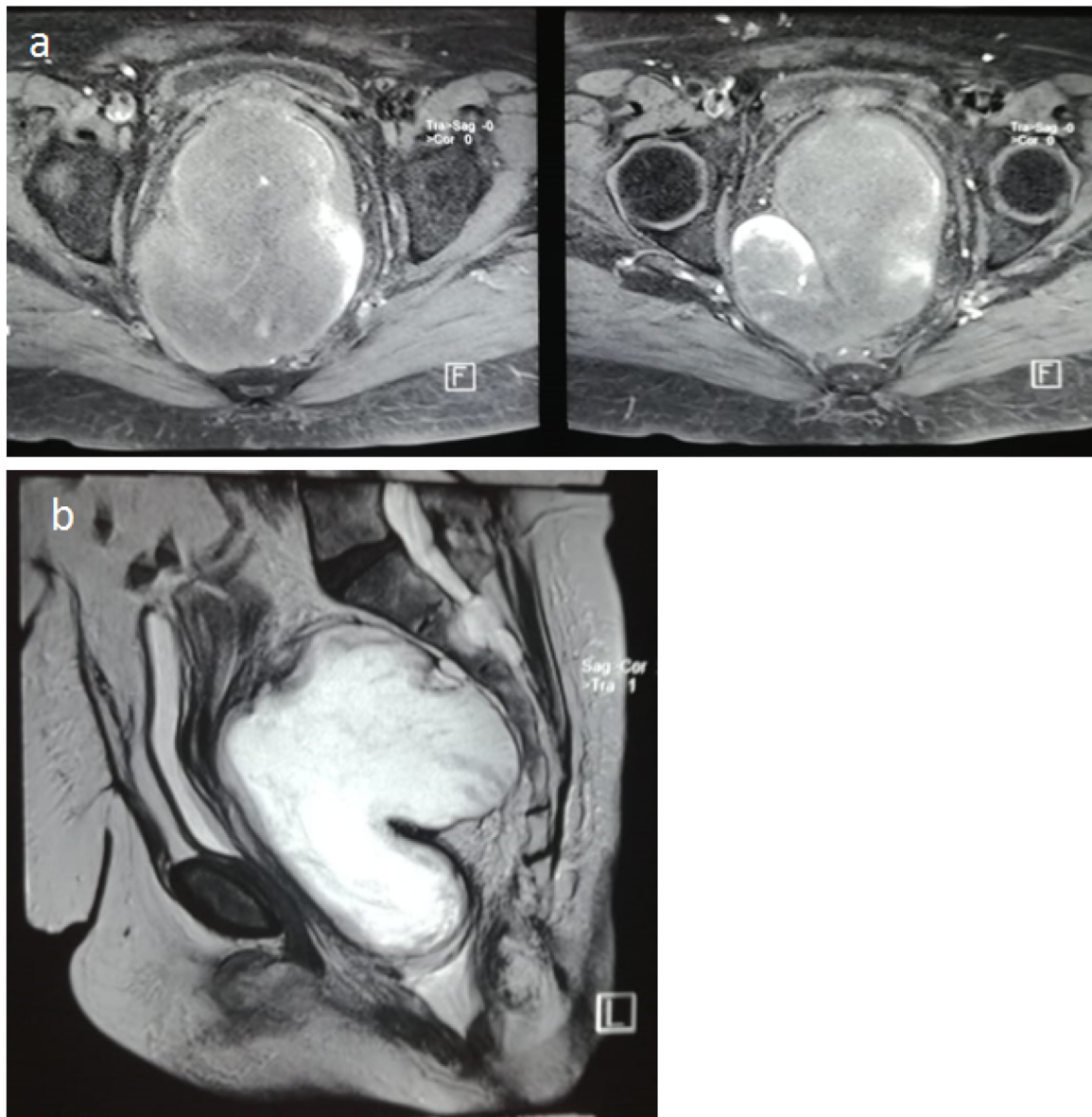


Fig. 2. (a, b) Pelvis magnetic resonance imaging scan (MRI) scan revealing a presacral cystic formation.

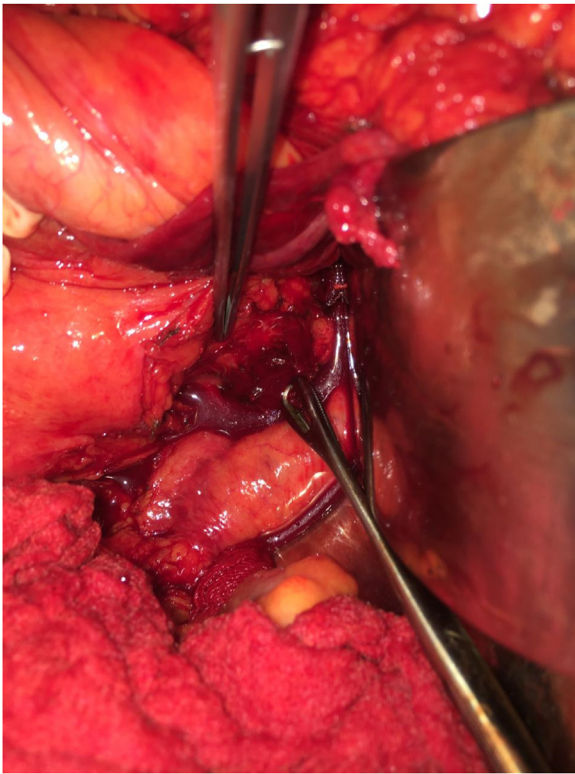


Fig. 3. Intraoperative photograph showing a cystic formation compressing the posterior wall of the rectum.

4. Conclusion

Retrorectal tumors are asymptomatic in most cases. They rarely manifest themselves as a pelvic tumor syndrome, as it is the case with our patient, or as a result of super infection or malignant degeneration. The positive diagnosis is mainly based on rectal examination, rectoscopy, endoscopic ultrasound, and especially pelvic CT and MRI. Several classifications have been proposed. Once the diagnosis of a retrorectal tumor is made, surgical excision is required as soon as possible in order to reduce the risk of complications.

Declaration of Competing Interest

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Ethical approval

I declare on my honor that the ethical approval has been exempted by my establishment.

Consent

Written informed consent for publication of their clinical details and/or clinical images was obtained from the patient.

Author contribution

El karouachi Asmaa: first author and Corresponding author writing the paper and operating surgeon.

Assemar mohamed: writing the paper and operating surgeon.

Jay Rifki Saad: writing the paper and operating surgeon.

Reguibi Driss: study concept.

Boufettal Rachid: study concept.

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References

- [1] G. La Greca, G. Trombatore, G. Basile, P. Conti, Retrorectal tumors: case report and review of literature, *Int. J. Surg. Case Rep.* 77 (2020) 726–729.
- [2] K. Bullard Dunn, Retrorectal tumors, *Surg. Clin. North Am.* 90 (February (1)) (2010) 163–171.
- [3] R.A. Agha, T. Franchi, C. Sohrabi, G. Mathew, A. Kerwan, A. Thoma, et al., The SCARE 2020 guideline: updating consensus Surgical Case Report (SCARE) guidelines, *Int. J. Surg.* 84 (2020) 226–230.
- [4] I. Setton, L.F. Okida, F. Yang, A. Ghuman, J.J. Nogueras, Retrorectal tumors: a 10-year single-institution experience, *J. Am. Coll. Surg.* 231 (October (4)) (2020) S67.
- [5] Suhani, K. Meena, S. Ali, L. Aggarwal, S. Thomas, Retrorectal cystic hamartoma: a problematic 'Tail', *J. Surg. Tech. Case Rep.* 6 (2) (2014) 58.
- [6] P.C. Gutiérrez, M.K. Taghavi, R.D. Sosa, A.P. Salas, V.J. Ovejero, J.L. Ruiz, et al., New surgical approach of retrorectal cystic hamartoma using transanal minimally invasive surgery (TAMIS), *J. Coloproctology* 34 (October (4)) (2014) 260–264.

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