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CASE REPORT

Retrorectal cystic hamartoma: diagnosis with CT scan

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ABSTRACT

Retrorectal cystic hamartoma or "tailgut cyst" is a rare entity, resulting from embryonic remnants of the primary posterior intestine or Tailgut. Imaging essentially in slices allowed the diagnosis of the site and the anatomopathological approach of the lesion confirmed by the histological analysis of the operative parts. The main differential diagnoses are retrorectal teratoma, retrorectal epidermal cyst and rectal duplication. The main complications are recurrence, chronic inflammation leading to anal margin fistulas and carcinomatous degeneration. We report the case of a 40 year old female patient, with no particular pathological history, who consulted for pelvic heaviness.

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Cystic hamartoma, retrorectal , Tailgut cyst.

Introduction

Retro rectal tumors are extremely rare and very varied in adults. They are dominated by chordomas, which are locally malignant tumors mainly observed in males, whereas vestigial cystic tumors are often benign and predominantly in females.

Retro rectal cystic hamartoma (RRCH) is a rare and benign congenital lesion of the presacral space developed from the remnants of the primary posterior intestine.

It is often asymptomatic and discovered incidentally by imaging in women of an average age between 30 and 60 years and requires histological confirmation. The treatment of choice is surgical.

We report the observation of a 40-year-old woman, without any particular pathological history, who consulted for pelvic heaviness, who had a CT scan that showed a retro rectal pelvic mass.

Case report

The patient was 40 years old and had no particular pathological history. She presented with pelvic heaviness associated with right iliac fossa pain.

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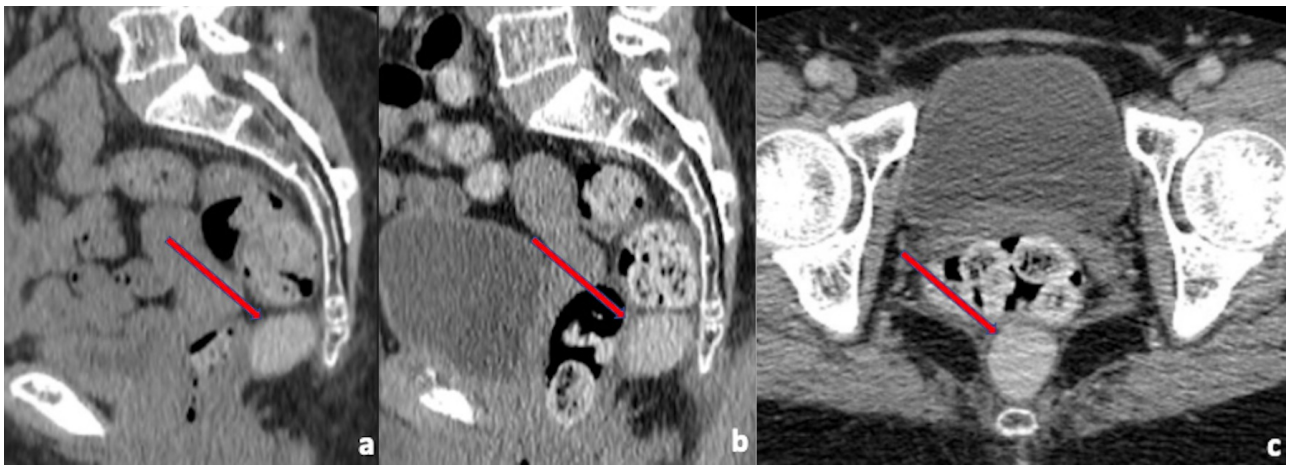


Figure 1: Pelvian CT before injection of ICA in sagittal section (a), and after injection of ICA in sagittal section (b) and axial section (c) showing: a presacrococcygeal cystic mass, well limited, uni loculated, with the thin and regular wall, with homogeneous dense content (100UH), not enhanced after injection of ICA, measuring 32 mm in maximum diameter, coming in contact with adjacent structures (sacrum, coccyx, rectum, levator ani muscles) without signs of an invasion

Inspection and abdominal palpation were unremarkable.

The digital rectal exam revealed a renitent mass bulging in the cul de sac of Douglas.

Pelvic ultrasound revealed a 3 cm fine echogenic cyst.

The CT scan shows a well-limited presacrococcygeal cystic mass, uniloculated, with a thin and regular wall, with homogeneous dense content (100UH), not enhanced after injection of iodinated contrast agent (ICA), measuring 32 mm in maximum diameter, coming into contact with the adjacent structures (sacrum, coccyx, rectum, levator ani muscles) without signs of invasion (Figure 1).

The patient subsequently benefited from resection of this lesion with anatomopathological confirmation of the diagnosis of retrorectal cystic hamartoma.

Discussion

Retrorectal cystic hamartoma (RRCH) is a benign lesion, derived from embryological remnants of the primitive posterior intestine or tailgut [1].

It develops in the space bounded anteriorly by the rectum, posteriorly by the sacrococcygeal piece, inferiorly by the levator and anococcygeal muscles, laterally by the ureters and the iliac vessels [2].

Frequent in children and often malignant, on the contrary, in adults, they are rare lesions, most often benign, with a female predilection [3].

RRCH originates from mature histological elements derived from the three germ layers: squamous epithelium, glandular epithelium, smooth muscle, and fibrous connective tissue [4].

it is often asymptomatic and the main symptom is anal pain at defecation, sometimes associated with rectal pain or pelvic heaviness [4].

Its main complications are fistulas, abscesses, or exceptionally malignant degeneration [5].

The first-line suprapubic ultrasound scan shows a multi-loculated cystic mass with transnasal or finely echogenic content. An endorectal

ultrasound allows specifying the topography of the lesion [5,6].

CT scan without and after intravenous injection of ICA with multiplanar reconstruction shows a presacral cystic mass, well limited, uni or multiloculated, with a thin and regular wall, with contents of variable density, not enhanced after injection of iodinated contrast medium, parietal calcifications may be found [5, 6].

In the case of superinfection, the cyst wall is thick and takes on contrast after injection of ICA [5].

If the RRCH is large, it exerts a mass effect on the rectum.

Magnetic resonance imaging reveals a cystic lesion, with a regular thin wall, uni or multiloculated with a honeycomb aspect, homogeneous.

It presents a T1 hyposignal, T2 hypersignal. In atypical cases, there is a T1 hypersignal if mucinous, protein-rich, or hemorrhagic content and a T2 hyposignal if hemorrhage or keratin deposits [7].

Classically, there are no calcifications, fat, or blood in these lesions [7].

Sequences with gadolinium injection are recommended in order not to miss a malignant transformation, thus to look for intralesional or mural contrast, intracystic vegetations, or infiltration of the perilesional fat [7, 8].

Histologically, it is a uni or multiloculated cystic mass, with a thin wall, mucoid content with variable epithelial coating, parietal calcifications are possible [4].

The main differential diagnoses are teratomas, retrorectal epidermal cysts, meningoceles, chordomas, and rectal duplications [5].

Surgical removal is the treatment of choice even if asymptomatic because of the risk of degeneration [7].

References

1. Mills SE, Walker AN, Stallings RG, Allen MS. Retrorectal cystic hamartoma. Report of three cases, including one with a perirenal component. Arch Pathol Lab Med. Sept 1984;108(9):737-40.
2. Mohamed H, Taieb J, Cherif A, Karim S, Adnene C. Kyste vestigial retrorectal: a propos d'un cas. Pan Afr Med J [Internet]. 2015 [cité 16 févr 2022];22. Disponible sur: http://www.panafrican-med-journal.com/content/article/22/387/full/
3. Almou M, Bennani S, Zerouali N. [Presacral cyst of vestigial origin in adults. Problems of diagnosis and therapy]. J Chir (Paris). Juill 1990;127(6-7):341-6.
4. Delemer M, Detchev R, Dugue T, Gosset P, Houzé de l'Aulnoit D. L'hamartome kystique rétrorectal (HKRR) : à propos d'un cas réséqué par abord vaginal et revue de la littérature. J Gynécologie Obstétrique Biol Reprod. Oct 2011;40(6):569-71.
5. Atioui D, Benmoussa C, Benaissa L, Chakir N, Hassani MRE, Jiddane M, et al. Hamartome kystique retro-rectal. 1999;4.
6. G. De Vurzubuer; Drouilland J; Laurent F; Lafarge V; Tran R. Imagerie des tumeurs rétrorectales de l'adulte. Feuillets de Radiologie,1991, 31 ; n°6 ; 488-49.
7. Faradji A, Derinck A, Coget J, Lair M, Savoye-Collet C. Hamartome kystique rétrorectal ou tailgut cyst : à propos d'un cas. Imag Femme. 1 juin 2020;30(2):98-100.
8. Aflalo-Hazan V, Hoeffel C, Mourra N, Azizi L, Arrivé L, Tubiana JM. Aspects IRM des hamartomes retrorectaux (tailgut cyst). J Radiol 2006;87(10):1396-7.