Case Report

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Cystic lymphangioma of the mesentery: a case report

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ABSTRACT

Cystic lymphangioma of the mesentery is a rare benign malformative tumor of the lymphatic vessels. Mesenteric lymphangioma is predominantly encountered during infancy, yet in uncommon instances, it can manifest in adults. Their clinical expression is polymorphic but nonspecific. Diagnosis is suggested by radiology but only histological examination will confirm the diagnosis. Treatment is surgical and the prognosis is good. Complete resection should be performed whenever possible. Intracystic sclerotherapy is possible for unresectable lymphangiomas. The rarity of these tumors, their diagnostic challenges, and the fact that this case involves an adult patient, prompted us to report the following observation.

Keywords: Cystic lymphangioma, Mesentery, Surgery

INTRODUCTION

Cystic lymphangioma of the mesentery is a benign tumor originating from malformation of the lymphatic system. ^{1,2} Its diagnosis requires histological confirmation. The treatment of choice is complete excision of the lesion. Intracystic injection of sclerosing agents is possible for lesions that are not amenable to resection at the root of the mesentery. ^{3,5}

CASE REPORT

Here, we presented the case of a 64-year-old female patient admitted to our facility for the management of a cystic lymphangioma of the mesentery. The patient had no significant medical history and presented with right hypochondrial pain persisting for three years. Clinical examination revealed mild tenderness in the right hypochondrium. Abdominal CT scan (Figure 1) showed a unilocular cystic mass in the mesentery, rounded and well-defined with regular contours, measuring $61 \times 48 \times 43$ mm

(anteroposterior×transverse×height). There were no septations or vegetations, and the mass respected adjacent structures. A diagnosis of cystic lymphangioma of the mesentery was made.

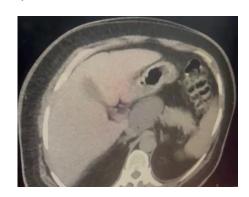


Figure 1: Abdominal CT scan.

Tumor markers were negative. Surgical exploration revealed a mass arising from the mesentery (Figure 2).



Figure 2: Intra-operative view.

The patient underwent a pericystectomy. Histological examination revealed features consistent with cystic lymphangioma of the mesentery (Figure 3). The postoperative course was uneventful with good clinical progress.

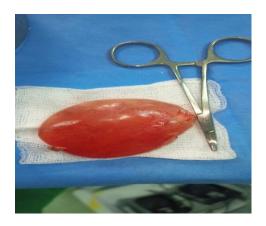


Figure 3: Surgical specimen.

DISCUSSION

Cystic lymphangioma of the mesentery is a benign malformative tumor of the lymphatic system. It is exceptionally rare in adults and typically occurs in the neck and axillary fossa (95%). Intra-abdominal forms are uncommon, accounting for approximately 2 to 10%, and are predominantly found in the mesentery and retroperitoneum. The supramesocolic location is exceedingly rare.

Clinical symptoms are diverse and nonspecific, varying depending on the size and location of the cysts. They may include abdominal pain with or without distension, palpable mass, and even weight loss if symptoms persist over a prolonged period.^{4,5}

The diagnosis, often suspected through imaging, can be made either prenatally or, conversely, later in adulthood, but it requires histological confirmation. CT scan is one of the most sensitive imaging modalities for detecting and characterizing cystic lymphangiomas of the mesentery.

The images obtained may show cysts of varying sizes, filled with fluid and surrounded by connective tissue. CT can also help evaluate the extent and impact of the cysts on adjacent structures.

MRI can be used as an alternative to CT, especially if a more detailed assessment of the cyst composition is needed.^{1,10}

The treatment of cystic lymphangioma of the mesentery depends on factors such as the size and location of the cysts, as well as associated symptoms. Treatment options may include careful observation with regular monitoring, symptomatic treatment, percutaneous drainage of cysts, sclerotherapy, and in some cases, surgery involving complete excision of the lesion. Intracystic injection of sclerosing agents can be used for symptomatic relief, particularly in cases of diffuse lesions involving the mesenteric root that are not amenable to resection without extensive intestinal sacrifice. 1,8,9

The prognosis following complete resection is generally excellent, but it is poor after incomplete resection due to the risk of recurrence.^{4,6,7}

CONCLUSION

Cystic lymphangioma of the mesentery can be incidentally discovered in adults. While ultrasound and computed tomography images can help guide the diagnosis, only a definitive histological examination of the surgical specimen obtained through appropriate surgical resection confirms it and ensures recovery.

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REFERENCES

- Losanoff JE, Richman BW, El-Sherif A, Rider KD, Jones JW. Mesenteric cystic lymphangioma. J Am Coll Surg. 2003;196(4):598-603.
- 2. Mabrut JY, Grandjean JP, Henry L, Chappuis JP, Partensky C, Barth X, et al. Mesenteric and mesocolic cystic lymphangiomas. Diagnostic and therapeutic management. Ann Chir. 2002;127(5):343-9.
- 3. Kably A, Moumen M, Raissouni N, Benjelloun N, Mehhane M, Abi F, et al. Cystic lymphangiomas of the mesentery and the epiploon. About two cases. Gynecol Obstet Fertil. 2003;31(2):136-8.
- Rebbani M, Brahmi YE, Mouhafid ELF, Ali AA, Zentar A. Splenic cystic lymphangioma in adult: a case observed in the Visceral Surgery Department II of Mohamed V Military Hospital. Int Surg J. 2020;7(9):3099-101.
- 5. Mordi A, Rabii K, Hameed E, Lefrancq T. Occlusion intestinale secondaire à un lymphangiome kystique

- du mésentère. Journal de Chirurgie Viscérale. 20212;149(5):402-4.
- 6. Chen CW, Hsu SD, Lin CH, Cheng MF, Yu JC. Cystic lymphangioma of the jejunal mesentery in an adult: a case report. World J Gastroenterol. 2005;11(32):5084-6.
- 7. Perrot M, Rostan O, Morel P, Le Coultre C. Abdominal lymphangioma in adults and children. Br J Surg. 1998 Mar;85(3):395-7.
- 8. Tsukada H, Takaori K, Ishiguro S, Tsuda T, Ota S, Yamamoto T. Giant cystic lymphangioma of the small bowel mesentery: report of a case. Surg Today. 2002;32(8):734-7.
- 9. Bezzola T, Bühler L, Chardot C, Morel P. Surgical therapy of abdominal cystic lymphangioma in adults and children. J Chir (Paris). 2008;145(3):238-43.
- 10. Rieker RJ, Quentmeier A, Weiss C, Kretzschmar U, Amann K, Mechtersheimer G, et al. Cystic lymphangioma of the small-bowel mesentery: case report and a review of the literature. Pathol Oncol Res. 2000;6(2):146-8.

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