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A RARE CAUSE FOR HUGE ABDOMEN

Govindarajalu Ganesan¹, Ganesh babu²

¹Department of General Surgery, Aarupadai Veedu Medical College and Hospital, Puducherry, India

²Department of General Surgery, Mahatma Gandhi Medical College and Research Institute, Puducherry, India

E-mail of Corresponding Author: drgganesan@gmail.com

ABSTRACT

Both intraabdominal cystic lymphangioma and chylolymphatic mesenteric cyst present as huge abdominal mass and both have chyle as their content. Hence the only way to differentiate between these two conditions is by histopathological examination which is extremely important as lymphangiomas are more invasive and relapsing than mesenteric cyst. Here we report a rare case of huge abdomen due to cystic lymphangioma arising from lesser omentum that did not have recurrence for more than six years after surgical excision.

Keywords: intraabdominal cystic lymphangioma, lesser omentum, chyle, recurrence

INTRODUCTION

Lymphangiomas is of three types- capillary, cavernous and cystic lymphangiomas (1-3). Cystic lymphangiomas are most commonly found in head and neck and axilla of young children (1-8).

But intraabdominal lymphangiomas are extremely rare and the incidence is only in 1 per 100000 individuals (2, 9) While occurring intraabdominally, lymphangiomas occur most frequently in the mesentery (2 - 6, 9). But it is extremely rare to find intraabdominal lymphangioma arising from lesser omentum (10, 11). Hence an extremely rare patient of cystic lymphangioma arising from lesser omentum and presenting as huge abdominal mass is reported here.

CASE REPORT

A 29 year old female presented with a huge painless soft, smooth, nontender, mobile mass occupying umbilical and hypogastric regions extending on either sides to both lumbar region and both iliac fossa for a period of two months. Ultrasound abdomen showed a large thin walled

cyst occupying abdomino-pelvic region with septations suggestive of lymphatic cyst. Intravenous pyelogram showed normal function and drainage of both kidneys.

On 11th July 2007, the patient underwent laparotomy by midline incision. A huge cyst was arising from lesser omentum extending upto pelvic region. (fig.1).Cyst was excised in total and sent for biopsy.Patient had an uneventful post-operative period and discharged on 8th post-operative day.

The cyst was found to contain more than 1 litre of chyle as its content. Biopsy report showed cyst wall lined by flattened endothelium. The cyst wall showed fibro-collagenous tissue, smooth muscle bundles and aggregates of lymphocytes suggestive of cystic lymphangioma. (fig.2).Hence this patient is a case of huge intraabdominal chylous cystic lymphangioma arising from lesser omentum.

DISCUSSION

Pathologically, lymphangiomas consist of three groups :1) capillary lymphangiomas composed of small lymphatics, 2) cavernous lymphangiomas

composed of larger lymphatics and 3) cystic lymphangiomas composed of large macroscopic lymphatic spaces containing collagen and smooth muscle (1). Cystic lymphangiomas contain serous fluid or chyle as its content (2,4,5) Cystic lymphangiomas having chyle as its content can be called as chylous cystic lymphangiomas. Histopathologically cystic lymphangiomas are lined by a single row of flat endothelial cells and contain fibrous tissue, aggregates of lymphoid tissue and smooth muscles in the cyst wall (7).

But mesenteric cysts which are often confused with intraabdominal cystic lymphangiomas (12-14) do not contain smooth muscles in the cyst wall in histology (14). Chylolymphatic mesenteric cyst is a type of mesenteric cyst which has chyle as its content and can present as huge abdominal mass (14). Intraabdominal cystic lymphangiomas commonly has chyle as its content and can also present as huge abdominal mass (4). Hence it is extremely important to differentiate between these two conditions.

There are no blood tests to confirm the diagnosis of these two lesion (4). Radiological investigations like ultra sound or computed tomography are very sensitive in diagnosing intraabdominal cysts but are not very specific and cannot differentiate between these two conditions (4, 6, 15). Hence the only way to differentiate between these two conditions is by histopathological examination (12-14). The differentiating histologic feature is the presence of smooth muscles in the cyst wall of intraabdominal cystic lymphangiomas (1-9,12) which are absent in the cyst wall of chylolymphatic mesenteric cyst (14).

An exact histological diagnosis is extremely important as lymphangiomas are more invasive, aggressive and relapsing than mesenteric cyst (3,6,12,13,15,16).

Our patient is on regular follow up for 6 years and she did not have any evidence of recurrence for more than six years after surgical excision.

CONCLUSION

Though intraabdominal chylous cystic lymphangioma and chylolymphatic mesenteric cyst are exactly similar to one another clinically, radiologically and intraoperatively, they are two entirely different lesions histologically. Histologically smooth muscles are found in the cyst wall of chylous cystic lymphangioma, but smooth muscles are absent in the cyst wall of chylolymphatic mesenteric cyst. This histological differentiation is extremely important as lymphangiomas are more invasive and relapsing than mesenteric cyst. But our patient with cystic lymphangioma arising from lesser omentum did not have any evidence of recurrence for more than six years after surgical excision and hence is reported here.

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REFERENCES

1. Okizaki A, Shuke N, Yamamoto W, Usui K, Koyano S, Miyokawa N, Tokusashi Y, Aburano T. Protein-loss into retroperitoneal lymphangioma: demonstration by lymphoscintigraphy and blood-pool scintigraphy with Tc-99m-human serum albumin. *Ann Nucl Med.* 2000 Apr;14(2):131-4
2. Rana Ajay, Katzman Philip J., Pegoli Walter, Qualia Cary. An Unusual Cause of Abdominal Pain: Duodenal Cystic Lymphangioma. *Gastroenterology & Hepatology*; Mar 2013, 9 (3):192
3. Mousavi SR, Moradi A, Sobhiyeh MR, Jabbehdari S, Azimi B, Lotfollahzadeh S, et al. A patient with cystic lymphangioma in

- pancreas. *Gastroenterol Hepatol Bed Bench* 2013;6(3):159-164.
4. Akwei Solomon, Neil Bhardwaj, and Paul D. Murphy. "Benign mesenteric lymphangioma presenting as acute pancreatitis: a case report." *Cases journal* 2009; 2(1): 9328.
 5. Chung J. H., Suh Y. L., Park I. A., Jang J. J., Chi J. G., Kim Y. I., & Kim W. H. .A pathologic study of abdominal lymphangiomas. *J Korean Med Sci*, 1999;14 (3), 257-262.
 6. Sohn BK, Cho CH, Chae HD.Cystic lymphangioma of the pancreas.*J Korean Surg Soc.* 2011 Aug;81(2):141-5.
 7. Kshirsagar A. Y., Wader J. V., Suleman F., & Pujari S.. Intra abdominal cystic lymphangioma in an adult. *Medical Journal Armed Forces India*,2009; 65(3), 270-271.
 8. Hornick JL, Fletcher CD. Intraabdominal cystic lymphangiomas obscured by marked superimposed reactive changes: clinico pathological analysis of a series. *hum pathol* 2005 April;36(4) ;426-32.
 9. Hisham Fayad Aly.Abdominal Cystic Lymphangioma in Children.*Annals of Pediatric Surgery*, April 2009;5[2] ;132-136.
 10. Martin- perez E, Tejedor D, Brime R, Larranaga E, cystic lymphangioma of lesser omentum in an adult. *Am J Surg* 2010 Feb 199(2): 20- 22.
 11. Sakurai Y, Taniguchi K, Uyama I, inaba K, Furuta S, Sunagawa R et al, laparoscopic excision of the cystic lymphangioma occurred in the lesser omentum: report of a case and review of literature. *Surg Laparosc Endosc Percutan Tech.* 2009 Feb;19(1):e11-4.
 12. Geof Allen J, Taylor Sohn Riall, John L. Cameron, Frederic B. Askin, Ralhb H.Hruban, kurtA.Campbell. Abdominal lymphangiomas in adults .*J Gastrointestinal Surg* 2006; 10:746-51.
 13. Takiff H, Calabria R, Yin L, Stabile BE.Mesenteric cysts and intra-abdominal cystic lymphangiomas. *Arch Surg.* 1985 Nov; 120(11):1266-9.
 14. Rattan K. N., Nair V. J., Pathak M., & Kumar S. Pediatric chylolymphatic mesenteric cyst-a separate entity from cystic lymphangioma: a case series. *Journal of medical case reports*, 2009 ;3(1):111.
 15. Lörken M, Marnitz U, Manegold E, Schumpelick V.Intra-abdominal lymphangioma.*Chirurg.* 2001 Jan; 72(1):72-7.
 16. Granata C, Lonati L, Scarsi PL, Mattioli G, Michelazzi A. Abdominal cystic lymphangiomas and mesenteric cysts: the clinical considerations. *Pediatr Med Chir.*1994 May-Jun;16(3):277-9.

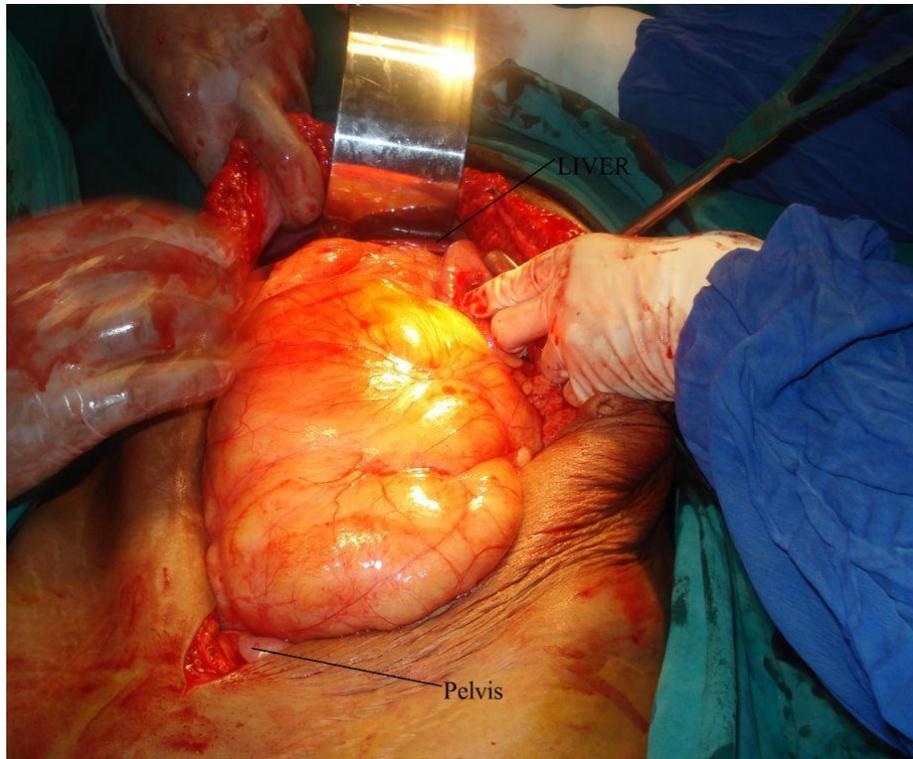


Figure 1: A huge cyst found arising from from the region of free edge of the lesser omentum beneath the liver extending upto pelvic region.

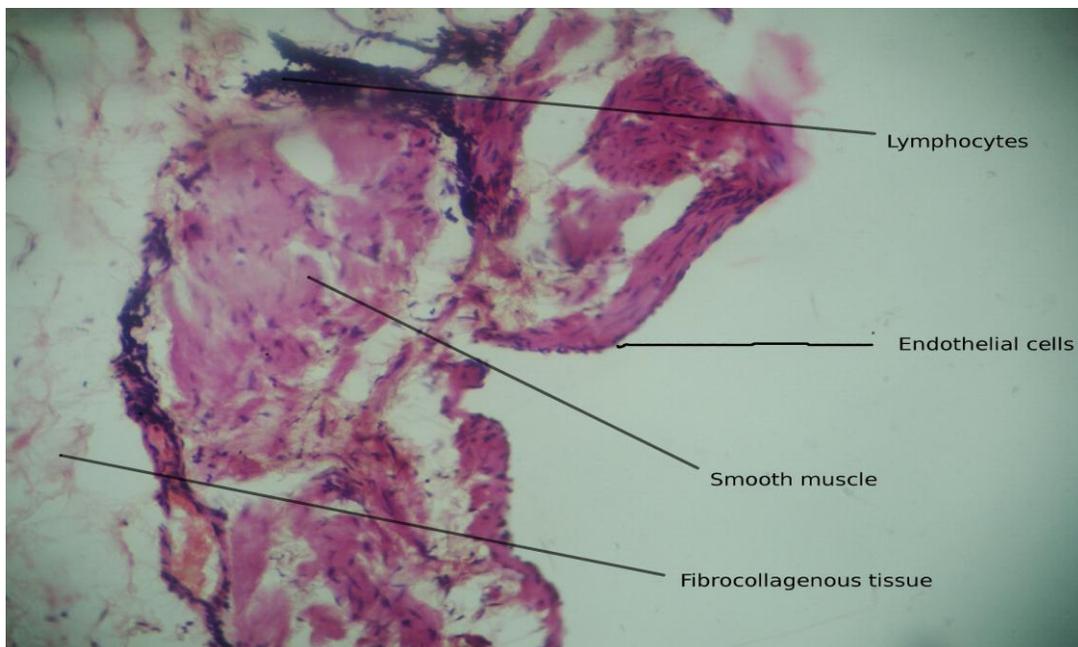


Figure 2 : Photomicrograph showing cyst wall lined by flattened endothelium. The cyst wall also showed fibro-collagenous tissue, smooth muscle bundles and aggregates of lymphocytes suggestive of cystic lymphangioma