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Cystic Lymphangioma, Mimicking a Strangulated Inguinal Hernia: A Case Report

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Abstract | **Case Report**

Cystic lymphangioma is one of the benign tumors that affect the lymphatic system of children, rarely adults. Its inguinal location is rare. Clinically it can simulate a picture of strangulated inguinal hernia. The diagnosis is suggested by imaging and confirmed by pathological examination after surgical excision. The treatment is based on surgery by excision of the tumor.

Keywords: Cystic lymphangioma, hernia, inguinal.

CASE REPORT

This is a 61-year-old patient without any history of surgery, admitted to surgical emergencies with pain in right inguinal region developing since 12h before its admission with a fever of 38°C; the clinical examination revealed a painful, irreducible mass of the inguinal region, the rest of the somatic examination was normal.

Hemoglobin was at 12 g/dl, white blood cells at 10,000 elements/mm³; CRP at 200 mg/L; the ionogram was correct; we performed an abdominal ultrasound and it objectified cystic formation inguinal has finely ultrasound content not vascularized with color Doppler, a CT-scan was performed and objectified a cystic formation of the right inguinal canal measuring 50 mm long axis without continuity with digestive or gynecological structure associated a thickened aspect of the homolateral round ligament.

We admitted the patient in the operating room and the exploration revealed the presence of mass adherent to the inguinal region with inflammatory liquid around, we performed the dissection with cystic mass resection.

Post-operative suites were simple and the patient went home 3 days after the operation.

The result of the pathological examination objectified a wall fibrous material that can be part of a cystic lymphangioma. The ablation of the points of suture was performed at day 15.

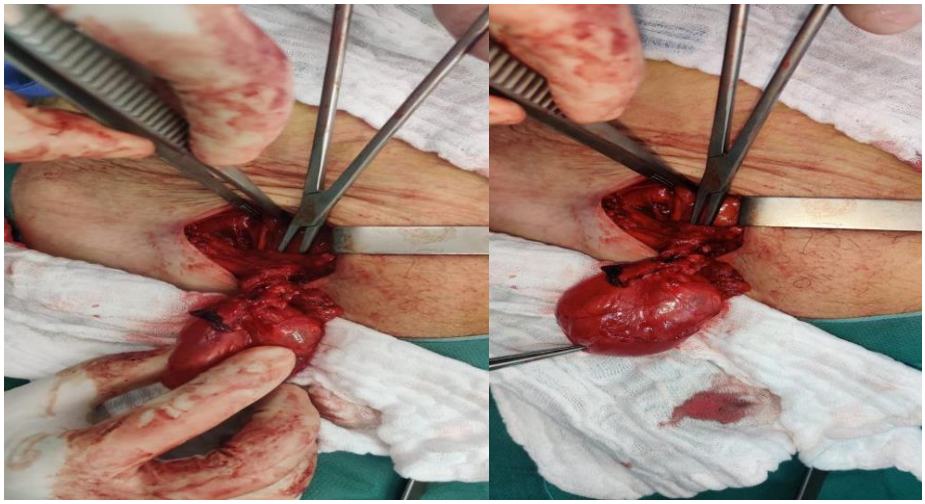
We have seen the patient three months in the consultation and the control ultrasound of the inguinal region didn't reveal any anomalies.

DISCUSSION

Cystic lymphangiomas are benign congenital tumors of unknown etiology. The majority of lymphangiomas (90%) develop during the first two years of life and 50% are present at birth [1]. Development in adults is exceptional. Males and females are reported to be affected similarly in adulthood, whereas in children the sex ratio is either similar or slightly predominant in boys [2]. Inguinal and scrotal lymphangiomas are rare. Epididymal lymphangiomas are extremely rare with only 6 such cases reported in the literature [3, 4] and even more so those in the inguinal region. A cystic lymphangioma usually presents as a mass that progressively enlarges with time [4]. Sometimes it presents with an acute onset of pain and a rapid and sudden enlargement [5]. This occurs after a cyst hemorrhage (spontaneous or consequential injury), inflammation, which was the case in our patient, or a disruption of the balance between lymphatic production and drainage [6].

Ultrasound usually reveals a multicystic mass that is not a multi-cystic, non-vascularized mass. Some cysts may contain fine echogenic material corresponding to blood [1]. CT is an excellent initial

diagnostic tool in adults [8, 9]. It usually shows a homogeneous, hypodense tumor that does not take contrast, as well as its thin septa, and allows the density of the tumor to be studied. The CT scan also allows evaluating the relationship of the tumor with the surrounding organs, in our case, it allowed to specify the relationship of the cystic formation and its origin especially in the context of emergencies. Magnetic resonance imaging (MRI), in second intention, was not performed in our patient given the context of the emergency, allows a better definition of the nature of the cyst contents and a better appreciation of the perivascular extension of the lesion. The cystic lymphangioma is of liquid signal: hyposignal in T1 and hypersignal in T2. The septa are hyposignal in T1 and T2. Gadolinium injection shows little or no parietal and septal enhancement [3]. Definitive proof of the diagnosis of cystic lymphangioma is provided by pathological examination [8, 9]. The gold stand art treatment is surgical, consisting of a complete removal of the lesion [1]. The excision must be as complete as possible to avoid recurrence [8]. The recurrence rate is 40% after incomplete resection and 17% after macroscopically complete resection, all locations combined [9, 10].



CONCLUSION

Cystic lymphangioma is a benign tumor rare, that usually occurs in childhood, in the inguinal region and may be revealed by strangulated hernia complication, we suspect the diagnosis with the ultrasound, but the best exploration is the CT-scan.

Anatomopathology reveals the diagnosis and the best treatment is surgery with a complete excision of the mass to prevent recurrences.

REFERENCES

1. Fakhfakh, H., Bouhlel, A., Ketata, H., Sahnoun, A., Bahloul, A., & Mhiri, MN (2005). Cystic scrotal lymphangioma. About a case. *Andrology*, 15(2), 242-244.
2. Cheng, L., MacLennan, G. T., & Bostwick, D. G. (2019). *Urologic surgical pathology*. *Elsevier Health Sciences.*
3. Saadi, A., Ayed, H., Karray, O., Kerkeni, W., Bouzouita, A., Cherif, M., ... & Chebil, M. (2016). Retroperitoneal cystic lymphangioma: about 5 cases and review of the literature. *The Pan African Medical Journal*, *25*.
4. Patoulias, I., Prodromou, K., Feidantsis, T., Kallergis, I., & Koutsoumis, G. (2014). Cystic lymphangioma of the inguinal and scrotal regions in childhood-report of three cases. *Hippokratia*, *18*(1), 88-91.
5. Kok, K. Y. Y., & Telesinghe, P. U. (2002). Lymphangioma of the epididymis. *Singapore medical journal*, *43*(5), 249-250.
6. Kajal, P., Rattan, K. N., Malik, V. S., & Garsa, V. (2013). Scrotal lymphangioma–a rare cause of scrotal swelling. *APSP Journal of Case Reports*, *4*(1), 5.
7. MacMillan, R. W., MacDonald, B. R., & Alpern, H. D. (1984). Scrotal lymphangioma. *Urology*, *23*(1), 79-80.
8. Rifki Jai, S., Adraoui, J., Khaiz, D., Chehad, F., Lakhloufi, A., & Bouzidi, A. (2004). Retroperitoneal cystic lymphangioma. Prog Urol, 14(4), 548-550.
9. Bezzola, T., Bühler, L., Chardot, C., & Morel, P. (2008). Surgical treatment of abdominal cystic lymphangioma in adults and children. *Journal of Surgery*, *145* (3), 238-243.
10. Alqahtani, A., Nguyen, L. T., Flageole, H., Shaw, K., & Laberge, J. M. (1999). 25 years' experience with lymphangiomas in children. *Journal of pediatric surgery*, *34*(7), 1164-1168.