

Large Lymphangioma Presenting like Irreducible Inguinal Hernia: A Rare Presentation and Literature Review

Dear Editor,

Although hernia is the most common abnormality of the inguinal region¹, other pathological entities may also be found in the area such as tumors of various elements of spermatic cord, lipomas, dermoid and epidermoid cysts and a few others²⁻⁴. Some of these may mimic an irreducible inguinal hernia and pose an initial diagnostic dilemma. We describe here a rare case of a large lymphangioma of the inguinal region which presented like an irreducible inguinal hernia.

Case Presentation

A 70-year-old Chinese man presented with long standing history of a slowly progressive swelling in the left inguinal region. The physical examination revealed a large nontender, cystic swelling which was irreducible and did not have any impulse on coughing. The ultrasound examination revealed a large unilocular cystic mass. Decision was made to perform an inguinal exploration. Surgery was performed through the left inguinal incision. A large cystic mass measuring 15cm x 10cm x 5cm was found in the



Fig. 1. Intra-operative picture of the cystic mass.

sub-cutaneous plane (Fig. 1), superficial to the external oblique aponeurosis. The mass was carefully enucleated. The inguinal canal was then opened where an indirect hernia was present which was repaired using Lichtenstein tension free technique. On gross examination, the cystic mass was well defined with a smooth surface and was filled with clear fluid. On microscopic examination, sections showed luminal surface lined by CD31 positive endothelial cells suggestive of lymphangioma. The patient was discharged on the first post-operative day and the post-operative course was largely uneventful.

Discussion

Cystic swellings during inguinal dissection are rare to find. Most of these cysts are mesothelial in origin⁵. Some of these cysts may grow exceptionally large and may mimic an irreducible inguinal hernia. Lymphangiomas are malformations of the lymphatic system that occur as a result of the failure of lymph to drain from sequestered lymphatic vessels with consequent dilatation of the ducts and formation of a cystic mass. Majority of these lesions are congenital but they may also occur secondary to trauma, infection, inflammation or degeneration. There are 3 distinct types of lymphangioma. First ones are lymphangioma circumscriptum, which are microcytic lymphatic malformations resembling a cluster of small blisters. Second are cavernous lymphangiomas which are bulging masses occurring deep under the skin. The last ones are the cystic hygromas which usually have a softer consistency and typically develop in fetuses. They usually appear on the neck (75%), armpit or groin areas. They often look like swollen bulges underneath the skin. Draining lymphangiomas of fluid provides only temporary relief, so they are removed surgically. Ultrasonography is very accurate at identifying the cystic nature of the swelling and marking the extent of the lesion. The final diagnosis is usually made only after the histopathologic examination. In conclusion, we have presented a rare case of a large lymphangioma presenting at an unusual site and mimicking an irreducible inguinal hernia. Although rare, this lesion must always be kept as a differential diagnosis while dealing with cystic inguinal masses. Ultrasonography is helpful in delineating the cystic nature and extent of the lesion whereas surgery remains the mainstay of treatment.

REFERENCES

1. Yang DM, Kim HC, Lim JW, Jin W, Ryu CW, Kim GY et al. Sonographic findings of groin masses. *J Ultrasound Med* 2007;26:605-14.
2. Poenaru D, Jacobs DA, Kamal I. Unusual findings in the inguinal canal: a report of four cases. *Pediatr Surg Int* 1999;15:515-6.
3. Leeming R, Olsen M, Ponsky. Inguinal dermoid cyst presenting as an incarcerated inguinal hernia. *J Pediatr Surg* 1992;27:117-8.
4. Salemis NS, Karagkiouzis G, Sambaziotis D, Tsiambas E. Large dermoid cyst of the spermatic cord presenting as an incarcerated hernia: a rare presentation and literature review. *Hernia* 2010;14:321-3.
5. Welch B, Barton TK. Inguinal cord cysts. *Hernia* 2002;6:33-5.

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