CASE REPORT

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Cystic Hygroma of the Spermatic Cord: A Case Report

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ABSTRACT

A lymphatic malformation is usually present at birth but can manifest at any age. The most common location sites are the neck (75%), axilla (20%), while, one of the unusual sites is the scrotum. To avoid misdiagnosis of cystic swellings in the inguinoscrotal area, Cystic Hygroma should be considered in the differential diagnosis. We reported a case of a 3-years-old male child presented to the pediatric surgery clinic with a painless lump in the right inguinoscrotal area of 2-years duration. On the ultrasound imaging, there was a large inguinoscrotal cystic swelling containing clear fluid. The mass was excised under general anesthesia through an inguinal incision. Intra-operative macroscopic examination and the histopathological result of this mass disclosed it as a Cystic Hygroma located in the spermatic cord. After 6-months of follow up no recurrence was detected.

Keywords: Spermatic cord, Cystic Hygroma, Lymphatic malformation.

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INTRODUCTION

Cystic Hygromas (Lymphangiomas) are benign fluid-filled lesions that occur due to defects in lymphatic vessel development. The most common predilection locations are in the neck (75%), axilla, and the rare locations are mediastinum, retroperitoneum, and pelvis [1]. The scrotum is one of the unusual sites [2]. Cystic Hygromas are mostly celebrated at birth, but some time evident at any age. The etiology of this anomaly is unknown [3].

Lymphatic malformation (LM) is classified as microcytic (diameter $<$ 1 cm), macro cystic (diameter $>$ 1 cm), or a combination thereof. LM has mostly affected the skin and soft tissues. LM appears as soft, compressible masses, appear histologically as thin vascular spaces with flat endothelial lining filled with lymph. LM is at risk for bleeding, infection. Treatment of Lymphatic malformation is by resection, Sclerotherapy or both [3].

CASE PRESENTATION

A 3-years-old male child from a rural area, from Anbar province, came to the Al-Ramadi Pediatrics and Maternity Teaching Hospital with a painless lump slowly rising in the right inguinoscrotal area for two years duration. There was no redness or discharge, also there was no previous history of trauma to the inguinal region and no family history of the same problem. The physical examination showed a softly non-tender irreducible cystic mass. The swelling showed a strong positive trans-illumination test. The swelling neither showed any impulse on coughing nor pulsatile (Figure 1).

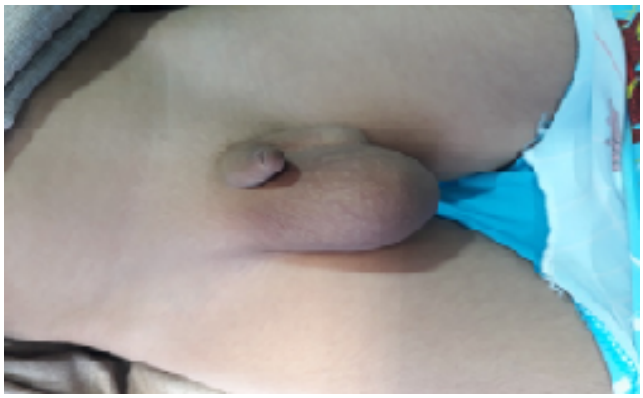

Figure 1. Preoperative photograph showing large right inguinoscrotal mass.

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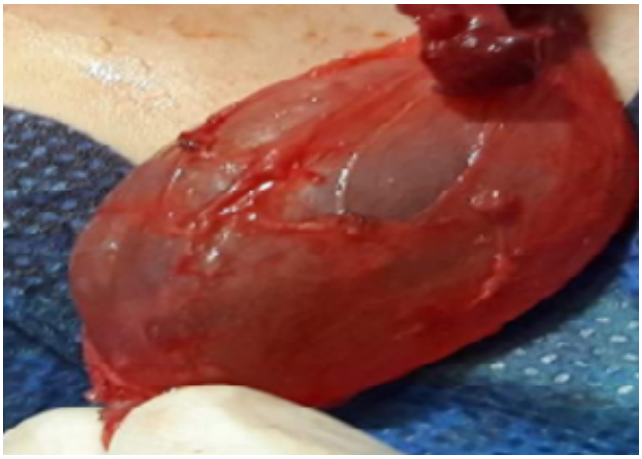

Figure 2. Intra-operative photograph showing large inguinoscrotal multicystic mass containing clear fluid.

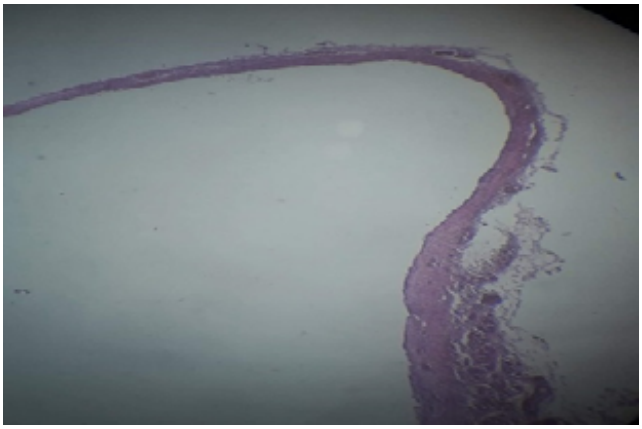

Figure 3. Histopathological photograph showing dilated vascular spaces with flat endothelial lining filled with lymph.

Both testicles have been normally palpable in the scrotum, there was no clinical finding in the rest of the examination.

Ultrasound examination of the groin showed a large inguinoscrotal cystic mass containing clear fluid. No further imaging studies were performed. We decided to excise the mass through an oblique inguinal incision under general anesthesia. During the exploration, the mass consists of multiple cysts filled with clear fluid (Figure 2). The mass was carefully excised and sent for histopathology (Figure 3). The microscopic examination, sections show soft multicystic gray color tissue measuring 6 $\times 4 \times 2$ cm with multiple dilated vascular spaces with flat endothelial lining filled with lymph (combined lymphangioma). After 6-months of follow up no recurrence was detected. Informed consent from the parents has been obtained to publish the case.

The article approved by the College of Medicine, University of Anbar.

DISCUSSION

The scrotum is the rarest site of lymphangioma, the study by Jung et al in 1996, reported 11 cases of lymphangioma of the spermatic cord [4]. The study by Hurwitz et al. found that 40 patients with lymphangioma of the spermatic cord were reported in the literature [5]. Loberant et al predestined that <50 cases of spermatic cord lymphangioma have been reported [6].

In the English medical literature, there were 80 patients with spermatic cord lymphangioma as reported by a prior study by Komura et al [7].

The most common presentation of the inguinal area is indirect inguinal hernia [8]. The most common sites of the LM are the neck (75%), axilla (20%), while, the scrotum is one of the unusual sites [2].

Cystic Hygroma is located anywhere in the body and presented as a slowly progressive enlarging cystic mass, soft in nature, and painless. Depending on its location, compressive symptoms like, dyspnea, and dysphagia may be the presenting complaints. The age of the presenting case was at the mean age of similar reported cases in prior studies. Ultrasound is the initial imaging for the diagnosis of cystic hygroma however, CT scan and MRI give more information about the condition. Microscopic examination confirmed the diagnosis of Cystic Hygroma [9, 10]. Complete excision of Cystic Hygroma is a curative way [5, 11, 12]. Incomplete excision of Cystic Hygroma mass leads to a high recurrence rate.

CONCLUSION

Although Cystic Hygroma is rare, the dealing surgeon should put this condition in the differential diagnosis of any irreducible cystic inguinal swelling. Scrotal ultrasound is essential and helpful in preoperative diagnosis of any cystic inguinal mass.

CONFLICT OF INTEREST

The author declare that there is no conflict of interest.

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