CASE REPORT

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Scrotal Lymphangioma – A Rare Cause of Scrotal Swelling

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ABSTRACT

Lymphangioma is an extremely rare cause of scrotal swelling. We are reporting such a tumor in a one and half year old child presenting with a painless, progressive scrotal swelling. The mass was evaluated and excised completely. Histopathology confirmed it as Lymphangioma. Due to rarity of the lesion, this case is being reported.

Key words: Lymphangioma, Scrotum, Child

INTRODUCTION

Lymphangioma are congenital lymphatic hamartomas, 95% of which occur in neck and axilla [1]. The scrotum and retroperitoneum are unusual sites [2]. The scrotum is one of the rarest sites for lymphangioma. It can involve scrotal wall, tunics, testis, epididymis, spermatic cord or Colle's fascia [3]. This is a report of scrotal lymphangioma with special emphasis on clinical, ultrasonographic, and histopathological findings.

CASE REPORT

An 18-month-old male child presented with painless, progressive enlargement of left scrotum for last one year. Examination revealed a non-tender and soft mass in left hemi scrotum which was compressible and transilluminant. The left testis could be felt separately from the mass. The right scrotum was normal (Fig. 1). Ultrasound of abdomen was normal. The patient was taken up for surgery after routine investigations. The swelling was explored by a scrotal incision and a 5cmx5cm multilocular cystic mass was found which was adherent to the tunics. The left testis and spermatic cord were healthy (Fig. 2). Complete excision of the mass along with overlying skin was done and the wound was closed in layers over a negative suction drain which was removed on 2nd postoperative day. The postoperative period was uneventful and the child was discharged on 3rd postoperative day in fair health. On histopathological examination, it was confirmed to be a cystic lymphangioma.

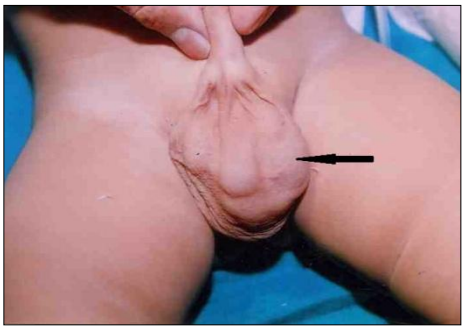

Figure 1: Clinical photograph showing left scrotal swelling (arrow) separate from left testis.

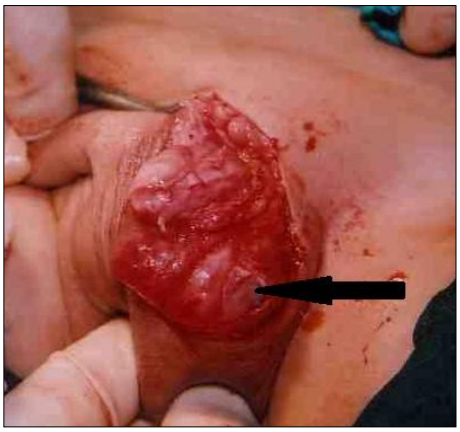

Figure 2: Cystic lymphangioma (arrow) arising from scrotal wall and adherent to the tunics.

At a follow-up of one year, the child was absolutely fine without any evidence of recurrence.

DISCUSSION

Lymphangioma results from inadequate drainage of lymph from sequestrated lymphatic vessels and are considered to be lymphatic hamartomas [1]. Most of these are congenital due to insufficiency or atresia of the efferent lymphatics or lack of communication between lymphatics and venous channels [1]. These lesions can also be acquired because of obstruction of lymphatics after inflammation, trauma or degeneration [3].

Histologically, these are primarily of three types – capillary, cavernous and cystic. The cystic form is the most common variety. Half of these are recognized at birth, 90% are evident by the age of 2 years and 95% occur in the neck or axilla. Unusual sites are scrotum, retroperitoneum, intraperitoneum, gluteal, mediastinum, groin, pelvis, mesentery, omentum and spleen [1, 4, 5]. Scrotum is a very rare site for lymphangioma. Singh et al reported thirty two cases of cystic lymphangiomas in children, only one of these was located in scrotum [1]. Loberant et al estimated that less than fifty cases of scrotal cystic lymphangioma have been reported in literature till 2002 [6].

When scrotum is involved, it is usually misdiagnosed as hernia, hydrocele, varicocele, large epididymal cyst or acute scrotal conditions which may lead to inadequate treatment with a risk of recurrence [2, 5, 7]. Scrotal involvement in filariasis can also be considered as a differential diagnosis but presence of loculations and a clear fluid in the swelling on ultrasonography in our case ruled out the possibility of this condition. Moreover, there was no symptom or sign suggestive of filariasis in our patient. Hurwitz et al reported seven cases of scrotal cystic lymphangioma over a period of ten years, all of which were misdiagnosed preoperatively [7].

USG usually shows a multicystic extra testicular mass with internal septae; internal echoes in the cysts are due to debris and/or hemorrhage which is an extremely rare complication but has been reported [6, 8, 9]. As cystic lymphangiomas do not communicate with the lymphatic system, lymphography is not recommended [9].

The treatment consists of surgical excision of the entire mass along with the overlying skin. Incomplete excision can result in recurrence [7]. Other modalities of treatment such as injection of sclerosants, extensive fulguration and cryotherapy have been used without much success. To conclude, though the scrotal lymphangioma is rare, it must be kept in mind while exploring any scrotal swelling. Misdiagnosis is common. Complete surgical excision by a scrotal approach is curative.

REFERENCES

1. Singh S, Baboo ML, Pathak IC. Cystic lymphangioma in children: Report of 32 cases including lesions at rare sites. Surg 1971; 69: 947-51.
2. Ratan SK, Rattan KN, Sehgal T, Maggu S. Spermatic cord lymphangioma in a 7 year old child masquerading as a hydrocele. Br J Urol Int 2003; 10: 4046.
3. Koshy A, Tandon RK, Kapur BM, Rao KV, Joshi K. Retroperitoneal lymphangioma. A case report with review of the literature. Amer J Gastroenterol. 1978; 69:485-90.
4. Singla SL, Rattan KN, Singh S. Cystic hygroma of the gluteal region. Indian J Pediatr 2000; 67:779.
5. Parakh A, Dubey AP, Garg A, Khurana N, Aggarwal SK. Cystic lymphangiomatous hamartoma masquerading as massive ascites: Indian J Pediatr 2009; 76:753-4.
6. Loberant N, Chernihovski A, Goldfeld M. Role of Doppler sonography in the diagnosis of cystic lymphangioma of the scrotum. J Clin Ultrasound 2002; 30:384-7.
7. Hurwitz RS, Shapiro E, Hulbert WC. Scrotal cystic lymphangioma: the misdiagnosed scrotal mass. J Urol 1997; 158:1182-5.
8. Rattan KN, Kajal P. Kadian YS, Gupta R. Hemorrhage in a scrotal lymphangioma in a child: a rarity. African J Pediatr Surg 2009; 6:110-11.
9. Chung SE, Frush DP, Fordham LA. Sonographic appearances of extratesticular fluid and fluid containing scrotal masses in infants and children: clues to diagnosis. Am J Roentgenol 1999; 173:741-5.

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