Different Modalities used to Treat Concurrent Lymphangioma of Chest wall and Scrotum

Sir,

Lymphangiomas are congenital malformations of lymphatic system. The common sites are cervico-facial region and axilla, followed by rare sites such as tongue, retroperitoneum and mesentery. Scrotal and chest wall lymphangiomas are rare.[1] Lymphangioma usually presents as an isolated lesion, however, its occurrence at multiple sites in the same patient have been reported infrequently.[1,2] We report a case of concurrent lymphangioma of chest wall and scrotum which were managed with different treatment modalities.

A 2-year-old male baby was presented to the surgical emergency department with complaints of sudden increase in scrotal size. The baby had a scrotal swelling since birth, along with another swelling on the left-sided chest wall [Figure 1]. The parents did not opt to visit any physician for these lesions. Currently, the child had a sudden increase in the scrotal size, which was painful.

On clinical examination the scrotum was found to be red in hue and tender but not warm. The lesion in left chest wall was multicystic and non tender. On transillumination, the chest lesion was transilluminant but this was not true for scrotal lesion. Ultrasound (Doppler) of chest lesion delineated 7 to 8 multicystic lesions with no flow in it. Ultrasound of scrotal lesion showed a multicystic extra testicular mass with internal septations. Based on history, clinical examination and Doppler ultrasonography, a diagnosis of concurrent lymphangioma of chest wall and scrotum was made. The lymphangioma of scrotum was believed to be increased in size due to spontaneous intra-lesional haemorrhage.

A decision to manage the scrotal lymphangioma with surgical excision and chest wall lymphangioma with sclerotherapy was made after informing the parents. The scrotal lymphangioma was excised surgically after an initial period (10 days) of conservative management with scrotal support, antibiotics and analgesics. Histopathology of the excised tissue was consistent with lymphangioma. The post-operative recovery was uneventful. At follow-up, after 1 month, the scrotum had improved significantly with respect to size, colour and no pain was observed [Figure 2]. At this time, sclerotherapy with bleomycin aqueous solution was instituted for chest wall lymphangioma at a dose of 0.5 mg/kg every 3 weeks. This remarkably reduced the size of lymphangioma after 3 sessions of sclerotherapy. No complication associated with sclerotherapy was observed during the course of treatment.

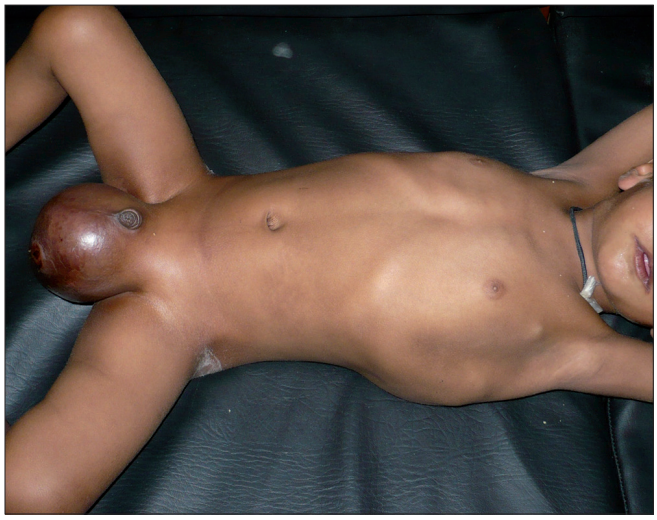

Figure 1: Image showing chest wall and scrotal lymphangiomas. The scrotum was red and enlarged in size due to intra-lesional haemorrhage

Figure 2: The size and colour of scrotum became normal. The image is taken at 1-month follow-up

DISCUSSION

Lymphangiomas develop due to congenital atresia or lack of communication between the lymphatics of different regions, and the lymphatics and venous channels. It may

be acquired due to damage of lymphatics after infection, trauma, inflammation etc. Its 3 main types are capillary, cavernous and cystic lymphangiomas.[1]

The common sites for lymphangiomas to occur are cervico-facial region and axilla, tongue, retroperitoneum, mesentery, groin, and pelvis are rare sites. The rarer variants include lymphangiomas of the limbs, chest wall and scrotum.[2] In our case, both the lesions were rare according to the site of occurrence.

In untreated cases complications such as haemorrhage inside cysts, infection, spontaneous or traumatic rupture, nerve compression causing pain and paraesthesias, respiratory difficulty, dysphagia and disfigurement may occur. In our case, sudden increase in the scrotal size was due to spontaneous haemorrhage in the scrotal lymphangioma.[1,3,4]

The management options are surgical excision or sclerosant therapy.[1-6] We employed both the treatment modalities and gained commensurate effects of the combined approach. The scrotal lymphangioma was completely excised with no recurrence during the follow-up period of 4 months. There was remarkable reduction in the size of chest wall lymphangioma but patient never returned after 3 sessions of sclerotherapy.

The concurrent presentation of lymphangiomas in a single patient is rare.[7] We have reported this case to highlight this rarity and also the different modalities needed for management of such lesions.

Bilal Mirza, Lubna Ijaz, Muhammad Saleem, Afzal Sheikh

Department of Pediatric Surgery, The Children's Hospital and The Institute of Child Health, Lahore, Pakistan.
E-mail: blmirza@yahoo.com

REFERENCES

1. Rattan KN, Kajal P, Kadian YS, Gupta R. Haemorrhage in a scrotal lymphangioma in a child: A rarity. Afr J Paediatr Surg 2009;6:110-1
2. Deodhare SG, Siddiqui HM. Aggressive lymphangioma (report of an unusual case). J Postgrad Med 1983;29:255
3. Mansingani S, Desai N, Pancholi A, Prajapati A, Vohra PA, Raniga S. A case of axillary cystic hygroma. Indian J Radiol Imag 2005;15:517-9.
4. Arora A, Narula MK, Sonkar P, Chadha R. Cystic hygroma of chest wall. Indian J Radiol Imag 2003;13:120-1.
5. Ibrahim AHM, Kandeel A, Bazeed MF. Successful non surgical management of a huge life threatening cervicomediastinal cystic hygroma case report and review of the literature. J Pediatr Surg Specialt 2009;3:48-50.
6. Okada A, Kubota A, Fukuzawa M, Imura K, Kamata S. Injection of bleomycin as a primary therapy of cystic lymphangioma. J Pediatr Surg 1992;27:440-3
7. Emir S, Ugur H, Kologlu M, Erekul S, Unal E, Tacyildiz N. Concurrent cystic mediastinal lymphangioma and paratesticular rhabdomyosarcoma. Pediatr Blood Cancer 2004;43:156-8

Access this article online

Quick Response Code:

Website: www.jcasonline.com

DOI: 10.4103/0974-2077.74501