Lymphangioma of the Epididymis

K Y Y Kok, P U Telesinghe

ABSTRACT

We report herein a 39-year-old man with a left scrotal swelling. The clinical and ultrasonographic appearances were suggestive of epididymal cyst. Histopathology of the excised lesion was shown to be lymphangioma of the epididymis. The differential diagnoses of a swelling in the scrotum of a young man include both benign and malignant conditions. Lymphangioma of the epididymis is, however, a rare and unusual cause.

Keywords: lymphangioma, epididymis, benign, surgical excision

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INTRODUCTION

The occurrence of a swelling in the scrotum of a young man is always a cause for concern. The clinical differential diagnoses include both benign and malignant conditions. Lymphangioma of the epididymis is an unusual cause. This condition is also exceedingly rare. Thompson reported the first case of lymphangioma of the epididymis in 1936[1]. To date, only three other cases have been reported in the English literature[2-4]. We report herein the fifth case of lymphangioma of epididymis.

CASE REPORT

A 29-year-old man presented to the surgical clinic with a six-month history of a left scrotal swelling. He complained of slight discomfort in the left testis. He had no previous history of accidental trauma or surgery to the groin or testis.

Physical examination of the scrotum and testes revealed a firm swelling measuring about 4 cm in diameter in the left epididymis. The swelling was slightly was slightly tender on palpation and showed a positive light transillumination test. Both testes were clinically normal. General examination and routine laboratory investigations were within normal range. Ultrasonography showed a hypoechoeic mass with multiple cystic areas in the upper pole of the left testis. The clinical diagnosis of an epididymal cyst was made. The patient agreed to surgical excision. At operation, a cystic mass was seen arising from the left epididymis. The mass was excised completely. At operation the cyst was noted to contain multiple loculations. This patient's postoperative recovery was uneventful. There was no evidence of recurrence after 12 months' review.

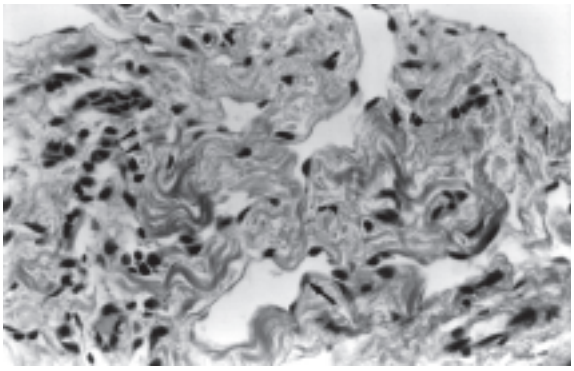

Fig. 1 Irregularly shaped cystic spaces lined by single layer of endothelium (arrow) with lymphocytic infiltration (arrow heads) of the surrounding stroma. Haematoxylin and eosin stain, magnification x 40.

HISTOPATHOLOGY

The excised cystic mass was fixed in formalin buffered at 10%. Paraffin embedded 5 mm section were cut and stained with haematoxylin and eosin. The section revealed large irregularly shaped cystic spaces, which are lined by a single layer of endothelium, situated in a loose connective tissue stroma. The cystic spaces contain eosinophilic amorphous substance. There is also moderate lymphocytic infiltration of the stroma. The histological diagnosis was that of lymphangioma of the epididymis (Fig. 1).

DISCUSSION

Lymphangiomas are thought to be congenital anomalies from the abnormal development of the lymphatic vessels, arising from sequestrations of lymphatic tissue that fail to communicate normally with the lymphatic system[2,5]. They are composed of one or several cysts lined by a single layer of endothelium, which range from 0.1 to 5 cm in

Department of Surgery
Ripas Hospital
Bandar Seri Begawan BA1710
Brunei Darussalam

K Y Y Kok, FRCS, FRCSEd, FAMS
Specialist Surgeon

Department of Pathology

P U Telesinghe, MRCPath
Specialist Pathologist

Correspondence to:
K Y Y Kok
Tel: (673) 224 2424
Fax: (673) 242 3484
Email: koky@brunet.bn

diameter and often communicate with each other. Lymphangiomas are commonly seen in the head and neck regions, especially in children[6]. Lymphangioma of the epididymis is, however, exceedingly rare. Etiologically, lymphangiomas of the epididymis in an adult may arise as a true primary neoplasm or secondary to lymphatic obstruction associated with surgery or trauma[4]. One case of lymphangioma of the epididymis reported in the literature was thought to develop secondary to herniorrhaphy[4]. The present case and the three previously reported cases were probably true primary neoplasms as there was no history of preceding trauma or surgery to the groin or scrotum in any of these cases.

These tumours are usually small and are slow-growing. Its importance lies in the differential diagnosis of testicular and paratesticular tumours. Its cystic nature, location and relationship to neighbouring structures can be determined on ultrasound. But these characteristics are not pathognomonic to lymphangioma of the epididymis as these features are also seen with epidermal cysts. However, the differentiation has little practical value because they are both benign and require surgical excision when symptomatic. The treatment of lymphangioma of the epididymis is surgical excision. The procedure seems to be curative, as thus far no relapse has been reported in the literature.

Lymphangioma of the epididymis is a rare condition; only four such cases have been reported hitherto. We have presented only the fifth such case. In a young man with a scrotal swelling, clinical differential diagnoses of both benign and malignant conditions should always be considered; in rare cases, one may be surprised with a diagnosis of lymphangioma of the epididymis.

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