# **Original Research Paper**



# Radiodiagnosis

## AN UNUSUAL CASE OF SCROTAL SWELLING CLINICALLY MIMICKING AS THIRD TESTIS - A CASE REPORT

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ABSTRACT Cystic lymphangiomas are usually congenital malformations of draining lymphatic channels with most common sites including neck, axilla, mediastinum and retroperitoneum. Occurrence of lymphangiomas in scrotum or inguinal region is a rare entity. We report a case of 20 year male presented with painless swelling in the scrotal region mimicking as a third palpable testes for which he underwent a scrotal ultrasonography and MRI followed by surgical excision and histopathology examination which revealed a cystic lymphangioma of scrotum.

**KEYWORDS**: lymphangioma, scrotum, testes, congenital.

### History

- 20 year male presented with the following complains:
- Painless swelling in the scrotal region which he noticed 15 -20 days back.
- · No other complains.

## Clinical examination

- Solitary, soft, well defined, midline swelling was seen at the root of scrotum.
- Skin & temperature over the swelling were normal.
- Testes, epididymis & cord were palpated separately.
- Small palpable bilateral inguinofemoral lymph nodes were noted.

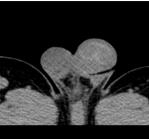
## Ultrasonography features:

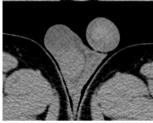
- Solitary, well defined complex cystic lesion in the scrotum of size approximately 4\*2 cm found to be extra testicular, avascular, predominantly hypoechoic with small hyperechoic component within, completely filled with free floating internal echoes and linear hyperechoic structures swirling within.
- Bilateral testes & epididymis normal in echotexture & vascularity.
- No hydrocele/varicocele/hernia.
- Scrotal wall: normal; No signs of inflammation.

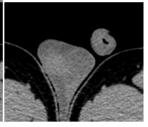




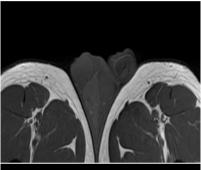
#### CT features:

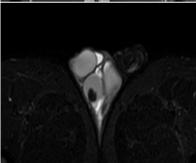






## MRI features:









## Peri Operative specimen:





### Differential diagnosis:

- Cystic lymphangioma of scrotum.
- 2. Dermoid cyst.
- 3. Pilomatrixoma.
- Epidermal inclusion cvst.

#### Final diagnosis:

Cystic lymphangioma of scrotum.

### DISCUSSION:

- Lymphangioma results from inadequate drainage of lymph from sequestrated lymphatic vessels and are considered to be lymphatic hamartomas. Most of these are congenital due to paucity 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, three types capillary, cavernous and cystic are described. 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 region, mediastinum, groin, pelvis, mesentery, omentum and spleen. (1, 4, 5) Scrotum is a rare site for lymphangioma. Singh et al reported thirty two cases of cystic lymphangiomas in children, and only one was located in the 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) Hurwitz et al reported seven cases of scrotal cystic lymphangioma over a period of ten years, all of which were misdiagnosed preoperatively. (7) Ultrasound scan usually shows a multicystic extra testicular mass with internal septae; internal echoes in the cysts due to debris and/or hemorrhage may be noted as a result of complication. (6, 8) The treatment consists of surgical excision of the entire mass along with the overlying skin. Incomplete excision can result in recurrence. (7) Scrotal lymphangioma though rare must be kept in mind while exploring any scrotal swelling.
- Lymphangioma are congenital lymphatic hamartomas, 95% of which occur in neck and axilla. (7) 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.

## REFERENCES

- Singh S, Baboo M L, Pathak I C. Cystic lymphangioma in children: Report of 32 cases
- including lesions at rare sites. Surg. 1971; 69:947–51. [PubMed]
  Ratan S K, Rattan K N, Sehgal T, Maggu S. Spermatic cord lymphangioma in a 7 year
  old child masquerading as hydrocele. Br J Urol Int. 2003; 10:4046. [PubMed]
  Koshy A, Tandon R K, Kapur B M, Rao K V, Joshi K. Retroperitoneal lymphangioma. A
- саse report with review of the literature. Am J Gastroenterol. 1978; 69(4):485–490. [PubMed]
- Singla SL, Rattan KN, Singh S. Cystic hygroma of the gluteal region. Indian J Pediatr. 2000;67: 779.[PubMed]
- Parakh A, Dubey AP, Garg A, Khurana N, Aggarwal SK. Cystic lymphangiomatous hamartoma masquerading as massive ascites. http://geneticalliance.org/ws\_display.asp?filter=infosearch\_results&info\_keyword=Lymphangioma. Indian J Pediatr. 2009 May 27; 76(7):753-754. doi: 10.1007/s12098-009-0141-y. [PubMed]
- Loberant N, Chernihovski A, Goldfeld M. Role of doppler sonography in the diagnosis of cystic lymphangioma of the scrotum. J Clin Ultrasound. 2002;30(6):384–7. doi: 10.1002/jcu.10080.[PubMed][CrossRef]
- 10.1002/gdt.10080. [Fubmed] [crossRef] Hurwitz R S, Shapiro E, Hulbert W C, Diamond D A, Casale A J, Rink R C. Scrotal cystic lymphangioma: the misdiagnosed scrotal mass. http://www.scholaruniverse.com/ncbi-linkout?id=9258167. JUrol. 1997; 158:1182–1185. [PubMed]
- Rattan K N, Kajal P. Kadian YS, Gupta R. Hemorrhage in a scrotal lymphangioma in a child: a rarity. Afr J Pediatr Surg. 2009; 6:110-11. [PubMed]