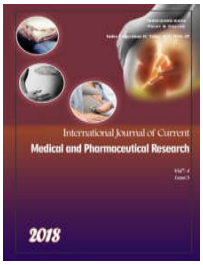
Research Article

INTERNATIONAL JOURNAL OF CURRENT MEDICAL AND PHARMACEUTICAL RESEARCH

ISSN: 2395-6429, Impact Factor: SJIF: 4.656
Available Online at www.journalcmpr.com
Volume 4; Issue 3(A); March 2018; Page No. 3177-3179
DOI: http://dx.doi.org/10.24327/23956429.ijcmpr20180420



AN UNUSUAL RIGHT ILIAC FOSSA LUMP -LYMPHATIC FILARIASIS PRESENTING AS A RETROPERITONEAL CYSTIC LESION, A RARE CASE

Aftab S Shaikh., Amarjeet E Tandur., Arshad S Khan., Ajay H Bhandarwar., Girish D Bakhshi and Nilofar M Jamadar

Grant Government Medical College & JJ group of hospitals, Byculla, Mumbai 400008, Maharashtra

ARTICLE INFO

Article History:
Received 9th December, 2017
Received in revised form 21st January, 2018
Accepted 05th February, 2018
Published online 28th March, 2018

Key words:
Retroperitoneal cyst, lymphatic cyst, filarial cyst, RIF mass, cyst

ABSTRACT

Primary retroperitoneal parasitic cysts are rare. Lymphatic filariasis afflicts over 25 million people with genital disease worldwide and is an endemic infection in tropical regions of the world presenting commonly as lymphocele, hydrocele, chyluria or groin lymhadenovarix. We present a rare case of filarial infection in a 70 yr old male presenting with pain and recent onset right iliac fossa lump. Patient was managed surgically and histopathology findings confirmed it to be a filarial cyst. After receiving a course of diethylcarbamazine patient is asymptomatic at 2 years follow up.

INTRODUCTION

Primary retroperitoneal parasitic cysts are uncommon.[1,2] Mostly these are echinococcal cysts.[3] Filariasis is an infectious parasitic disease endemic to tropical regions.[4] It is caused by thread like nematodes, Wuchereria Bancrofti, Brugia Malayi, or Brugia Timori. Adult worms lodge in the lymphatic system and disrupt the immune system. Lymphatic filariasis infection involves asymptomatic, acute and chronic conditions with majority of the infections being asymptomatic. Filariasis presenting as retroperitoneal cysts are very rare even in endemic areas like India and there are only a few case reports till date.[5,6] We present a rare case of retroperitoneal cyst due to filariasis, diagnosis of which was confirmed by demonstration of live microfilariae in cyst fluid.

Case Report

A 71 years old male patient presented with complaints of pain and gradually increasing lump in right Iliac fossa since 1 month. Pain was dull in character and moderately severe in intensity. He also gave history of intermittent mild to moderate grade fever. Bowel and bladder habbits were normal. On general examination, patient was febrile and had tachycardia. On abdominal palpation, patient had tenderness in RIF with a vague, diffuse palpable lump which decreased on leg raising and did not fall forward in the heel knee position. There was no evidence of spermatic cord thickening or scrotal pathology. Bilateral inguinal lymph nodes were not palpable and no swelling of lower limbs.

Complete blood counts were within normal limits. Blood culture was sterile. Abdominal sonography done at the time of admission revealed the lump to be an ileocaecal mass. However, the Contrast Enhanced Computer Tomography of the abdomen showed the lump to be a multiloculated retroperitoneal cystic lesion measuring 10 x 8 x 5 cm not involving adjacent organs(Figure 1).Lump was symptomatic due to pain and gradually increasing in size with diagnostic uncertainty prompted us to go for exploratory laparotomy. Patient was taken for exploratory laparotomy. Intraoperatively, a cystic lump measuring 10X10X8cm containing chocolate colored fluid was seen in the retroperitoneum on the right side which was abutting the iliac vessels and the ureter. The lump was gradually separated from the surrounding structures and delivered out (Figure2,3). Cyst fluid analysis showed 85 cells/cm with 40% lymphocytes, 40% neutrophils and 20% eosinophils. Histopathology revealed live microfilariae in the cyst(Figure 4). Postoperative course was uneventful and patient was started on Di Ethyl Carbamazine.2 years followup is uneventful.

DISCUSSION

Retroperitoneal cystic masses are commonly divided as nonneoplastic (hematoma, lymphocele, pancreatic pseudocyst, nonpancreatic pseudocyst, urinoma) lesions and neoplastic (tailgut cyst, cystic change in solid neoplasms, mucinous cystadenoma, epidermoid cyst, cystic teratoma, cystic mesothelioma, müllerian cyst, bronchogenic cyst,

Corresponding author:* **Aftab S Shaikh
Grant Government Medical College & JJ group of hospitals, Byculla, Mumbai 400008, Maharashtra

pseudomyxoma retroperitonei,cystic lymphangioma, perianal mucinous carcinoma) lesions.

Primary retroperitoneal cysts are rare, often asymptomatic, and incidentally detected on imaging for other problems. They have been classified as (a) traumatic cysts, (b)parasitic cysts, (c)lymphatic cysts, (d)mesocolic cysts, (e)cysts arising in cell inclusions, and (f) urogenital cysts, depending on the origin and histology.[1, 2] Most common primary retroperitoneal parasitic cysts are echinococcal cysts.[3]

Filariasis is an endemic infection seen in the tropical and subtropical regions of the world, presenting with a wide array of clinical manifestations, including lymphedema of limbs, genital disease(hydrocele, chylocele and swelling of scrotum and penis)and recurrent acute disease episodes.[4] Lymphatic filariasis is transmitted by different types of mosquitoes for example by the *Culex* mosquito, widespread across urban and semi-urban areas; *Anopheles* mainly in rural areas, and *Aedes*, mainly in endemic islands in the Pacific.

Filarial Retroperitoneal cysts have a reported incidence of 1,05,000 in literature.[7,8] There are only a few reported cases in the literature, all from the Indian subcontinent. Even in endemic areas retroperitoneum is a rare site for filarial cyst. Possible etiologies include presence of ectopic lymphatic tissue, obstruction of the lymphatic vessels by adult worms followed by their rupture and hence extravasation of the chyle and microfilaria into the retroperitoneum with surrounding inflammatory response leading to formation of the cyst.No previous case has been reported with initial presentation being a lump in the right iliac fossa.

Giri *et al* reported a young male patient presenting with heterogenous mass at left iliac fossa along with left sided hydrocele and hydronephrosis of left kidney. After confirming the diagnosis by FNAC, the patient was treated with antifilarial therapy which led to complete resolution of the cyst.[9]

Natasha *et al* reported a case of retroperitoneal cyst presenting as acute abdominal pain which showed significant reduction in symptoms on antifilarial medication.[10]

Col Anand Srivastava reported a large retroperitoneal filarial cyst in young male athlete extending from mediastinum to pelvis presenting with haematuria. The diagnosis was made on FNAC and DEC started, for which the patient responded well with reduction of size but still symptomatic with on and off haematuria.[11]

Bakde A reported a case of large retroperitoneal cyst mimicking as pancreatic pseudocyst extending from epigastrium to pelvis with bilateral hydrocele and classical Filarial Dance sign on USG scrotum. FNAC done revealed microfilariae, the patient was started on DEC and later taken up for excision.[12]

Wuchereria bancroftiis the most common organism encountered in India among all species of filarial worms. Common presentations are asymptomatic microfilaremia, acute adenolymphangitis, hydrocele, and lymphedema. Recent onset of retroperitoneal cyst, without other common manifestations of filariasis like lymphangitis and lymphedema, no inguino-scrotal swelling is the peculiar presentation of our patient. We decided to perform surgery straight away without FNAC, as the patient had large symptomatic cyst with diagnostic uncertainty and unusal presentation. Imaging rarely helps to confirm the diagnosis. Often the diagnosis is made either by FNAC or histopathology after excision like in our case. If diagnosis is madeon FNAC, one can start with medical treatment first and surgical excision may be reserved for persistent symptomatic cysts.

CONCLUSION

Filarial retroperitoneal cysts should be included in the differential diagnosis of retroperitoneal cysts especially in endemic areas like India even though retroperitoneum is a rare location for a filarial cyst. They may present as misleading lumps in any quadrant of the abdomen. The exact aetiology remains uncertain, obstructed lymphatic vessels, rupture of lymphatics causing extravasation of chyle presence of ectopic lymphatic tissue remain possible aetiologies.[6] Small retroperitoneal lesions may resolve with antifilarial therapy, but most case require surgical removal because of their large size ,as in our case.

Figure 1 CT Scan showing multiloculated cyst in the right retroperitoneal region 10 x 8 x 5 cm in size

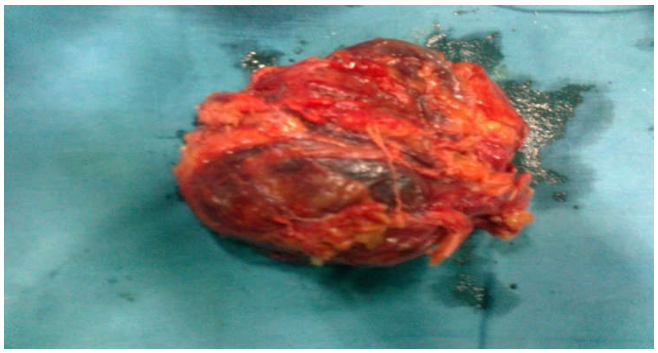


Figure 2 Gross apperance of cyst with irregular margins

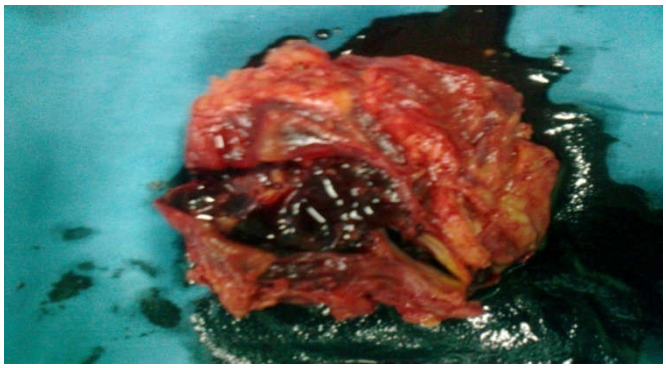


Figure 3 Laid open cyst with chocolate colored fluid

Figure 4 Microscopy showing microfilariae

References

1. M. W. Guile, M. Fagan, A. Simopolous, and M. Ellerkman, "Retroperitoneal Cyst of Müllerian Origin: a case report and review of the literature," *Journal of Pelvic Medicine and Surgery,* vol. 13, no. 3, pp. 149-152, 2007. View at Publisher · View at Google Scholar· View at Scopus
2. R. M. Handfield-Jones, "Retroperitoneal cysts: their pathology, diagnosis, and treatment," *British Journal of Surgery,* vol. 12, no. 45, pp. 119–134, 1924. View at Publisher · View at Google Scholar
3. Aydinli, G. Ozturk, K. Y. Polat *et al*., "Extravisceral primary hydatid cyst of the retroperitoneum," ANZ *Journal of Surgery*, vol. 77, no. 6, pp. 455–459, 2007. View at Publisher · View at Google Scholar
4. Guerrant, Richard L, David H Walker, and Peter F Weller. Tropical Infectious Diseases. Philadelphia: Churchill Livingstone, 2006. Print.
5. A. K. Kapoor, S. K. Puri, A. Arora, L. Upreti, and A. S. Puri, "Case report: filariasis presenting as an intra-abdominal cyst," *Indian Journal of Radiology and Imaging*, vol. 21, no. 1, pp. 18-20, 2011. View at Publisher · View at Google Scholar · View at Scopus
6. C. R. Pillay, "Retroperitoneal cyst of filarial origin," *Journal of the Association of Physicians of India*, vol. 9, pp. 760–762, 1961. View at Google Scholar
7. M. Madhavan, S. K. Vanaja, K. Chandra, and D. J. Reddy, "Atypical manifestations of filariasis in Pondycherry," *Indian Journal of Surgery*, vol. 34, pp. 392–394, 1972. View at Google Scholar
8. G. Chittipantulu, K. Veerabhadraiah, G. V. Ramana, and M. V. Somayajulu, "Retroperitoneal cyst of filarial origin," *Journal of the Association of Physicians of India,* vol. 35, no. 5, pp. 386-387, 1987. View at Google Scholar · View at Scopus
9. A. Giri, A. K. Kundu, M. Chakraborty, and S. Das, "Microfilarial worms in retroperitoneal mass: a case report," *Indian Journal of Urology*, vol. 17, pp. 57–58, 2000. View at Google Scholar
10. Natasha. N. Mehta, Vaishali S.Dalvi, Nikit.P.Mehta, "filariasis presenting as acute abdominal pain: role of imaging and image guided intervention in diagnosis., "Radiology case reports, volume10 issue 2,2015 article 1125
11. Srivastava A, Agrawal A. Large retroperitoneal filarial lymphangiectasia. *Med journal, Armed Forces India* [Internet]. 2016 Apr [cited 2018 Jan 17];72(2):180–2. Available from: http://www.ncbi.nlm.nih.gov/pubmed/27257331
12. Bakde A, Disawal A, Taori K, Aanand A, Gaur P, Agrawal M. Retroperitoneal Cyst: An Unusual Presentation of Filariasis. *J Med Sci Heal* [Internet]. 2016 [cited 2018 Jan 17];2(2):44-7. Available from: http://jmsh.ac.in/index.php?option=com_k2&view=item&id=53:retroperitoneal-cyst-an-unusual-presentation-of-filariasis&Itemid=1

How to cite this article:

Aftab S Shaikh *et al* (2018) 'An Unusual Right Iliac Fossa Lump -Lymphatic Filariasis Presenting As A Retroperitoneal Cystic Lesion, A Rare Case', *International Journal of Current Medical And Pharmaceutical Research,* 04(3), pp. 3177-3179.

****