Case Reports

Smriti Agnihotri¹, Om Prakash Talwar², Sujata Pudasaini², Ritu Baral²

Cysticercosis of Breast – A Case Report

¹Department of Pathology, SSR Medical College, Mauritius,

Cysticercosis can affect any organ or tissue of the body. Involvement of the breast is a rare presentation. In this report we present a case of 22 years young married woman who came with the history of painless mobile swelling in the right side of the breast. An excision biopsy was carried out. Histopathological examination revealed the presence of typical cysticercus larva and a definite diagnosis of cysticercosis was made. To conclude, cysticercosis of the breast is rare and it should be considered as a differential diagnosis for a lump in the breast.

Introduction

Human cysticercosis, a parasitic infection caused by *Cysticercus cellulosae*, is a major public health problem mainly in developing countries. The common sites of cysticercosis are skeletal muscle, subcutaneous tissue, breast, brain, and eye in decreasing order of frequency [3]. Breast is an uncommon site for cysticercosis but not rare. Only few cases have been reported in the literature. The patients commonly present in the form of cyst or lump in the breast. Here, we will discuss a case of cysticercosis in breast presented in form of small non-tender lump.

A Case Description

A twenty-two years young married female has developed non tender lump (Fig. 1) in the upper part of the right breast for last eight months. Initially it was of pea size but gradually increasing in size. It was associated with intermittent pain. The left breast was normal. Excision biopsy was done and lump was removed.

Pathological findings

Grossly, the specimen consisted of cystic, nodular swelling measuring 0.75 cm. External surface was unre-

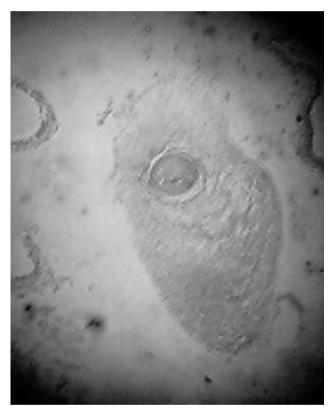


Fig. 1. Gross appearance of the diseased breast.

markable. Cut section showed serous fluid with white mass of about 0.1 cm. Entire specimen was submitted in two bits.

Microscopically, sections showed cystic wall of the cysticercus lined with three layers, namely corrugated cuticular layer with hair-like protrusions (microtrichia) in contact with host tissue, a thin middle cellular layer and a thick inner layer containing a loosely packed network of small canaliculi with infiltration of lymphocytes, plasma cells and eosinophils. Multinucleated giant cells and foreign body granulomas were seen in the wall of the cyst (Fig. 2).

²Department of Pathology, Manipal College of Medical Sciences, Pokhara, Nepal

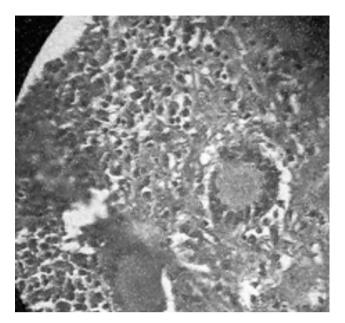


Fig. 2. Giant cells and foreign body granulomas in the cyst wall.

Discussion

Although human cysticercosis is a common problem in developing countries, still it is unusual for cysticercosis to occur in the tissue of the breast. In one study in Nepal, in last 5 years in Patan Hospital-Kathmandu, in 62 of 23,402 biopsy cases cysticercosis have been detected, with 8% of the cases located in breast [2]. In India, a review study of 8,364 breast aspirates over 15 years (1978–1992) in All India Institute of Medical Sciences, New Delhi, demonstrated only 8 cases of cysticercosis [6].

It is well known fact that the larva of *Taenia solium* (*Cysticercus cellulosae*) is most commonly encysted in the muscles of pigs and man acquires infection by ingestion of raw or insufficiently cooked measly pork. But, cysticercosis

may also occur in vegetarians due to ingestion of contaminated vegetables. Cysticerci can develop in any organ or tissue. The effects are serious when they occur in the central nervous system and eye [4]. In this particular case, the patient was initially presented with non-tender lump in the right breast. The diagnosis of cysticercosis was established by microscopic examination of the entire cyst. Geetha TV et al. [5] and Alagaratnam TT et al. [1] have also reported similar cases in Nepal and China, respectively.

Conclusion

This case report emphasizes the fact that the breast is unusual site for cysticercosis and it should be considered as differential diagnosis of the lump of breast especially in the area of great prevalence of this parasitic disease.

References:

- Alagaratnam TT, Wing YK, Tuen H: Cysticercosis of the breast. Am J Trop Med Hyg 1988, 38(3), 601-602.
- Amatya BM, Kimula Y: Cysticercosis in Nepal. A histopathologic study of sixty-two cases. Am J Surg Pathol 1999, 23(10), 1276–1279.
- Chi HS, Chi JG: A histopathological study on human cycticercosis. Kisaengchunghak Chapchi 1978, 16(2), 123–133.
- 4. *Del Britto OH and Sotelo J:* Neurocysticercosis: an update. Rev Infect Dis 1998, 10, 1075–1087.
- Geetha TV, Krishnand BR, Pai Chitra G: Cysticercosis of breast: A rare presentation. J Nep Med Assoc 2000, 39, 184–185.
- Sahai K, Kapila K, Verma K: Parasites in fine needle breast aspirates assessment of host tissue response. Postgrad Med J 2002, 78(917), 165–167.

Address for correspondence and reprint requests to:

Dr (Mrs.) Smriti Agnihotri Department of Pathology SSR Medical College, Belle-Rive, Mauritius Email: smritiayushi@yahoo.co.in