

Pseudoneoplastic lesion of the breast caused by *Schistosoma mansoni*

Pseudoneoplasma da mama causado pelo *Schistosoma mansoni*

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ABSTRACT

A case of a pseudoneoplastic lesion of the breast clinically and sonographically suggestive of a fibroadenoma is reported. Excisional biopsy revealed the nodule was an inflammatory process consequent to infection by Schistosoma mansoni.

Key-words : Breast. Schistosomiasis. Pseudoneoplastic lesion. Schistosoma mansoni.

RESUMO

Relata-se um caso de uma lesão pseudoneoplásica da mama clinicamente e ultrasonograficamente sugestiva de um fibroadenoma. A biópsia excisional revelou que o nódulo tratava-se de um processo inflamatório consequente à infecção pelo Schistosoma mansoni.

Palavras-chaves : Mama. Esquistossomose. Lesão pseudoneoplásica. Schistosoma mansoni.

Schistosomiasis is an important health problem in the world, mainly in developing countries where it is responsible for more than 200 million infected people. The disease is caused by the schistosome and, although various species are found worldwide, only five cause disease in man: *S. mansoni*, *S. japonicum*, *S. haematobium*, *S. mekongi*, and *S. intercalatum*². In South America, only *S. mansoni* is known.

There are several clinical presentations of schistosomiasis, defined by manifestations mainly of the gut, urinary tract, portal system, and lungs. Also, ectopic granulomas can occur in every organ. The breast is a very rare site of disease manifestation. Only six cases of this localization were found in the world literature^{1 3 4 5 6 7}. Thus, we report what seems to be the seventh case of a breast lesion caused by *S. mansoni*, with a clinical and sonographic appearance of fibroadenoma.

CASE REPORT

This 23-year-old woman sought medical attendance because of a painless breast nodule noted six months before admission. Physical examination revealed a non tender, elastic, mobile 2.5 x 2cm mass

located between the lower quadrants, near the right nipple. A sonogram revealed a hypoechogenic nodule suggestive of a fibroadenoma. No mammogram was done because of the age of the patient. Excisional biopsy showed a dense fibrous brown mass. Microscopically, two features were outstanding: several granulomas with either viable ova or remnants of ova in the center (Figures 1 and 2) and couples of adult worms inside veins amongst mammary lobules, surrounded by an intense eosinophil-rich inflammatory process (Figure 3). These formed a pseudoneoplastic breast lesion cause by *S. mansoni*. Since there were viable worms, treatment with oxamniquine was prescribed.

DISCUSSION

The present case occurred in a 23-year-old woman with physical and sonographic findings suggestive of a fibroadenoma. Usually, findings such as this can be monitored and if remain unchanged with time should be left untreated. However, it was decided to perform a surgical excision mainly in view of the patients wishes. Gross appearance was that of a benign lesion and light microscopy

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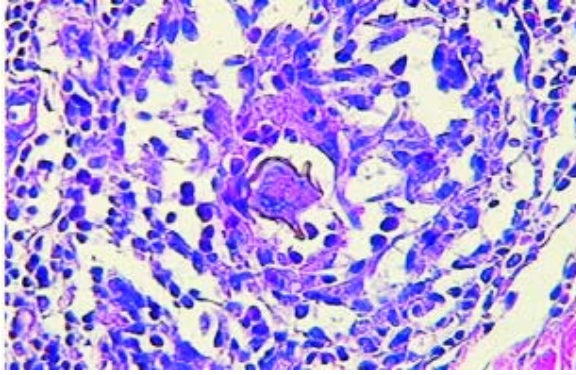


Figure 1 - Granulomas centered by a viable *S. mansoni* egg.

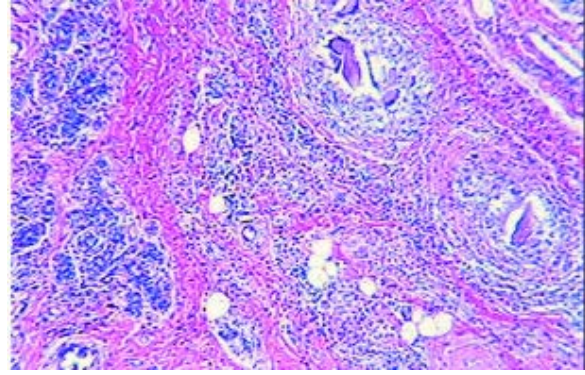


Figure 2 - Granulomas centered by eggshells.

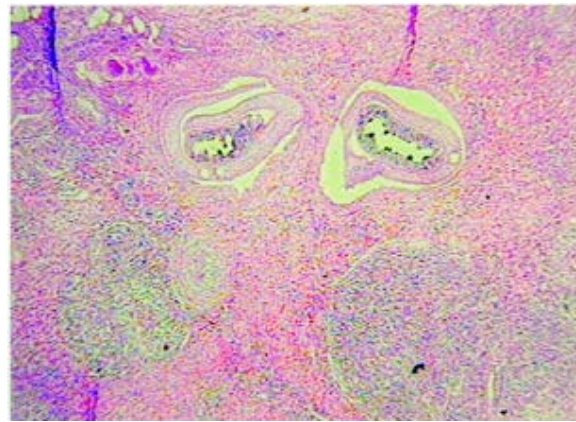


Figure 3 - Couples of adult worms inside veins.

enabled the diagnostic confirmation of a mammary nodule caused by *S. mansoni*. This finding was considered conclusive and so no other diagnostic methods were necessary. Treatment with Oxamniquine was initiated because viable ova were observed. A fecal test revealed no ova soon after treatment. In older women, such a clinical and mammographic appearance would not rule out the possibility of cancer. Thus, either an excision or needle biopsy is necessary for differential diagnosis as well as providing the only form of diagnosing pseudoneoplastic lesions caused by schistosome.

The rarity of the mammary presentation should be emphasized and the six cases reported in the world literature were due to *S. japonicum*¹⁵⁶⁷ and *S. haematobium*³⁴.

To the best of our knowledge, this is the first case to be reported in the world literature, with *Schistosoma mansoni* as the etiologic agent.

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