

CASE REPORTS

DIROFILARIASIS OF THE BREAST

G.C. RAJU, V. NARAYNSINGH, N. JANKEY

Departments of Pathology and Surgery, Port-of-Spain General Hospital, Trinidad, West Indies

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Abstract. Sections of an adult filarial worm, probably *Dirofilaria tenuis* or related species were found within the breast tissue. This is the first human dirofilarial infection reported from Trinidad

Introduction

Human infection with dirofilaria have been reported from various parts of the world [1, 2]. Most of the described lesions manifested as single subcutaneous nodules although a few involved the lung and heart.

Case report

M.P., a 32-year-old woman reported to the hospital with a lump in the upper outer quadrant of her left breast. She was in good health and there was no evidence of cutaneous or systemic disease on examination. Her chest X-ray and ECG were normal. The leucocyte count was $4.2 \times 10^9/l$ with 1% eosinophils. Blood, sputum and stool examinations were negative for parasites. With a clinical diagnosis of fibroadenosis, the breast lump was excised.

Pathology. A small, firm greyish white tissue of one centimeter was received and was processed enblock. Microscopically, there were numerous cross sections of a filarial worm within a dilated lymphatic vessel surrounded by an inflammatory infiltrate, consisting mainly of lymphocytes (Figure 1). It was difficult to positively identify the species from the histological sections. Based on the morphological descriptions [3, 4], the sections of the filarial worm is suggestive of *Dirofilaria tenuis* or a related species (Figure 2). The breast tissue showed fibroadenosis and intraductal hyperplasia.

Discussion

A review of the literature on human infection with *Dirofilaria* revealed that such cases have been observed throughout the world. The majority of reported cases are subcutaneous infections. *Dirofilaria* located at or near the breast in the subcutaneous tissue have been recorded [5]. Sections of *Dirofilaria* in the galactophor canal of the breast have also been noted [6].

There are subtle morphological differences which may help to distinguish certain species or groups of species of *Dirofilaria* [4]. Moreover, it is not possible to correctly identify the species when small portions of the worms in histological sections are available for study.

Correspondence to: Dr. G.C. Raju, 15 Wainwright Street, St. Clair, Port-of-Spain, Trinidad, W.I.



Figure 1. Breast



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References

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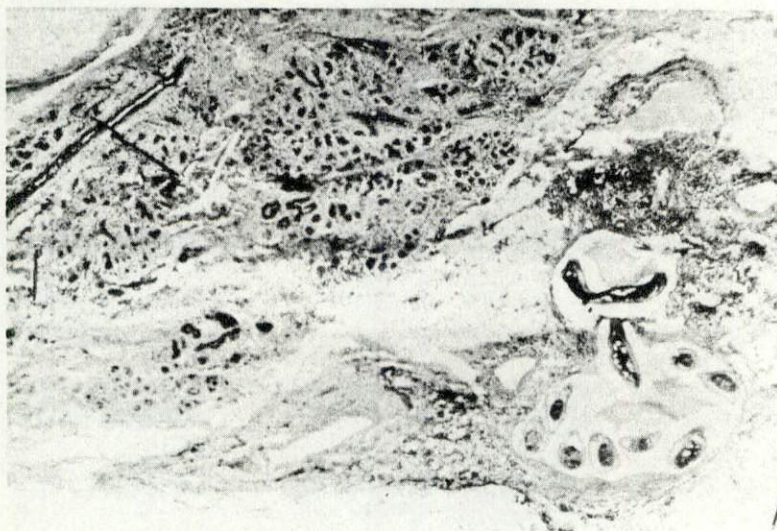


Figure 1. Breast tissue showing sections of dirofilariasis worm within a lymphatic vessel (H&E \times 50).



Figure 2. Transverse section showing the cuticle of the worm, genital tube and intestine (H&E \times 200).

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