



## Case Illustrated

## Extra-lymphatic filariasis at reconstructive surgery flap site recurrence of head and neck cancer



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## ABSTRACT

Filarial infection is commonly encountered in the Indian subcontinent. Here we present a clinical image of filarial infestation at the site of recurrence of head and neck cancer.

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A 37 year old male, chronic tobacco chewer, presented with an ulcer in the left buccal mucosa. On examination, he had an ulceroproliferative growth involving the left buccal mucosa, extending from the first premolar up to the last molar, without local lymphadenopathy. He was diagnosed with stage IV A (T4aN0M0) squamous cell carcinoma and underwent composite resection of the left buccal mucosa with modified neck dissection and bipaddle pectoralis major myocutaneous flap reconstruction followed by adjuvant radiotherapy. After 6 months, he presented with two discrete skin nodules near the previous flap site, 2 cm × 2 cm in size, one being hard and other cystic. CT scan was suggestive of local recurrence without lymphadenopathy. Needle aspiration showed metastatic squamous carcinoma along with sheathed microfilaria but peripheral smear did not reveal any microfilaria. Filarial antigen and antibody tests were not available. He was treated with diethyl carbamazine and then palliative chemotherapy for recurrence (Figs. 1 and 2).

Filarial infection is common in India where majority of the infections are caused by *Wuchereria bancrofti* and a minority by *Brugia malayi* [1]. The manifestations could be acute or chronic. Our patient did not have fever or lymphadenopathy, but he had extra lymphatic manifestation in the form of skin nodules near the reconstructive flap site. Filarial infections usually affects lymphatics especially of the extremities however, extralymphatic infestation in breast and ovarian cysts, thyroid, bronchial aspirates,

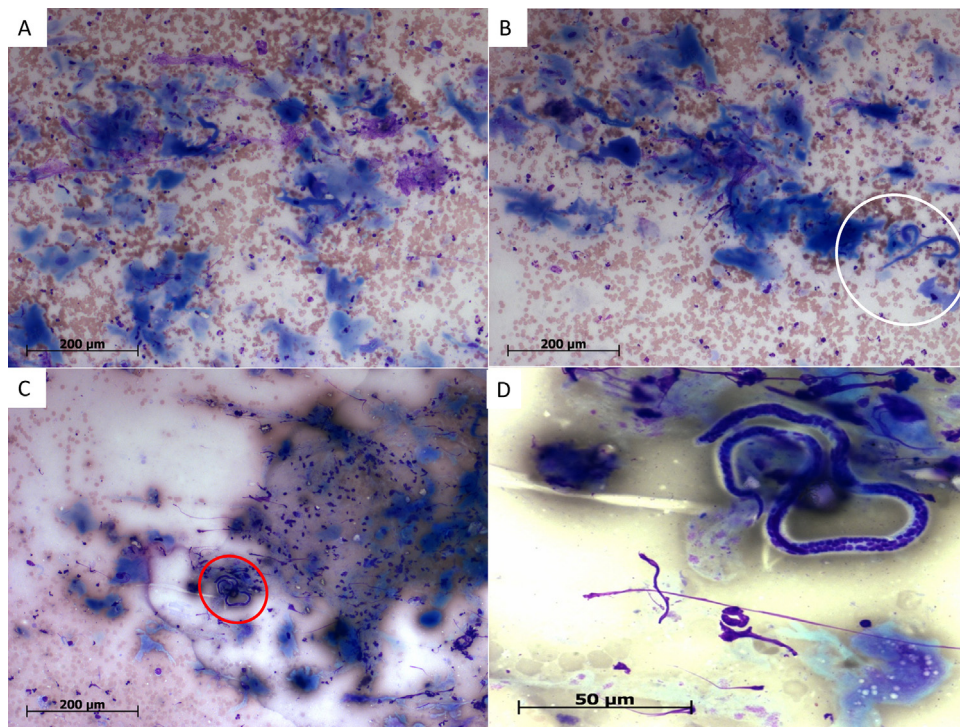
pleural and pericardial fluid as well as subcutaneous tissue have also been reported [2,3,4]. Extra lymphatic spread could be either due to lymphatic obstruction and spillage or due to rupture of the micro-vasculature. In our case, probably the patient could have had



Fig. 1. Clinical picture of swelling near the flap site.

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**Fig. 2.** Giemsa stained smears of fine needle aspiration cytology showing atypical squamous epithelial cells (A,B  $\times 100$ ; round circle in B highlights the tadpole shaped atypical squamous epithelial cells). Interspersed a single unsheathed microfilaria (C  $\times 100$ ; highlighted by the red circle; D  $\times 400$ ). (For interpretation of the references to color in this figure legend, the reader is referred to the web version of this article.)

microvasculature rupture due to the tumor and hence detectable microfilaria in the skin nodule. In countries where filariasis is rampant, presence of microfilariae at rarer sites should be borne in mind.

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