Intr
oduction
Among other tropical diseases, filariasis is a major
public health problem in the African and Asian sub-
continent. It is transmitted by the Culex mosquito
and is caused by two closely related nematodes:
Wuchereria bancrofti and Brugia malayi. Filariasis
affects the lymphatic system with a predilection for
lower limbs, retroperitoneal tissues, spermatic cord,
and epididymis\(^1\). Filaria can affect other sites rarely.
Though single or small number of cases on microfi-
laremia at various sites as lymphnode, breast lump,
bone marrow, bronchial aspirates, nipple secretion,
pleural and pericardial fluid, ovarian cyst fluid and
cervico vaginal smear have been reported, thyroid is
another site from which microfilaria has been isolat-
ed. So far only nine case reports are available. It is
estimated that approximately 600 million people are
living in areas endemic for lymphatic filariasis
Southeast Asia Region. There are approximately 60
million people infected in the region and approxi-
mately 31 million people have the clinical manifes-
tation of this disease\(^2\).

Case Pr
esentation
A 36-year-old female presented with a slowly
enlarging painless swelling of thyroid gland over a
period of two years. Clinically patient had no other
complain. Thyroid function was normal. On exami-
nation a 3×3 cm, firm, non-tender thyroid nodule
was palpable over left lobe. No cervical lymph node
was palpable. Fine-needle aspiration of the thyroid
nodule revealed blood mixed colloid. Slides were
stained with Leishman-Giemsa stain.

Microscopic examination of the smear showed the
presence of microfilarial larvae with few mono-
layered clusters of benign follicular cells in the back-
ground of blood mixed colloid. The microfilariae
had blunt head and pointed tail with a sheath project-
ed slightly beyond the extremities of the embryo
(Fig.1). Somatic cells or nuclei appeared as granule
in the central axis of the body and were absent at the
tip of the tail. All the features distinguish M. ban-
crofti from the other sheathed larvae.

Discussion
Filariasis is a global problem. It is also a major
health problem in India\(^3\). This patient also presented
as euthyroid state similar to the findings of Kundu
et al, Kar D.K. et al and Mohanti et al\textsuperscript{4,5,6}. In no case reported previously suspect of microfilaria was made. All the cases were sent for FNAC for diagnosis of other primary lesions similar to our case\textsuperscript{2}.

The clinical manifestations of lymphatic filariasis may range from asymptomatic microfilariasis to hydrocele, lymphangitis, lymphadenitis with high-grade fever (filarial fever), and lymphatic obstruction\textsuperscript{7}. In our case it presented with asymptomatic thyroid swelling, similar findings have been noted by study of Mohanti et al and Vargese et al\textsuperscript{6,8}. Microfilaria of thyroid has never been suspected in any case reports including those cases where high eosinophilia has been reported\textsuperscript{2}. There are eight identified species of filarial parasite among them only three (i.e., \textit{W. Bancrofti}, \textit{B. Malayi}, and \textit{Brugia timori}) are known to cause lymphatic filariasis. These are sheathed species. In India microfilariae bancrofti and microfilariae malayi are the commonly prevalent species. Species diagnosis is made on the basis of morphology of the microfilaria. Microfilariae of \textit{B. Malayi} are smaller than those of \textit{W. bancrofti}, possess secondary kinks instead of a smooth curve, and unlike the latter, the tip is not free of the nuclei\textsuperscript{9}.

**Conclusions**

In conclusion, filariasis of the thyroid is an uncommon condition and need a high index of suspicion and careful screen of FNA smears especially in asymptomatic patients belonging to endemic zones, so as not to miss this incidental finding especially in patients from endemic areas.

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**References**


