



# Microfilaria Diagnosed At Uncommon Sites On Cytology

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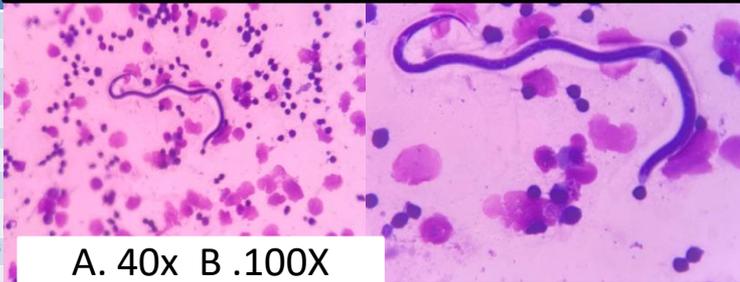
**INTRODUCTION:** Lymphatic filariasis is a global problem affecting more than 120 million people especially in the tropical and subtropical countries. It is endemic in various states of India including Uttar Pradesh, Bihar, Orissa and Kerala. It is caused most commonly by *Wucheria bancrofti* and *Brugia malayi*. The organism is mainly manifested in lymph and lymph nodes. The definite diagnosis of filariasis is made on Peripheral smear, however, *Microfilaria* have also been incidentally detected in Fine Needle Aspiration Cytology in many clinically unsuspected cases.

**METHODOLOGY:** We included ten cases of Filariasis diagnosed on routine cytological examination. Majority of the patients who presented for FNAC had subcutaneous soft tissue swelling at various locations including arm, forearm and preauricular region. Two patients presented with pleural effusion while in the other two patients it was detected incidentally in pap smear and along with follicular neoplasm of thyroid respectively.

**RESULTS:** Age distribution showed a wide range from 17-70 years. Male predominance was seen on analysis of these cases with M:F ratio of 4:1. Most frequent clinical presentation was longstanding swelling.

| S.No | AGE/ GENDER | SITE          | CLINICAL PRESENTATION |
|------|-------------|---------------|-----------------------|
| 1    | 69YR/M      | PLEURAL FLUID | PLEURAL EFFUSION      |
| 2    | 69YR/M      | PLEURAL FLUID | PLEURAL EFFUSION      |
| 3    | 20YR/M      | RIGHT FOREARM | SWELLING              |
| 4    | 17YR/M      | LEFT ARM      | SWELLING              |
| 5    | 21YR/M      | RIGHT ARM     | SWELLING              |
| 6    | 23YR/M      | LEFT ARM      | SWELLING              |
| 7    | 20YR/M      | PREAURICULAR  | SWELLING              |
| 8    | 33YR/M      | Pap SMEAR     | MUCOID DISCHARGE      |
| 9    | 55YR/M      | NECK          | THYROID SWELLING      |
| 10   | 30YR/M      | LEFT ELBOW    | SWELLING              |

**FNAC DEMONSTRATING MICROFILARIA OF W.BANCROFTI**



A. 40x B .100X

**DISCUSSION:** Clinical manifestations of lymphatic filariasis range from none to both acute and chronic such as lymphagitis, lymphadenitis, elephantiasis of genitals, legs and arms. Though not fatal, the disease is responsible for considerable suffering, deformity and disability. Apart from lymph nodes, it has been otherwise reported at various locations such as pleural fluid, subcutaneous swelling, pap smear, breast, scrotum and bone marrow.

**CONCLUSION:** FNAC is quick, cheap and minimally invasive method for diagnosis of Filariasis in clinically unsuspected cases. The diagnosis of microfilaria should be kept in mind while dealing with clinically palpable lesions on non lymphoid sites and careful screening of all cytology smears should be done in endemic areas to reduce morbidity due to microfilaria.

**REFERENCE:** (1)Park K. Park’s textbook of preventive and social medicine. Health Programmes in India: 25th ed. Jabalpur: Banarasidas Bhanot Publishers 2019. P 295.

(2.) Chakrabarti, N, Konar, K, Mala Incidental detection of microfilaria in cytology: Report of three cases. Ann Clin Pathol 2014; 2: 1033–1033.

(3.) Kanade US, Dantkale SS, Chaware SA, Narkhede RR, Gadhekar MS. Microfilaria in preauricular subcutaneous nodule on cytology: An unusual