

## MICROFILARIAE IN CERVICAL SMEARS

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Cervical smears are routinely examined for detection of inflammatory, dysplastic and malignant lesions. However, a variety of parasites like *Entamoeba histolytica*, *Trichuris trichura*, *Enterobius vermicularis*, *Bilharzia* and *Microfilariae* have been reported in vaginal smears (Berry, 1971; Chatterjee, 1975; de Borge, 1971; Jordan, 1960; Ruth, 1978; Vasilokas and Cox 1974). This report presents the observation of microfilariae of *Wucheria Bancrofti* in cervical smears.

### *Materials and Method*

While studying the cervical smears from cases of unhealthy cervix routinely on 358 cases attending gynaecological out patient department of S.C.B. Medical College, Cuttack during November 1979 to June 1980, microfilariae were detected in smears of 2 patients. All the cervical smears were stained by Papanicolaou stain after fixation with absolute alcohol. Both the patients had leucorrhoea and on examination clinically had cervical erosion.

### *Observation*

Cervical smears stained with Papanicolaou stain revealed sheathed micro-

filaria. Nuclei in the parasites did not extend upto the tip of the tail. At the anterior end there was a space (cephalic space) also devoid of granules. Larvae varied between 285  $\mu$  to 290  $\mu$  in length by 6  $\mu$  to 7  $\mu$  in breadth (Figs. I and II). From these morphological features they were diagnosed as larval stages of *Wucheria bancrofti*.

None of the smears had dyskaryotic or malignant cells. Smear from one of these patients showed severe inflammatory changes in epithelial cells. Both the smears did not have *Trichomonas* and *Monilia*.

### *Discussion*

Filariasis caused by *Wucheria bancrofti* is endemic in (Orissa) this part of India. *Microfilaria* are commonly encountered in peripheral blood smears, hydrocoele fluid and other serosal fluids (Vasilokas and Cox, 1975). So far microfilaria in cervical smears have not been reported from this part of the country.

While collecting the smears patients did not have uterine bleeding to suggest the escape of these parasites through endometrial bleeding. Both smears were blood stained due to trauma to local capillaries during collection of samples. While obtaining the smears possibly these larvae were in the capillaries which were traumatized and thus the organisms were trapped in the smears.

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The other possibility of finding microfilaria in cervical smears of these leucorrhoeic patients could be the escape of the parasites through inflammatory exudate.

These cases in this report were from out patient department and were not available for follow-up to find out whether there was any etiological relationship between the parasite and leucorrhoea.

Here it can be stressed that while studying the cervical smears a careful watch should be kept for presence of microfilaria particularly in endemic areas of filariasis and further studies should be carried out to determine whether these parasites produce any pathology in cervix uterii or not.

#### Summary

During routine cervical smear examination on 358 cases of unhealthy cervix, larval stages of *Wuchereria Bancrofti* were observed in two patients who had leucorrhoea and on clinical examination both of

them had cervical erosion. It has been emphasized that while examining cervical smear, a search should be made for these larva particularly in endemic areas.

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See Figs. on Art Paper II