

VAGINAL PARASITOSIS*

by

MOHINI A. GARUD,** M.D., D.G.O., M.R.C.O.G., D.F.P.

USHA SARAIYA,** M.D., D.G.O., M.I.A.C., F.I.C.S.

SUDHA PARASKAR,*** B.Sc.

and

JOSEPHINE KHOKHAWALLA,*** B.Sc.

This communication from Cytology Clinic, deals with the finding of ova of parasites in the Papanicolaou stained smears from the vaginal pool. From time to time reports have appeared in the literature of parasitic disease evidenced by the presence of ova or cysts or parts of parasites in cervico-vaginal smears.

The incidence of worm infestations is very high in India and is particularly so in the lower socio-economic classes, due to the poor hygienic standards. The cytology smears of patients in a general hospital on careful screening are likely to reveal many interesting parasites. We report herewith 2 cases.

CASE REPORTS

Case 1

A 45 year old patient L.M., attended the hospital in August, 1975 with the complaints of white discharge for 3 days and backache for 2 days. In the past, her menstrual history revealed that she had periods lasting from 8 to

9 days and coming at a frequency of 18 to 20 days, and recently she had noticed pain with the period. Since the last three months she had amenorrhoea. Her obstetric history revealed that she had been married for many years and had 9 full term normal deliveries of which 5 children had survived and 4 died. Her last delivery was 16 years ago. She also gave a history of 6 months abortion 15 years ago. Her general examination revealed her as a endentulous woman. She had poor nutrition and was anaemic clinically. There was no lymphadenopathy. Her cardiovascular and respiratory systems were normal. Per abdomen, there was no abnormality.

Her uterus was retroverted and small in size. Per speculum, she had a small friable lesion on the posterior lip of cervix. Cytology revealed cells from an invasive carcinoma. In one of the smears we found an unfertilised ovum of *Ascaris Lumbricoides* or Round Worm.

Description

Fertile eggs of ascaris vary in size from 45- μ -75- μ by 35- μ -50 μ . The typical egg is one celled and thick shelled. The exterior is rough and mammillated in appearance although sometimes the rough exterior is missing. Infertile eggs are considerably longer than fertile and lack interior cellular differentiation. (See Photographs Figs. 1, 2, 3).

Her investigations were as follows:

Hb 10.8 gm%. Bl. group A +ve. Bl. KT -ve. Bl. sugar 84 mg%. Bl. urea 28 mg%. Chest X-Ray clear. IVP-NAD.

Subsequent to the Cytology smear reports, routine stool examination showed heavy infestation with ova of round worm.

This patient was treated for anemia and

*From Cytology Clinic (AMWI) and Department of Obstetrics & Gynaecology of Cama & Albles Hospitals, Mahapalika Marg, Bombay 1, INDIA.

**Hon. Cytologist and Assit. Hon. Obstetrician & Gynaecologist, Cama & Albles Hospitals and Assit. Hon. Professor of Obstetrics & Gynaecology, Grant Medical College, Bombay 8, INDIA.

***Technicians in Cytology.

Accepted for publication on 1-8-77.

ascariasis with oral iron and Decaris tablets respectively. Treatment with Decaris resulted in the expulsion of several worms pre-operatively. The diagnosis of carcinoma was confirmed by cervical biopsy. She was subjected to a Wertheim hysterectomy on 23rd August, 1975.

Even at the time of Wertheim hysterectomy, several dead round worms were palpated in the intestines.

To the best of our knowledge, ascaris eggs in vaginal pool have not been reported so far. This finding is almost certainly due to the contamination with stools due to poor personal hygiene. This patient also had a second degree perineal tear, so that she had partial loss of sphincteric control.

Case 2

A 20 year old patient, D.M. who had a history of 2 full term deliveries in the past was admitted to our hospital with 3 months' amenorrhoea and bleeding per vaginam for 3 days. Her previous menstrual history was normal. Since the internal cervical os was closed, the diagnosis of threatened abortion was made and the patient was treated accordingly. Smears were requested for progesterone effect. In one of the slides, we found a typical ovum of *Enterobius Vermicularis*.

Description

The egg measures 55μ by 25μ i.e. the width is about $\frac{1}{2}$ of the length. The egg is flattened on one side. Enclosed in the refractile shell are bright orange staining larvae. The shell is composed of an outer triple layer and inner monolayer.

Her other investigations were as follows:

Haemaglobin 11 gms. Stool examination was performed and showed ova of *Enterobius Vermicularis Ovum* or Pin Worm.

The gravid female of enterobium extrudes the eggs on the perineal skin and it is not unlikely that they can invade the vagina. The intense pruritus associated with this disease can also lead to the deposition of eggs around the introitus. These eggs can produce vaginitis and leucorrhoea. Cases have been reported of parasites migrating the entire length of the genital tract and entering the peritoneal cavity through the Fallopian Tubes.

This patient subsequently underwent treatment for her worm infestation with piperazine citrate and had normal delivery at term.

Discussion

De Torres and Bribiesca from Mexico reported a series of 13 cases of pin worm ova in vaginal smears in 1973. Langlenais in 1969, reported the finding of pinworm ova in smears. Amongst the parasites found in cervico vaginal smears are *Entamoeba Histolytica*, *Schistosoma Haematobium*, *Microfilaria* and Pin Worm Ova. To this list, we add our case of *Ascaris Ova*.

References

1. Elena Fontanes De Torres, E. F. and Bribiesca, L. B.: *Acta. Cytol.* 117: 252, 1973.
2. Langlenais, P. C.: *Acta. Cytol.* 13: 40, 1969.

See Figs. on Art Paper VI