

AMOEBIASIS OF CERVIX AND VAGINA

(Report of 2 Cases)

by

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Infection with the protozoan, *Entamoeba Histolytica*, is very common in the tropics and subtropics, where it manifests commonly as intestinal or hepatic amoebiasis. The incidence is estimated as 3-5% on routine stool examination of all patients admitted to this hospital. In contrast, genitourinary amoebiasis is quite rare. Review of literature, so far, reveals only 24 cases of amoebiasis of female genital tract, inclusive of 3 cases of amoebiasis of cervix and vagina reported by G. V. Talwalkar and S. Israel (1962). In a study of 200 cases of leucorrhoea, Bickers (1943) observed 0.5% incidence of amoebiasis but did not report any cases. Undeservedly scant attention has been given to this condition and most of the standard text-books do not deal with this condition at all.

It is important to remember *E. Histolytica* as a possible cause of vaginitis; considering the proximity of the vagina to the ano-rectal canal,

it is logical to expect spread to the vagina. The relative rarity of vaginal infestation is striking, in view of the wide prevalence of intestinal amoebiasis. Probably the acid pH of the vagina inhibits the growth of the parasite. It is also possible that some of the cases are missed when routine microscopic examination of the discharge is not carried out. Infection of the vagina is probably by continuity and contiguity of the ano-rectal canal. The method of cleansing the perineum from behind forwards has been pointed out, as a possible factor (G. V. Talwalkar and Israel, 1962). Bhoumik (1951) noted that in 80% of reported cases, there was a history of chronic dysentery. This is the first report from this hospital of 2 cases of Amoebiasis of cervix and vagina.

Case 1.

Mrs. K., aged 50 years, attended the Gynecological Out-patients Department of King George Hospital on 1st May 1966, with the complaint of leucorrhoea and vague abdominal and body pains. Her marital and menstrual histories were normal and she attained menopause 5 years ago. There was no history of dysentery at any time.

Clinical examination revealed a normal sized anteverted uterus and fornices were

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Received for publication on 10-2-67.

free. Speculum examination revealed the cervix and vagina to be reddened, slightly oedematous and granular and covered over by a blood-stained mucoid discharge. There was no evidence of ulceration and no pruritus. Microscopic examination of discharge showed active vegetative forms of *E. Histolytica* with ingested red blood cells. Patient refused admission and has not since been traced for follow up.

Case 2.

A 29 year old Hindu female widow, attended the Gynaecological Outpatient department of King George Hospital, on 19th June 1966, for profuse white discharge from vaginam of 10 days' duration. Obstetrical history:—Three F.T.N.D., alive, last confinement 12 years ago. Husband died 2 years ago.

Menstrual history—Menarche 12th year, periods—regular 3-4/30, normal flow, painless.

Past illness—No history of dysentery at any time. No fever or cough.

Present illness—started quite suddenly 10 days ago as profuse white discharge, not offensive, and not associated with pruritus or soreness of vulva. Micturition was normal, bowels regular, appetite good.

General examination—thin built, slightly anaemic individual. Temp. 98.4°F., pulse 72/mt.

Abdomen soft, no masses and no tenderness. Caecum not palpable. Liver not palpable. Heart and lungs—nil abnormal.

Local examination—relaxed vulval outlet, no sign of inflammation or excoriation. Profuse yellowish white discharge seen on separating the labia. Cervix was pointing downwards. Uterus retroverted, bulky soft, mobile, not tender. Vaginal mucosa felt irregular, especially in the posterior fornix, but no tenderness was elicited.

Speculum examination—Cervix healthy. There were multiple shallow, well circumscribed ulcers with undermined edges of different sizes ranging from 1-2 cms. in diameter in the posterior fornix, spreading on to the posterior vaginal wall (Fig. 1). Some of the ulcers were discrete and rounded with red, granular base while others were spreading 'snail-track' ulcers covered with yellowish slough. The ul-

cers bled readily on touch and all of them were superficial. Vaginal mucous membrane in between ulcers looked oedematous but not inflamed.

In view of the characteristic multiple ulcers, a possibility of tuberculous ulceration was thought of and patient admitted for further investigation.

Hb. 68% W.B.C.:—T.C. 7.500/cmm. D.C. P68; L26; E6: E.S.R. 38 mm/hr.

Urine:—No alb. No sugar.

Stool:—No ova. No cysts.

Endometrial biopsy:—Proliferative phase—no evidence of T.B.

Patient was meanwhile put on high protein diet, vitamin B. complex and Strepto-penicillin, 1 vial/day, for 6 days. The condition worsened, the discharge becoming offensive and purulent. The case was re-examined on 6-7-1966. Speculum examination revealed a spread of ulceration to the cervix as well. Scrapings from the surface of the ulcer were examined under microscope when actively motile *E. Histolytica* were seen swarming the field (Fig. 2). A definite diagnosis of amoebic ulceration of vagina with involvement of cervix was made and before proceeding with specific therapy, a biopsy from the vaginal ulcer and cervical tissue was taken and the stool was once again re-examined after giving an aperient.

Stool showed *E. H.* vegetative forms.

Biopsy-cervix showed destruction of surface of epithelium with granulation tissue, fibrosis and vegetative forms of *E.H.*

Vaginal ulcer:—ulceration of the surface epithelium with granulation tissue and large acidophilic bodies with reticulated nuclear membrane and nucleoli and phagocytosed red blood cells; in some of them suggestive forms of *Entamoeba Histolytica* were noted confirming the diagnosis of amoebic vaginitis (Fig. 3).

Treatment:—The patient was put on Emetine $\frac{1}{2}$ gr/day for 12 days along with Diodoquin—2 tabs. t d s for 10 days and Vit. B1 100 mg. i.m. daily.

There was immediate symptomatic relief and ulcers showed signs of healing within 1 week and were completely healed at the end of the course of treatment (Fig. 4).

Discussion

Considering the simplicity of diagnosis and the very gratifying results of specific treatment, it is essential to diagnose these cases in time. Care in selection of material for microscopic study i.e., from surface of ulcer rather than vaginal discharge, and careful histological study of biopsy material is well rewarded. In the present case, though the condition was suspected, it was initially missed.

The best way to avoid pitfalls in diagnosis is to keep the condition in mind when the characteristic ulceration is seen. A microscopic examination of vaginal discharge should always be done in all cases of leucorrhoea even without evident ulceration as happened in case 1.

The salient features to be kept in mind are:

(1) the acute onset of leucorrhoea which gradually becomes profuse and offensive as well and sometimes blood-stained;

(2) characteristic ulceration — multiple, superficial ulcers with undermined edges, bleeding readily on touch;

(3) ulcers are characteristically painless;

(4) absence of pruritus;

(5) vaginal mucous membrane in between ulcers looks normal or oedematous but without any sign of inflammation.

The superficial ulceration with undermined edges can be mistaken for tuberculous ulcers. But vaginal ulceration in absence of uterine and tubal involvement is rare. Tuberculous ulcers are besides painful and vagina tender.

Syphilitic ulcers have a characteristic punched out appearance in contrast to the superficial shallow ulcers of amoebiasis.

Malignant ulceration of cervix and vagina can most often be ruled out easily because of multiplicity of lesions and the soft base with no induration in the case of amoebiasis. But association of the two conditions has been noted. Amoebic ulceration superimposed on carcinoma cervix stage III with recto-vaginal fistula has been reported (Brag & Teo 1964).

Summary

(1) Two cases are reported—one of amoebic vaginitis in a post-menopausal woman and another of amoebic ulceration of cervix and vagina in a woman of 29 years.

(2) These cases are characterised by sudden onset of leucorrhoea and are associated with characteristic, often multiple ulceration of vagina and sometimes by a granular condition of vagina and cervix without ulceration.

(3) Diagnosis can be made by examination of discharge from the surface of the ulcer and biopsy of the lesion.

(4) There may or may not be a history of dysentery and stool may be negative.

(5) These cases respond only to specific therapy; response is so dramatic and complete that this can almost be taken as a therapeutic test of the condition. No local treatment is necessary.

(6) It is possible that some of these cases are overlooked or confused with other vaginal ulcerations.

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Figs. on Art Paper IV