

A CLINICAL STUDY OF VAGINAL TRICHOMONIASIS

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Trichomonal vaginitis is very commonly encountered in women complaining of excessive discharge per vaginam. This discharge can cause distress to the patients and this immense distress makes it an important gynaecological problem. The disease is mainly transmitted by sexual intercourse. Swimming pools and splashes from water closets and wet soiled linen are also important modes of transmission.

The signs and symptoms caused by trichomonas vaginalis vary according to the severity of infection, age, marital status, resistance of the patient and pH of the vagina. Sometimes the patients may be symptom free. Methods for diagnosis included.

a) A detailed history and clinical examination for signs and symptoms suggestive of Trichomonas vaginalis.

b) Laboratory aids:

Wet Preparation: The discharge from the patients was investigated for the parasite by wet preparation in which one drop of vaginal discharge from each patient was mixed with one or two drops of normal saline. A cover slip was put over it and it was examined under the microscope immediately for the presence of T. Vaginalis.

2. Acridine-orange fluorescent micro-

scopy. In this method a standard (Fig. 2). Zeiss microscope was fitted with an ultra-violet lamp. The slides, smeared with the discharge and stained by Riva and Turner's 10 seconds method of Acridine orange technique were examined under the microscope. The T. vaginalis was identified by the bright orange fluorescence and an elliptical yellow nucleus.

3. Culture: Vaginal discharge was collected on sterile swabs and incorporated within $\frac{1}{2}$ hour into modified Stein and Cope's medium. Of all the trichomonal vaginitis patients, 62.68% were menstruating normally and 14.93% were pregnant. Most of the patients belonged to lower socio-economic group i.e. 97.01% belonged to classes III to VI, with the majority, 60.4%, being class VI. The percentage of uneducated patients was 74.63%. No significant relationship of the disease was found with parity and again 91.04% were of unclean habits.

In this study, 77.61% came with the complaints of excessive vaginal discharge and 23.13% came with itching. Dyspareunia was complained of by 5.2% patients. Urinary complaints were the presenting features of 23.13% patients. The miscellaneous complaints were pain in abdomen, backache, menstrual irregularities, swelling of vulva, something coming down per vagina and psychological upsets. Thirty (22.39%) patients were symptom free and were diagnosed during routine investigation for some other gynaecological prob-

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Iem. The duration of relevant symptoms varied from 6 days to 3 years.

On local examination, a yellowish or greenish frothy discharge typical of trichomonal vaginitis was found in only 77.6% cases. Other types of discharge were encountered in 22.4% cases. Thus a blood-stained discharge was found in 7.46% cases, a purulent or pasty discharge in 8.96% cases, a curdy discharge in 0.75% cases and a mucoid discharge in 1.4%, while a watery discharge was found in 2.99% cases. An important finding was that no discharge was found in 2.23% cases. It was noted in this study that a typical trichomonal discharge may be found in non-trichomonal infections as well giving false positive results.

The consistency of the discharge was mostly thin (80.6%) while in 89.56% it was foul smelling. The amount of discharge was profuse in 55.2% cases, average in 33.5% cases and scanty in 8.97% cases. No clinical signs were encountered in 10.45% cases. Vulvitis and vulval ulcers were found in 14.93% and 0.75% cases respectively. Urethral congestion and swelling were found in 5.2% cases, while a congested vagina was found in 50.75% cases, inflammation with a raw red appearance of vagina in 7.46% cases and the typical strawberry appearance of upper third of vagina in 2.24% cases only. Cervical erosion was found in 5.97% cases, cervicitis in 1.49% cases while the flea bitten cervix was seen in 2.24%.

While correlating haemoglobin percentage with 'TV positive' patients, it was found that most of the patients harbouring trichomonas vaginalis had a haemoglobin level below 8 gm%. The urinary tract was invaded by the parasite in 26.12% cases and associated moniliasis was found in 4.48% cases. Interestingly, it was found that 11.94% of the patients were getting antibiotics. Of the 10 treat-

ment resistant cases studied, the husbands were found to be infected with trichomonas vaginalis in 2 cases.

Discussion

Clinical diagnosis is not always reliable and laboratory methods are indispensable for the correct diagnosis of trichomonal vaginitis with the possibility of false positive findings (8.87%).

It was noticeable in this study that trichomonal vaginitis occurred in 60.4% in a lower social group and mostly among the uneducated (76.6%). Another important finding was that though 77.6% had excessive discharge typical of trichomonal vaginitis, there were 2.23% who had no discharge at all. These would have been missed clinically if the laboratory aids had not revealed the infestation and these patients were probable carriers, who, while not manifesting any symptom could be responsible for carrying the infection to others.

Again, while 50% had a congestion of the vagina only 2.3% had the typical strawberry appearance, which was always found in the "florid stage" in association with symptoms and signs. Although a typical discharge characteristic of trichomonal vaginitis was found only in 76.87% patients in the "TV positive" group while no discharge was found in 2.23%.

Hughes *et al* (1966) found a trichomonal type of discharge in 60 (19.7%), other types of discharge in 127 (41.6%) and no discharge in 118 (38.7%) patients.

In this series 55.22% had profuse discharge, 33.58% had an average discharge, 8.97% had a scanty discharge. The figure of average discharge in the present series compared favourably with that reported by Velayudhan *et al* (1963) who found it in 33.3% cases. The clinical signs were conspicuous by their absence in 10.45%

cases in the present series, a figure much higher than that of Kleegman (1950) who could not demonstrate any clinical finding in 3% cases.

The typical discharge in 76.87% in this series is comparable to Menon *et al*'s (1962) series of 88% and Velayudhan *et al*'s (1963) series of 67.6%. The incidence of itching was almost the same as in the series of Chappa *et al* (1966) who found it in 22.7% cases. The incidence of asymptomatic cases in this series (22.3%) compares favourably with 22.2% of Mcvay *et al* (1951) and 25% of Johnson *et al* (1945). These symptom free patients should be treated to prevent spread of infestation. These are carriers and the finding of the parasite was accidental. Laboratory examination is imperative before institution of treatment as there is chance of development of leucopenia with indiscriminate Flagyl therapy. However, in a busy hospital or in a village health centre without any laboratory facility, much weight will fall on the clinical diagnosis and considering the distressing nature of the symptoms treatment may be instituted in such cases immediately.

Summary

A clinical study on vaginal trichomoniasis is presented. The signs and symptoms vary according to the severity of infestation. The symptom-free patients accounted for 22.3%. They need treat-

ment to prevent them being carriers. Clinical diagnosis should always be confirmed by a wet preparation examination or other laboratory methods.

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