

DETECTION OF *TRICHOMONAS VAGINALIS* IN
WOMEN DURING THE CHILD BEARING PERIOD BY
CONVENTIONAL AND IMMUNOLOGICAL METHODS

ABSTRACT

In the present study one hundred female patients in the child bearing period (age 18-45yrs) were selected from those attending the Obstetric and Gynecology outpatient clinics , in Kasr El Aini hospital, Cairo university. Females were complaining of vaginal discharge with either itching , burning sensation or both.

Vaginal swabs were obtained from all female patients for examination by direct wet mount examination, Giemsa staining , Modified Diamond culture and latex agglutination test (Kalon) to detect the presence of *Trichomonas vaginalis* infection .

The percentage of infection was 5cases (5%) by all tests done collectively. Out of 100 examined cases, latex agglutination test detected 5 positive cases , 3 of them were detected by culture, 1 were detected by Giemsa staining and one was detected by wet mount. This case was also positive with all other methods.

The wet mount, Giemsa staining and Kalon latex test had sensitivities of 33.3%, 33.3% and 100% respectively while their specificities were 100%, 100% and 97.9% respectively.

KEY WORDS:

Trichomonas Vaginalis - Wet Mount Examination- Culture- Latex Test.

Effect of some protein tyrosine-kinase inhibitors on experimental *Schistosomiasis mansoni*.

ABSTRACT

Schistosomiasis mansoni is considered one of the most common fibrotic disease resulting from inflammation and deposition of fibrous tissue around parasitic eggs trapped in the liver, causing morbidity and mortality. It affects 210 million people worldwide and causing more than 280,000 deaths per year.

Chemotherapy against schistosomiasis relies mainly on Praziquantel (PZQ); which is safe and effective anti-schistosomal drug, yet, the massive administration of this drug in endemic areas and its ineffectiveness towards the immature stages, have raised critical concerns against the development of parasitic drug resistance. Few drugs are directed to reverse the *schistosomal* hepatic fibrosis, especially at the chronic and advanced stages of the disease.

Recently, Protein tyrosine kinase inhibitors are identified as potent anti-schistosomal and anti-fibrotic drugs against *schistosomes*, that may suppress and reverse *S. mansoni* induced liver fibrosis.

The present study was designed to assess the anti-schistosomal activity of the protein tyrosine kinase inhibitors (Imatinab and Genistein) in comparison to praziquantel, in an *in vivo* study, in both acute and chronic *S. mansoni* infection using different parameters including; parasitological, histopathological and immunohistochemical studies.

From the obtained results, we found that; Imatinib and Genistein showed a significant reduction in TWB and tissue egg load with elevation in percentage of

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degenerated ova, in comparison to the control groups, in both acute and chronic stages of infection. The best results were obtained when Imatinib and Genistein were combined with PZQ; with absence of female worms with Imatinib. While no copulae were observed with Genistein.

Also, both drugs showed high percentage of reduction in mean hepatic granulomas diameter and numbers, in addition to a reduction in the percentage of collagen, compared with the control in both acute and chronic stages, especially when both were combined with PZQ.

As regards Immunohistochemical parameter; both drugs showed a reduction in expression of TGF- β 1 in the examined hepatocytes in both acute and chronic stages, while, when combined with PZQ; both were negative.

Therefore, protein tyrosine kinase inhibitors (Imatinab and Genistein) may be one of the new potential targets as an anti-schistosomal and anti-fibrotic drugs in chemotherapy against schistosomiasis.