Trichomonas vaginalis among Pregnant Women in Obari, Libya

Rugaia Algazaui,* Abdul Hafeez Khan,** Yosef Kubti,***

Abstract:
A total of 489 pregnant women attended gynecologic and obstructive Department, Obari Hospital (during the period of middle of November 2007 to end of January 2008) for routine clinical examination. Among 489, 51 (10.42 %) were clinically diagnosed as having vaginitis with vaginal discharge and their vaginal swabs were screened for Trichomonas vaginalis using direct wet-mount microscopy. Only nine samples (1.84 %) were found positive for T. vaginalis. All these patients complained of vaginal discharge, burning, vulvar pruritis and showed a heavy infection of T. vaginalis (3 to 4 parasites per 40 X field).

Introduction:
Trichomonas vaginalis, an anaerobic parasitic flagellated protozoa, is the causative agent of trichomoniasis and is the most common pathogenic protozoal infection of human worldwide.1 WHO estimated 180 millions infection are acquired annually world wide.2 Trichomoniasis is characterized with a foamy yellowish or creamy odorous discharge, itching and burning of vulva and can cause superficial necrotic ulcers in the mucosa.3 T. vaginalis is also reported among patients suffering from impotence and infertility but association of this parasitic infection and disorders is not known.4 Urethral involvement occurs in a large number of cases and is characterized by dysuria and frequent urination. Other symptoms of T. vaginalis include preterm delivery, low birth weight and increased mortality as well as predisposing to a HIV infection, AIDS, and cervical intraepithelial cancers.5-7

So far (up to our knowledge), only one study has been documented on T. vaginalis in Libyan Arab Jamahiria in Benghazi City.8 Moreover, infections are observed in Sebha (unpublished data).

In the present study, we report the results of a prospective study of vaginal swabs specimens from pregnant women for T. vaginalis using direct wet-mount microscopy.

Patients and Methods:
The study was carried out among 51 pregnant women, who presented with vaginitis and vaginal discharge in the Laboratory, Obari Hospital, from middle of November 2007 to the end of January 2008. All the patients were Libyans, between 21 to 47 years of age who reside in Obari and near by its villages.

Fresh vaginal discharges were collected from consenting women. Soon after vaginal swabbing, swabs were employed on glass slides; a drop of normal saline was added and covered with the cover slip. These preparations were examined under low power (10X) and a high power (40X) of microscope to detect T. vaginalis by its jerky movement with undulating membrane.

Results:
Of 489 pregnant women, 51 (10.42%) showed vaginitis with vaginal discharge. Of these, 9(1.84%) were found positive for T. vaginalis. Out of 9 vaginal swab specimens, 7 (77.77%) were found positive for Candida monilia. The mean age was 31±10 (in years). All the patients infected with T. vaginalis complained of vaginal discharge, burning and vulval itching. Clinical symptoms correlated with T. vaginalis abundance (3 to 4 cells per 40 X field) in the study.

*) Department of Zoology, Faculty of Science Obari, Sebha University.
**) Department of Parasitology, Faculty of Medicine Sebha University.
*** Department of Parasitology, Faculty of Medicine, Al-Arab Medical University, Benghazi.
Discussion:
As more *Trichomonas vaginalis* is appreciated concerning the important public health implications of this common sexually transmitted parasite world wide, studies are required to understand the epidemiology, diagnosis, treatment and control programme of *T. vaginalis* to minimize the potential health risk for communities in Libya. Moreover, a very little information is available about trichomoniasis in Libyan Arab Jamahiriya.

This is the first study of *T. vaginalis* infection in Obari region. Infection rate (1.84%) was found to be almost similar to a report in Benghazi city (1.2%) among women with vaginal discharge. Correlation was found between clinical symptoms and presence of high number of *T. vaginalis*. Moreover, Kassem and Majoud reported that the pregnant women infected with *T. vaginalis* suffered from vaginal discharge (93.10%), burning (81.48%), dysuria (21.43%) and strawberry appearance of vagina (75.86%) in Benghazi city.

Diagnosis of *T. vaginalis* must be made when dealing with patients showing clinical signs and symptoms for public health aspects of trichomoniasis in Libya because there is no active surveillance and control programme on national or regional levels for this disease.

References