Effect of methanolic extracts of Artemisia aucheri Boiss, Zataria multiflora Boiss and Myrtus communis L. on Trichomonas vaginalis (In Vitro)

Abstract

Background & Objective: Considering the high prevalence of Trichomonas vaginalis (TV) in women and the known side effects of metronidazol, herbal drug therapy in order to reduce drug side effects has been considered increasingly in recent decades. This study was done to determine the effect of Artemisia aucheri Boiss, Zataria multiflora Boiss and Myrtus communis L. on Trichomonas vaginalis.

Materials & Methods: This study was done on samples extracted from 100 patients with vaginitis due to Trichomona. The parasite was isolated from vagina and determined directly. Identification was done through direct smear preparation. Parasite was added to the 5 test tubes containing Dorse medium, metronidazole, dimethyl sulfoxide (DMSO), Artemisia, Zataria and Myrtus extraction with concentration of 0.1, 0.01 ml in order to determine the effect of these concentrations within 72 hour.

Results: Trichomonas could be alived in Dorse medium for 72 hours, in presence of metronidazole for one hour and in Dorse medium for 6 hours. Also, methanolic extracts of Artemisia are effective at concentration of 0.1 after one hour and 0.01 after 4 hours of the inoculation. Methanolic extracts of Zataria at concentrations of 0.1 and 0.01 and the Myrtus extract at concentration of 0.1 are effective at beginning of inoculation but the Myrtus extract at concentration of 0.01 is effective after one hour.

Conclusion: Considering the acceptable effect of methanolic extracts of these plants on trichomonas in in-vitro conditions, it is recommended that, the therapeutic effects of the substances from these plants to be studied in in vivo conditions and in case of having positive effect to be used as a drug.

Key Words:
Artemisia aucheri Boiss- Zataria multiflora Boiss- Myrtus communis L.- Trichonas vaginalis- Medicinal plants