

Detection of *Entamoeba gingivalis* trophozoites in patients suffering from gingivitis versus healthy subject

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ABSTRACT:

This study included a total 160 case which were diagnosed according to their clinical examination. Samples from gingival pockets were collected from all cases which were divided into 2 groups; group 1: (80 cases) patients suffering from gingivitis and group 2: (80 subjects) healthy volunteers. *Entamoeba gingivalis* was detected in 38 samples (28.75%) out of the total 160 collected samples using Iron & Haematoxylin. Wet unstained samples only diagnosed *Entamoeba gingivalis* infection in 14 cases (8.75%). Twenty three out of the 38 positive cases were from group of cases complained of gingivitis and the remaining 15 subjects were from the control group which did not complain from any symptoms. The infection was found in 23 (28.75%) out of 80 cases with gingivitis. While in control group, *Entamoeba gingivalis* was observed in 9 of them (11.25%). Concerning the intensity of infection, it was significantly higher in cases which suffered from gingivitis than in control group. Samples related to the diseased subjects were found to be severely to moderately infected, while mild to moderate infection was recorded in control group. In general, diagnosis of such infection is vital to avoid development of chronic irreversible oral diseases. Repeated examination with more than one diagnostic technique by expert personal is recommended as a key of perfect diagnosis in such protozoan infection that has only trophozoite stage. Further studies on large scale are necessary for determining the actual nature of the relationship between these species and oral diseases.

KEYWORDS: *Entamoeba gingivalis* – periodontitis- Iron & haematoxylin stain.