

**DETECTION OF ENTAMOEBIA GINGIVALIS IN PATIENTS
SUFFERING FROM CHRONIC PERIODONTITIS.**

Thesis

**Submitted in partial fulfillment for the requirements of MSc. Degree in
Medical Parasitology**

By

SelviaWahibFayek Gad

M.B., B.Ch.

Demonstrator of Parasitology

Faculty of Medicine - Fayoum University

Supervisors

Prof. Dr. Amany Ahmed Abdel Aal

Prof. of Parasitology

Faculty of Medicine -Cairo University

Dr. Sandy Hassan Shabaan

Lecturer of Oral Medicine, Periodontology&Diagnosis

Faculty of Dentistry - Fayoum University

Dr. RamyWahbaHenin

Lecturer of Parasitology

Faculty of Medicine -Fayoum University

Faculty of Medicine

Fayoum University

2016

Abstract

A trial was done in the current study to clarify the relationship between *Entamoeba gingivalis* and patients suffering from gingivitis (40 cases) or chronic periodontitis (40 cases), in comparison to 40 cases healthy volunteers as a control group. Diagnosis of parasitic stages was relied on direct microscopic detection using permanent stains; Trichrome and Haematoxylin and Eosin stain (H&E), in addition to direct wet mount examination. H&E was found to be superior and the trophozoites were successfully identified in 26 out of the total 31 positive cases. Trichrome and wet mount diagnosed 10 and 5 cases respectively. The occurrence of *E. gingivalis* infection among gingivitis group was significantly higher (40%) than which reported in the control group (22.5%). While the infection among the chronic periodontitis group was 15%. However, samples related to the diseased subjects were found to be severely to moderately affected. Moderate to mild infection was recorded in control group. *E. gingivalis* infection was significantly higher (77.4%) in subjects with bad oral hygiene. Repeated examination with more than one diagnostic technique by expert personal is the key of perfect diagnosis especially in protozoan infection that have only trophozoite stage as *E. gingivalis*. The results of the study suggested a potential role for *Entamoeba gingivalis* infection in periodontal diseases, which certainly needs further elucidation on a larger scale.

Key words: *Entamoeba gingivalis* –permanent stains- gingivitis-chronic periodontitis .