Prevalence of *Entamoeba gingivalis* and *Trichomonas tenax* among patients suffering from .chronic systemic diseases in EGYPT

Background and study aim: The Oral cavity harbors many microorganisms and their balance is essential for its health. *Entamoeba gingivalis* and *Trichomonas tenax* are the most commonly found oral protozoa. This study aims to explore their prevalence in patients with chronic systemic diseases and the associated risk factors..
Materials and Methods: This case-control study included 150 chronic patients from Fayoum Governorate, Egypt, designated into three groups (50 each). These are; a group of diabetic patients, a group of chronic renal failure on regular hemodialysis, and a group of chronic liver diseases with Child-Pugh Class B and C. In addition to 50 healthy volunteer subjects were enrolled as a control group. A specialized dentist collected dental plaques and saliva samples from all subjects. A designed questionnaire was taken for personal, demographic data, oral risk factors as regular oral hygiene, smoking, halitosis, and history of chronic or recurrent gum and teeth complaints. Oral samples were examined using direct microscopy, saline wet mount, and Giemsa staining. Each sample was cultured on Diamond's medium [TYM] for detection of *T. tenax*, and on Locke's-egg medium for detection of *E. gingivalis*. HbA1c as indicator for diabetic control was measured in sera drawn from cases and controls.
Results: The prevalence of oral protozoa was significantly increased in chronic diseases, as *E. gingivalis* was reported in 80%, 76, and 74% of diabetic, renal, and hepatic groups of patients respectively compared to 20% in the control healthy group. While *T. tenax* was reported in 70%, 62%, and 64% respectively compared to 16 % in the control group.
Conclusion: This high prevalence in chronic systemic disease needs more investigations concerning its pathogenesis, immunological mediators that may affect systemic diseases and the interplay between them .

المجلة:

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