Cytological, cytogenetic and Biochemical analysis of Behcet's disease and recurrent aphthus ulceration in Iraqi patients

A thesis
submitted to the college of Dentistry – University of Baghdad, in partial fulfillment of the requirements for the degree of doctor of philosophy in oral medicine

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Baghdad-Iraq 2003

Abstract:

The aim of this study was to determine the clinical, biochemical markers, cytology and cytogenetic status of Behcet's disease patients and to compare these results with recurrent aphthous ulcer patients and healthy control.

The study included 72 patients with Behcet's disease, 41 patients with recurrent aphthous ulcer and 35 healthy control . All individual included in the present work showed no other types of oral mucosal lesions.

Age, number of frequencies and number of ulcers in each frequency were factors showed statistically significant differences between Behcet's disease and recurrent aphthous ulcer in Iraqi patients.

On the other hand, sex, age of onset, family history, marital state, type of ulcer, location of ulcer, duration of ulcer, symptoms and smoking showed no statistically significant differences.

The present investigation was designed specifically to evaluate the diagnostic value of enzymes as measured in saliva.

A significant increased levels of creatine kinase and total serum protein in Behcet's disease patients as compared to recurrent aphthous ulcer was established. However, slightly decreased levels was noticed as comparing alkaline phosphatase and lactic dehydrogenase.

Moreover, the accumulative interest in the involvement of trace element in diagnosis of Behcet's disease have mandated the investigation of it role in Behcet's disease. The level of saliva Fe in BD was increased as compared to recurrent aphthous ulcer, on the other hand significantly

decreased level of Zn and Mg was observed, furthermore saliva level of Ca can not be distinguished between Behcet's disease and recurrent aphthous ulcer.

The role of oral cytology particularly the hemotoxylin stained was studied for the diagnosis of Behcet's disease and recurrent aphthous ulcers. The cell type and total cell count was evaluated in saliva of both diseases and showed increased number of superficial type of cell in Behcet's disease patient as compared to the recurrent aphthous ulcer, in comparison intermediate cells showed also increased in recurrent aphthous ulcer compare to Behcet's disease.

The blood sample was collected from Behcet's patients for the chromosomal analysis, the finding of this study showed no obvious changes in the chromosomal status of Behcet's disease patients.