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"Salivary peroxidase enzyme in leukemic patients before and after receiving

chemotherapy'

Tanta Medical J., 11,5,1993

Salivary peroxidase enzyme activity in leukemic patients before and after receiving chemotherapy.

This study was carried out on 20 subjects; their age ranged between 20-38 years and was divided into 2 groups:

GROUP I:consisted of 10 patients with acute lymphoblastic leukemia(ALL), those patients were hospitalized and treated with those drugs.

(1) Vintristine 2 mg.

(2) Adrimycin 50 mg.

(3) Steroids 60 mg.

GROUPII: consisted of 10 subjects with clinically healthy gingiva (Russell's index score 0) and served as a control.

5 ml of unstimulated mixed saliva was collected from group I before and after 4 weeks of treatment as well as from group II to determine the activity of peroxidase enzyme using pyrogollal method.

The results of the previous study showed a statistical significant increase in the salivary peroxidase enzyme activity in the group I before treatment compared to the control group. But no statistical significant difference was found in group I after treatment when compared with the control group.

However, a statistical significant decrease in the enzyme activity was found in the group I after treatment as compared to the same group before treatment.

From the previous results, it could be concluded that, the increase in the salivary peroxidase enzyme activity in leukemic patients before treatment may be attributed to the poor condition of those patients or in attempt to slow the rate of growth of oral bacteria.

The treatment with chemotherapeutic agents may result in the impairment of function of salivary peroxidase system which may be a contributing factor of some oral complications that occur in leukemic patients undergoing chemotherapy.