A STUDY ON ALTERATIONS IN SERUM & SALIVARY LIPID PROFILE PATTERNS IN ORAL SUBMUCOUS FIBROSIS & ORAL CANCER PATIENTS.

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BY

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ABSTRACT

TITLE:

"A Study On Alterations In Serum & Salivary Lipid Profile Patterns In Oral Submucous Fibrosis & Oral Cancer Patients."

BACKGROUND:

Lipids are one of the major constituents of cell. Changes in these serum lipid parameters have long been associated with cancer as lipids play a key role in maintenance of cell integrity. In some malignant diseases lowered blood cholesterol levels could be due to process of carcinogenesis. Saliva is considered as ultrafiltrate of plasma and any change in plasma constituents is reflected in saliva, thus saliva acts as "mirror of general health". Considering these facts the present study was undertaken to evaluate changes in salivary cholesterol levels as well as serum lipid profile parameters in oral submucous fibrosis and oral cancer patients.

AIMS & OBJECTIVES:

Aim of the study is to estimate the alterations in serum lipid profile and salivary cholesterol in OSMF and oral cancer patients and also to evaluate the variations and correlations of serum & salivary cholesterol in OSMF, oral cancer patients and controls.

MATERIALS & METHODOLOGY:

The study included 120 subjects (40 subjects each in OSMF, Oral Cancer & Controls) and their blood and unstimulated whole saliva samples were collected and centrifuged. This serum sample obtained is used to measure the plasma lipid profile including TC, HDL, LDL, VLDL and triglycerides. Saliva thus obtained by centrifugation was used to estimate salivary cholesterol.

RESULTS:

In the present study, serum TC, HDL and LDL were statistically significant within the three groups whereas serum TG, VLDL and saliva cholesterol were statistically insignificant. Salivary cholesterol was decreased in oral cancer compared to control group but it was not statistically significant. There was significant positive correlation between serum and salivary cholesterol in cancer group and control group, but no significant correlation was found between serum and salivary total cholesterol in OSMF.

CONCLUSION:

The lower levels of lipid constituents in patients might be due to their increased utilization by neoplastic cells for new membrane biogenesis. Thus changes in lipid profile levels may have a diagnostic role in early diagnosis of OSMF and oral cancer and can also be considered as a good marker for increased cell turn over.

KEYWORDS- Oral submucous fibrosis, oral cancer, serum lipid, salivary cholesterol.