SUMMARY AND CONCLUSIONS

Results of 253 healthy adult males comprising of the tobacco habiters and controls have been presented and discussed. All the subjects underwent intra-oral examination for determining oral hygiene status, gingival inflammation, periodontal disease, recession, attrition, stains and also had their S-Ig A estimation carried out. Local immune recovery was also checked in separately grouped individuals on tobacco cessation. Change in leukoplakia severity as well as local immune recovery was assessed on tobacco cessation. On the basis of the present observations, the following conclusions have been drawn:

1. Smokers and chewers have significantly more debris, calculus, stains, gingival inflammation, periodontal disease and attrition. The problem is more pronounced in chewers as compared to smokers.

2. In all smokers and chewers debris, calculus, stains, gingival inflammation, periodontal disease and attrition increase progressively with increase in frequency and duration of habitual tobacco usage.

3. In chewers, more than 50% of teeth at site of placement of tobacco demonstrate gingival recession. The grades of recession are significantly associated with the extent of chewing habit. It is also found that as extent of chewing habit increases, the grades of recession also increase linearly.
4. In all the smoker and chewer sub-groups, except passive smokers, there is significant decrease in S-IgA levels in the whole saliva.

5. Smoker and chewer groups show a corresponding decline in S-IgA values according to intensity and duration of tobacco exposure.

6. The decrease in S-IgA levels is more evident in chewers compared to smokers.

7. Regression equations developed to express S-IgA at the time of quitting tobacco habit for ex-smokers and ex-chewers show high predictivity, i.e. 97% for ex-smokers and 88% for ex-chewers.

8. After quitting tobacco habit, smokers as well as chewers demonstrated immune recovery (S-IgA) and reversal of leukoplakia lesions.

9. The role of immune recovery in relation to consumption of unrestricted tobacco products like "pan-masala" needs to be pursued experimentally as well as clinically.