

## **Lymphocyte DNA Damage in Chewing Tobacco Users of Coimbatore, Tamilnadu, by Using Comet Assay**

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**ABSTRACT** The Chewing tobacco (CT) has a physically powerful association with the risk of oral leukoplakia (OL), oral submucous fibrosis (OSF), oral squamous cell carcinoma (OSCC) and squamous cell carcinoma of the head and neck (SCCHN). ST components exhibit genotoxicity and may alter the structure of DNA. Present study to investigate the effects of CT with smoking on lymphocyte DNA damage. After signing a consent form, volunteers provided blood samples (76 samples from including experimental and control subjects) to establish Single Cell Gel Electrophoresis (STGE) or comet were evaluated. Present study found significant differences in the genetic damage induction. However, association was found between smokings had significant effect, and it can induce maximum amount of DNA damage. The genotoxic effect of CT should be considered in addition to other known hazards for assessing health risks