

# **EVALUATION OF NUCLEAR CHANGES IN INVASIVE FRONT OF ORAL SQUAMOUS CELL CARCINOMA IMAGE ANALYSER STUDY**



By

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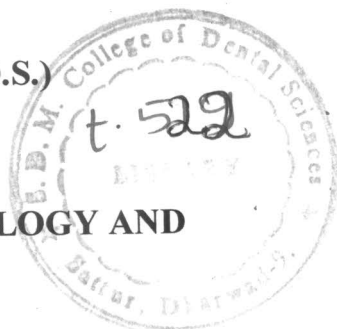
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## ABSTRACT

Pathologists have drawn attention to the invasive tumor front (ITF) in the determination of the biologic aggressiveness of oral cancer. We have attempted to discover the nuclear changes in cancer cells at ITF in 60 cases of oral squamous cell carcinoma and also the invasive tumor front grading system proposed by Bryne et al., 1992 is used in this study. The most anaplastic fields in the most invasive areas of the tumor were selected and the sections were stained by Feulgen reaction for image analysis. The grading system showed that tumor cells of moderately differentiated cases and poorly differentiated cases had maximum malignancy score showing the biological behavior and aggressiveness of the tumor cells. We also saw that various nuclear characteristics showed significant difference in the study except for shape of the nucleus. Since nuclear morphometry studies on oral squamous cell carcinoma are few so we here present this study by concluding that nuclear characteristics can be used as a reliable tool for determining the aggressiveness of the tumor cells.

**Key words: (Invasive tumor front (ITF), oral squamous cell carcinoma, nuclear morphometry).**