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Hematological Changes in Oral Cancer Patients with Smokable and Chewable Tobacco

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Abstract: Objective: To analyze hematological changes in patients of oral cancer with history of smokable and chewable tobacco use, and to compare them with healthy controls. Study Design: Descriptive type of study survey. Setting: This study was conducted at the Department of Oral and Maxillofacial Surgery, LUMHS, Jamshoro. Study Period: One year July, 2013 to July, 2014. Subject and Methods: Histopathologically confirmed hundred cases of oral cancer with the history of smokable and non-smokable tobacco were selected to analyze the hematological variation. Inclusion Criteria: Histopathologically diagnosed patients of oral squamous cell carcinoma, with history of smokable and non-smokable tobacco. Exclusion Criteria: Patient with any systemic medically compromising problem, terminally ill patients, radio or chemotherapeutically treated patients, patients with metastasis to lungs or any distant metastasis, patients with the history of more than one well-defined etiological factor involved. Results: There were 73% patients of oral cancer reported with anemic. Significantly lower values of Hb, platelet, and higher mean values of ESR, TLC, and were observed in both groups of oral cancer patients; tobacco smokers and tobacco chewers as compared to non-smokers healthy controls. There was more decline in the level of haemoglobin and incline in the level of ESR observed in tobacco chewer oral cancer patients as compared to tobacco smokers patients, while TLC was more observed in smokers. Conclusion: Oral cancer patients with a history of chewable/smokable tobacco have likely worse hematological profile, which increases the anesthetic and surgical challenges for maxillofacial surgeons, which have a significant impact on treatment planning as well.

Keywords: oral cancer, hematological variations, tobacco, smokers

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