



Abstract Preview

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Topic: Head and Neck

Title: **Role of ADAM-33 protein in laryngeal carcinogenesis and laryngeal cancer prognosis**

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Text: **Introduction:** The incidence of laryngeal cancer has increased significantly in the last 10 years, accounting for approximately 2-5% of all malignancies diagnosed in one year in the world. Diagnosis in early stage is of great importance to reduce morbidity and mortality due to laryngeal cancer. Pathologic markers can provide to make predictions about diagnosis and prognosis and facilitate clinical follow-up and organizing treatment plan. A disintegrin and metalloproteinase domain containing protein-33 (ADAM-33) is a member of a matrix metalloproteinase family which mediates extracellular matrix remodelling and changes in cellular adhesion. Studies have shown that these proteins participate in multiple physiological processes such as cell adhesion, cell migration, the release of cytokines and growth factors and promote angiogenesis, which is an important feature of carcinogenesis. The level of ADAM-33 expression was thought to be associated with laryngeal cancer development and prognosis.

Material & Methods: We evaluated the pathologic specimens of 307 patients who underwent laryngeal biopsies reported as premalign and benign laryngeal lesion and suffering from laryngeal squamous cell carcinoma, diagnosed and surgically treated at Marmara University Hospital between 2003-2017 years. Level of ADAM-33 expression was assessed retrospectively.

Results: Analysis showed that ADAM-33 immunexpression was significantly higher in laryngeal carcinoma specimens when compared with premalignant and malignant laryngeal pathologies (p=0,000). Tumors spreading cervical lymph nodes have higher expression (p=0,004). Specimens with positive surgical margins show higher ADAM-33 expressions (p=0,014).

Conclusions: These findings support the hypothesis that ADAM-33 is associated with laryngeal cancer development and disease prognosis.

References: n.a.

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