

عنوان مقاله:

Overexpression of Lactate Dehydrogenase in the Saliva and Tissues of Patients with Head and Neck Squamous Cell Carcinoma

محل انتشار:

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نویسندگان:

Farnaz Mohajertehran - *Dental Research Center, Mashhad University of Medical Science, Mashhad, Iran*

Hossein Ayatollahi - *Cancer Molecular Pathology Research Center, Department of Hematology and Blood Bank, Faculty of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran*

Amir Hossein Jafarian - *Cancer Molecular Pathology Research Center, Department of Pathology, Faculty of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran*

Kamran Khazaeni - *Department of Otorhinolaryngology, Mashhad University of Medical Sciences, Mashhad, Iran*

Mohammad Soukhtanloo - *Department of Biochemistry, School of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran*

Mohammad-Taghi Shakeri - *Department of Epidemiology & Biostatistics, MUMS, Mashhad, Iran*

Nooshin Mohtasham - *Dental Research Center, Mashhad University of Medical Science, Mashhad, Iran & Oral and Maxillofacial Disease Research Center, Mashhad University of Medical Sciences, Mashhad, Iran*

خلاصه مقاله:

Background: Head and neck squamous cell carcinoma (HNSCC) is the sixth most common malignancy that is associated with high morbidity and mortality. Salivary lactate dehydrogenase (LDH concentration), as an expression of cellular necrosis, may be a special marker of lesions that occur with changes in the integrity of the oral mucosa. This study was performed to determine the accuracy of salivary LDH as a clinical marker for HNSCC detection and to investigate the relationship between salivary LDH levels and tissue tumor detection. Methods: The case group consisted of 44 HNSCC patients and the control group consisted of 44 healthy subjects. The stage and grade of HNSCC were determined, and the LDH levels in collected saliva samples were measured in all subjects. The expression of LDH in tumors and healthy tissue margins was evaluated via immunohistochemistry. Results: The expression of LDH in the saliva of patients with HNSCC is significantly higher than that in the saliva of the healthy control group. The expression of salivary LDH in patients with oral squamous cell carcinoma (OSCC) is significantly higher than that in the other patients and healthy individuals in the control group. The levels of salivary LDH in patients with SCC of the tongue and lower oral cavity were significantly higher than those in other patients affected with SCC in other parts of the head and neck ($P < 0.01$). Conclusions: As this enzyme increases simultaneously in both tumoral tissues and saliva, it can serve as a useful diagnostic marker for the early diagnosis and prediction of HNSCC.

