Immunohistochemical Expression of Antioxidants CypA in Oral Squamous Cell Carcinoma compared to Normal Oral Mucosa in Relation to Clinicopathological Parameters

Mustafa Gheni Taher (BSc; MSc)¹ and Wasan Hamdi Younis (PH.D)² Muna Salih Merza (Ph.D)³

Abstract

Background: Cyclophilin A antioxidant protein (CypA) has been reported in several cancers including oral squamous cell carcinoma (OSCC) regarded the highest incidence cancer of oral cavity. However, the function of CypA in OSCC are far from being understood.

Objective: To evaluate the current research estimate the immunohistochemical expression of CypA in OSCC and normal corresponding mucosa and compare the results with clinicopathological parameters.

Patients and Methods: Forty OSCC cases and fifteen normal mucosae of formalin-fixed, paraffin-embedded tissue blocks were used and the sections samples collected during the period 0f 2016. Data concerning patient’s age, gender, site, clinical presentation, clinical staging and histopathological grading were obtained and reviewed by two pathologists. Representative paraffin blocks were selected and section samples immunohistochemically evaluated using CypA marker.

Results: Females affected more than males and the tongue was the most site. CypA expression was high in OSCC than normal (p=0.001) with mean±Sd (55±24.8) (22±10.8). Significant relation found with tumor stage (p=0.03) and no relation observed with age, gender, site and tumor grade.

Conclusion: CypA expression was clearly present in OSCC, it increases with clinical stage of tumor and can be used as prognostic marker to diagnose and evaluate OSCC cases from normal.

Key words: Oxidative stress, Cyclophilin A, Squamous cell carcinoma.

Corresponding Author: mostafa.ghany@yahoo.com

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1 Department of Pathology - College of Medicine - University of Diyala - Diyala-Iraq.
2 Department of Oral Pathology - College of Dentistry - Baghdad University - Baghdad - Iraq.
3 Dentistry College - National University of Science and Technology – Nasiriya - Iraq.