

PROGNOSTIC VALUE OF TUMORAL NK CELLS AND T CELLS SPECIFIC SUBSETS IN PATIENTS WITH ORAL SQUAMOUS CELL CARCINOMA

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INTRODUCTION: Head and neck squamous cell carcinoma (HNSCC) is the fifth most common cause of cancer deaths worldwide. Oral squamous cell carcinoma (OSCC) is the most common amongst all HNSCC and constitutes a malignant neoplasm with high degree of locally aggressiveness and metastasis. The progression of malignancies reflects intricate cellular and molecular interactions of tumor cells with tumor microenvironment and immune components. These elements may have paradoxical roles, acting either against or in favor of tumorigenesis. Particularly, lymphocytes and NK cells are part of a intriguing and complex network that involves paradoxal responses of their subpopulations on development of cancer.

OBJECTIVES: This study aimed to investigate presence of NK cells and T cells specific subsets in tumoral tissue of patients with OSCC in comparison to clinical and histopathological characteristics, highlighting how important these cells are in prognostic significance.

METHODS AND RESULTS: A total of 21 patients with OSCC (16 males and 05 females; aged between 42-85 years) were selected from surgical patients at the Department of Head and Neck Surgery at Aristides Maltez Hospital (HAM, Salvador, Bahia, Brazil). From tumoral fresh tissue, CD56+CD3- NK cells and CD4+, CD8+, CD8+CD16+, CD4+CD25+, CD4+CD25+FoxP3+ and CD4+CD103+ T cells were determined by flow cytometry. Additionally, immunohistochemical localization of CD57 and Foxp3 in a total of 60 paraffin embedded OSCC samples obtained at Department of Pathology (HAM, Salvador, Bahia, Brazil) were enrolled in this study. The results are being analyzed.

CONCLUSION: Our results may help to clarify the prognostic significance of NK cells and T cells specific subsets in OSCC.

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KEYWORDS: head and neck cancer, oral squamous cell carcinoma, lymphocytes, NK cells, IHQ