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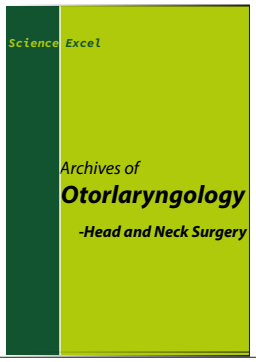
Short Communication



The actual landscape in head and neck cancer therapy

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In addition to the environmental factors (tobacco and alcohol consumption), the genetic risk for HNSCC has been reported to be associated with individual susceptibility to chemical carcinogenesis because of gene polymorphisms of human drug-metabolizing enzymes and DNA gene repair. Therefore, the use of drugs that interfere with the result of these metabolism and repair pathways could be used in the management of this disease, especially in HNSCC (HPV) – negative [1].

Considering that HNSCC in advanced stages (III and IV) are the majority without good results, the usual therapy is the association of chemoirradiation followed by surgery or surgery plus or chemoirradiation in elderly patients with co-morbidities in spite of these neoplasias courses go to failure and new protocols are justified [2].

HNSCCs have a large infiltration of immune cells, although the composition of this infiltrate and its extension vary according to the anatomical site and the etiologic agent, for example, smoking versus HPV. Thus, there are several molecular signatures on the HNSCC in distinct immune phenotypes. These signatures incorporate several tumor markers that can classify tumors and can be useful in predicting therapeutic response, particularly in checkpoint inhibitory therapies [3].

With the advent of targeting drugs called checkpoint modulations, the control of apoptosis for programmed death of patients HPV+ status, is one of the new ways to predict the cancer evolution [4].

At Asco Annual Meeting 2016 were presented immunotherapy drugs/check points inhibitors) with impact in traditional therapy for advanced HNC (stages III and IV), as antibodies targeting the programmed cell death (PD-1) axis. Among there Nivolumab was effective for HNSCC survival [5,6].

Nivolumab, (anti programmed deaths 1(PD-1)) is a monoclonal antibody was assessed to recurrence the head and neck squamous cell carcinoma (SCCHN) [7].

The limited survival of HNSCC has been a real challenge in the landscape of bad results, where clinical trials with immunotherapic drug considered immune checkpoints modulation towards antibody-based growth factor inhibition, were pointed changing the evolution of these patients [8].

The new scopus of HNSCC therapy includes the target drugs (immune checkpoints) of programmed cell death (PD-1) and cell death ligand (PD-L1). The aim call the necessity of ground breaking of check points, and limitation of neoplastic progress [9].

Head and Neck cancer (HNC) present cells as T-cell, which hands to B7 ligand on the cancer cell, leading to inhibition of T-cells activated. These factors are previously related to tobacco and alcohol as etiologic factors of HNSCC [10].

Pembrolizumab alone or associated with other drugs versus cetuximab with chemotherapy for recurrent or metastatic squamous cell carcinoma of the head and neck (KEYNOTE-048): a randomised, open-label phase 3 study. A new approach for recurrencial HNSCC is with Pembrolizumab plus chemotherapy, an appropriate first line treatment for PD-L1 positive recurrent or metastatic HNSCC [11].

Today HNSCC is treated as systemic and multifactorial disease and at the initial stage, we must consider the level of malignancy of molecular structure, justified by immune destruction as a hallmark of cancer [12].

This thesis is preceded by a chronic information that enable an escape of immunological capacity of surveillance, creating a tumor microenviroment that sustains cancer [13].

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