can reach up to 16%.
Conclusions: Preventive oral care in patients that must be treated with antiresorptive or angiogenetic drugs can help reduce the risk of medication related osteonecrosis of the jaws. The active collaboration of those involved in the management of patients at risk for osteonecrosis of the jaws and / or who are affected can contribute to minimizing the phenomenon.

Predicting death in patients with mutated TP53 head and neck squamous cell carcinoma

Bizzoca M.E.[1], Zhurakivska K.[1], Mascitti M.[2], Santarelli A.[2], Mauceri R.[3], Di Fede O.[3], Caponio V.C.A.[1], Lo Muzio L.[1]

[1]Department of Clinical and Experimental Medicine, University of Foggia, Foggia, Italy
[2]Department of Clinical Specialistic and Dental Sciences, Marche Polytechnic University, Ancona, Italy
[3]Department of Surgical, Oncological and Oral Sciences, University of Palermo, Palermo, Italy

Aim: Head and Neck Squamous Cell Carcinoma (HNSCC) is one of the most common cancer worldwide. Often, HNSCC presents as a locally advanced disease and includes biologically and molecularly diverse groups of tumors. The most affected sites by HNSCCs are oral mucosa, oropharynx and larynx. The risk factors frequently involved in the etiopathogenesis of HNSCC are tobacco and alcohol consumption, that cause DNA-damage with mutations in cancer-related genes. Consistently, several studies have shown that such carcinogens contribute to the mutational profile of TP53. TP53 tumor suppressor gene mutations are the most frequent somatic genomic alterations in squamous cell carcinoma of the head and neck (HNSCC). TP53 encodes the protein p53, which is implicated in important cell regulatory functions such as apoptotic process and control of cell cycle. So, we can assert that TP53 gene alterations are frequent in a large proportion of human cancers and occur in a tissue-specific manner. Unfortunately, it is not yet clear whether specific TP53 mutations could influence in a significative manner the wide landscape of HNSCC. The ultimate goal of this study was to study the TP53 mutation landscape and to link these molecular characteristics with clinical variables.
Methods: We performed a computational analysis on 300 patients with head and neck squamous cell (HNSCC) from available online database. We accessed to survival and clinic-pathological characteristics of the patients. We could also download data about mutational TP53 status with details about amino-acid substitutions, zinc-ion ligand and DNA binding domain. We built a classifier that was able to distinguish patients with a greater risk of death. For the statistical analysis we used an approach based on a Multivariate Cox regression model, for which the high risk group of mutation was compared to not fatal TP53 mutations and wild-type patients, together with age, gender and stage.
Results: TP53 mutations in HNSCC showed many distinct differences in different anatomical sites. The mutational profile of TP53 is heterogeneous in HNSCC. Carrying a mutation in TP53 gene resulted to be an independent prognostic factor in HNSCC. Our classification method highlighted the existence of high risk of fatal mutations and resulted to be an independent prognostic factor in this HNSCC database. In this cohort of patients, stage had not statistical association to a higher risk of death, same for gender and age.
Conclusion: In this study, we propose a new classification method, which has been able to highlight patients with mutations at high risk of death in tumors of the head and neck district. Instead, the proposed new classification method showed a better predictive performance, in particular patients in the high-risk group showed a worse prognosis, while the low risk group showed a similar overall survival compared to wild type.

Role of direct acting antivirals in the dental management of patients with hepatitis C

Bonardi M.[1], Matarese G.[1], Stelitano C.[1], Lo Giudice R.[1], Grassi L.[1,2], Imbesi Bellantoni M., Matarese M.[1,2]

[1]Department of Biomedical, Odontostomatological Sciences and of Morphological and Functional Images School of Dentistry, University of Messina, Messina, Italy
[2]Resident in Orthodontic, Department of Biomedical, Surgical and Dental Sciences, University of Milan. Fondazione IRCCS Ca' Granda - Ospedale Maggiore Policlinico

Aim: DAAs (Direct Acting Antivirals) are a category of drugs that work by targeting specific points of the viral polyprotein, preventing it from replicating. The potential targets of DAA include structural and non-structural proteins, with the aim of altering or blocking the virus replication cycle. The aim of this study is to shed light on the effectiveness of these new antivirals in the treatment of hepatitis C, evaluating the dental management of patients treated with DAA compared to patients treated with conventional interferon therapy, and the reduction of infectious risk.
Methods: The study was conducted on a group of 10 patients aged between 56 and 74 years, who had a previous clinical history of hepatitis C. They included subjects who had other past diseases, such as cardiovascular disease, diabetes, CRF (chronic renal failure) in functional compensation. Patients were