Title: A systematic review of therapeutical approaches in Biphosphonates-Related Osteonecrosis of the Jaw (BRONJ)

Katia Rupel
University of Trieste, Italy

Objectives: The clinical management of Bisphosphonate-Related Osteonecrosis of the Jaw (BRONJ) remains controversial. Since universally accepted guidelines haven’t been released yet, clinicians usually chose the type of treatment according to position papers based on expert opinion, or on empirical experience. The aim of this systematic review is to identify different therapeutical approaches for BRONJ that have been described in literature and to describe their effectiveness.

Materials and Methods: A Medline via Pubmed and Scopus database literature search was conducted and all publications fulfilling the inclusion and exclusion criteria were included in eligibility assessment. The full texts of 146 retrieved articles were then screened and 40 studies were included in the quality assessment process. 

Results: After quality assessment, 22 full text articles were selected for the final review. 14 articles out of 22 were screened for stage-related outcomes. The overall outcome results and results for every disease stage were the highest when patients were treated with extensive surgery or extensive laser assisted surgery.

Bcl-2 and COX-2 expression in Oral Lichen Planus: correlation with epithelial dysplasia

Nasim Taghavi
Shahid Beheshti University of Medical Sciences. Iran

Lichen planus is a common immune-mediated disease that is associated with an increased risk of malignant transformation in the oral cavity. Synchronous up-regulation of COX-2 and down regulation of Bcl-2 have been demonstrated in some malignancies. The aim of this study was to assess the correlation between COX-2 and Bcl-2 expression and their role in dysplastic changes of oral lichen planus (OLP). This study was performed on 47 paraffin blocks with the diagnosis of OLP. Immunohistochemical staining was performed using antibodies against COX-2 and Bcl-2. Spearman's rank correlation coefficient and Mann-Whitney test were used for data analysis. Data analysis showed significant correlation between the intensity of sub-epithelial Inflammation and the severity of basal cell layer degeneration (P=0.048). Significant up regulation of Bcl-2 and COX-2 was detected in sub-epithelial inflammatory infiltration (P<0.001, P=0.003). The amount and intensity of Bcl-2 and COX-2 expression were significantly correlated in sub-epithelial lymphocytic infiltration (P=0.013, P=0.019). In conclusion our findings indicated the effective role of Bcl-2 expression in decreasing apoptosis in the inflammatory infiltrate unlike the epithelium. The significant correlation of the intensity of Bcl-2 expression in the epithelium and the sub-epithelial inflammatory infiltrate with COX-2 expression and also the correlation of the intensity of inflammation with the severity of basal layer hydropic degeneration may imply that these two markers can induce malignant transformation in the affected epithelium in an indirect manner by the continuation of inflammation and activation of carcinogenic mechanisms.

Key Words: Oral lichen planus, COX-2, Bcl-2.