Early oral squamous cells carcinoma (Eoscc): tridimensional staging, prognostic correlations and 3d surgical treatment

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Objectives. WHO TNM Classification of Oral Squamous Cell Carcinoma is bidimensional and does not give information about infiltration in depth, that is very important for prognosis and treatment. The aim of this work is to describe tridimensional clinical staging and surgical treatment, and their prognostic implications.

Methods. We report on the cases of 229 patients which came to our attention in the Complex Operating Unit of Odontostomatology (Policlinico of Bari) from January 1992 to January 2012. At clinical examination, they showed dyshomogeneous leucocytrophic lesions in different locations that were classified as Stage 1 or 2 according to TNM Classification (Early Oral Squamous Cell Carcinoma). Moreover, MRI and Intraoral Ultrasonography with 15 MHz oval head were performed to highlight the tumour depth. Before surgical excision, histological diagnosis was obtained by deep citological scraping and microbiopsy. Under general anesthesis, patients underwent a one-time wide excision of the lesions with intraoperator historical analysis of both superficial (anterior, posterior and lateral) and deep margins. Surgical specimens were sent for histological frozen sections analysis to evaluate the 6 following prognostic factors: Tumour Thickness, Invasion pattern (single cell, large front), vascular, neural, salivary gland ducts and muscular infiltration.

Results. After our treatment, we noticed the healing of 90% of the cases (mean time follow-up: 3 years). Local recurrences and regional lymphnodes metastasis were highlighted in 10% of the cases, all associated with the positivity of one or more of the 6 histological prognostic factors.

Conclusions. Considering these results, tridimensional staging and treatment seem to be simple, reproducible and effective, but they require a multidisciplinary approach with a team of experts comprehending dentists, radiologists, surgeons and pathologists.

References

Oral lichen planus in children: an italian case series with literature review

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Objectives. Oral lichen planus is a chronic mucous inflammatory disease. The prevalence in adults ranges between 0.5% and 2%, whereas children are involved just in 0.03% of cases. The purpose of this paper is to review the current literature and to present six Italian cases of Oral Lichen Planus in children (OLPc).

Methods. We reported the data about a retrospective study on 6 cases of oral lichen planus in children. A detailed history was retrieved from clinical notes of each patient. Patients younger than 18 years old were enrolled in the study. All of them had the OLP diagnosis confirmed by clinical findings, history, and histopathology.

Results. The family history for lichen planus was negative in all patients, the mean age was 11 years (range 6-14); there was no cutaneous involvement, whereas 2 patients had concomitant autoimmune diseases. Topical corticosteroids was the only treatment used in 66.67% of patients with good response in a mean time of 4.7 weeks.
Conclusions. The rarity of OLPc may be due to the lack of symptoms that prevents the patient or his family from noticing the presence of the condition, but also to misdiagnosis of the dentist or the paediatrician. Thus, though LP in children is uncommon and oral mucosal involvement extremely rare, clinicians should be aware of its existence and management, and this diagnosis should be taken into account in children presenting oral white lesions.

References

Mitocondrial DNA clonality assay and p53 mutations in oral squamous cell carcinoma and matched neck metastases

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Objectives. Recent data have shown that mitochondrial DNA analysis is a useful technique to differentiate Local Recurrence from Second Primary Tumor in patients experiencing a second squamous cell carcinoma of the oral cavity (OSCC). The purpose of the present study was to see whether mtDNA D-loop analysis can be also applied in patients showing neck nodal metastasis to evaluate the presence or not of a clonal relationship with the index tumor.

Methods. The study population consisted of 8 patients treated for a primary OSCC and presenting synchronous neck-nodal metastases. MIDNA D-loop analysis was performed by deep sequencing and phylogenetic clusterization. Analysis of p53 mutations was additionally performed in each case to compare data obtained by the two different molecular techniques. DNA from exons 5-8 of the p53 gene was analyzed by deep DNA sequencing using 454 GS Junior platform.

Results. The results from mtDNA D-loop analysis (neighbor joining tree) revealed that 7 out of 8 cases (90%) of neck metastases were phylogenetically related with primary OSCC, while in the remaining one patient was not. The results from p53 analysis confirmed the absence of any relationship between neck-metastasis and OSCC in this patient and confirmed the clonal relationship between neck-metastasis and OSCC in other 3 patients, but was not informative in the remaining 4 patients.

Conclusions. mtDNA analysis seems to be more informative in establishing the presence or not of a relationship between neck-metastasis and primary OSCC with respect to the analysis of p53 mutations. The distinction between clonal neck-metastasis and new event not related with primary OSCC can be a key issue in defining a prognosis and may influence the choice of the appropriate treatment.

References

Fusion of right upper second premolar with supernumerary teeth: a case report

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Introduction. Fusion and germination are dental anomalies frequently detailed to identify clinical presentation of double teeth. Due to the union of two or more dental buds, fusion increase in tooth number especially when it takes place between normal and supernumerary teeth. The etiological factors are usually uncertain, probably due to trauma, systemic diseases or genetic factors. The incidence of fusion in permanent dentition is 0.1% in the Caucasian population.