Recurrent oral cancer: Current and emerging therapeutic approaches

Sabrina Daniela da Silva
McGill University, Canada

Oral cancer cavity (OCC) is associated with high incidence of loco-regional recurrences, which account for the majority of treatment failures post-surgery and radiotherapy. The time-course of relapse manifestation and metastasis are unpredictable. Relapsed OCC represents a major clinical challenge in part due to their aggressive and invasive behaviors. Chemotherapy remains the only option for advanced OCC whenever salvage surgery or re-irradiation is not feasible, but its efficacy is limited as a result of the drug resistance development. Alternatives to use of different permutations of standard cytotoxic drugs or combinations with modulators of drug resistance have led to incremental therapeutic benefits. The introduction of targeted agents and biologics against selective targets that drive cancer progression has opened-up optimism to achieve superior therapeutic activity and overcome drug resistance because, unlike the non-selective cytotoxic, the target can be monitored at molecular levels to identify patients who can benefit from the drug. This presentation will discuss the multifactorial aspects of clinical drug resistance and emerging therapeutic approaches in recurrent OCC, emphasizing recent advances in targeted therapies, immunotherapy, and potential relevance of new concepts such as epithelial-mesenchymal transition and cancer stem cell hypothesis to drug resistance.

sabrinadaniela@hotmail.com

Cytology of nasal mucosa as non-invasive method to assess the Airway inflammation in Allergy respiratory disease

Vincenzo Patella¹ ² and Giovanni Florio¹
¹Hospital of Battipaglia, Italy
²University of Naples Federico II, Italy

Background: In recent years, diagnostic cytology of nasal mucosahas provided significant contributions in clarifying important physiopathological mechanisms at the basis of several rhinological pathologies, it has been also clarified that nose mucosal is anatomically similar to bronchial mucosal.

Aim: In a group of young athletes was performed the cytology of the nasal mucosa to show a correspondence to bronchial hyperreactivity and the role of corticosteroids in the recovery of barrier integrity of the respiratory mucosa.

Methods & Patients: 83 young athletes (mean 21.3 +/- 3.5 yrs old; 53 Male and 30 Female), history of atopy, bronchial asthma (BA) and concomitant allergic rhinitis (AR) were reported; they were submitted to Spirometry with challenge by Methacholine or broncho-dilatator challenge (PFR), Asthma Control Test (ACT) and rhino-cytology. Based on the results of their examination, a program of their two-step treatment was proposed by topical cortical steroid therapy (mometasone 50 mg twice for 60 days).

Results: All patients (15 males and 9 females) with PFR positive had an ACT with poorly controlled asthma (ACT < 15; mean 10.1 +/- 3.6) and nasal inflammatory cells (eosinophils: 9.5 +/- 4.1 and neutrophils 23.3 +/-6.2). We found that the number of eosinophils highly correlated with all the above-mentioned parameters, including ACT and spirometric values. A significant positive correlation was present between all inflammatory cells and neutrophils displayed only a partial correlation with pulmonary parameters (FEV1). Methacholine test positivity significantly correlated with the number of eosinophils in the nasal smear. A close relationship between the nasal eosinophil number and the percentage of predicted FEV1 was demonstrated (r=−.76; p<0.0001). The patients submitted to steroid therapy showed a recovery of barrier integrity of the respiratory mucosa a nasal cytology similar to control group (r=−.68; p<0.001).

Conclusion: The cytology of nose mucosal may be considered a non-invasive tool to assess airway inflammation in young asthmatics with associated atopic rhinitis.

enzopatella@alice.it