Narrow Band Imaging: aid in early detection of oral cancer and conservative prosthetic treatment

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Background: Since surgery for head and neck cancer is often associated with disfigurement and loss of function, early detection represents a key strategy to obtain satisfactory life quality and good aesthetic results. The present report describes the diagnostic and rehabilitative process of a head and neck cancer patient who was approached with conservative surgical treament and post-operative rehabilitation.

Methods: A 63-year old woman was referred to the Oral Medicine and Pathology Unit for an asymptomatic white lesion on the floor of the mouth, which was noticed by her dental hygienist during a follow up. Visual and Narrow-Band-Imaging-aided examination was performed and microvascluar pathologic modifications of small vessels guided the oral pathologist toward immediate biopsy performing.

Results: Squamous Cell Carcinoma was diagnosed after histopathological evaluation and the patient was sent to the Otolaryngologist who performed surgical excision of the tumor, prior extractions of all residual mandibolar teeth and with marginal ostectomy. After one-year of disease-free survival, the patient was rehabilitated with fixed implant-supported toronto-like bridge of the inferior mandible and total resin prosthesis in the upper jaw. After two years of follow up, aesthetic and chewing functions were maintained and no signs of cancer recurrence were found.

Conclusions: Narrow band Imaging is an adjunctive aid for early detection of oral cancer. This simplifies surgical intervention and post operative rehabilitaion. The introduction of new technologies and the collaboration and good communication between specialists ensure fast and appropriate diagnosis and treatment process.