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Oral hygiene and ONJ: a proposal of protocol

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Abstract

Oral hygiene seems to be crucial to minimise their risk of ONJ.

Oral hygiene was suggested as effective ONJ prevention in the literature. Attention regarding brushing, interdental cleaning and other oral hygiene techniques has been stressed. Furthermore, the prescription of high fluoride toothpaste for those patients with increased caries risk has been suggested.

Oral hygiene habits may also play an important role, thus creating a potential bias in oral health studies.

However, there does not seem to be plenty of studies in the literature explaining a precise protocol about a professional oral hygiene program that could be applied to cancer patients that are at risk for developing ONJ.

Therefore, the aim of the present communication was to present and discuss our protocol for the management of oral hygiene in cancer patients that are going to start an antiresorptive therapy or that have already started it, in order to lower the risk for ONJ.

Background: In patients at risk for ONJ, all dental procedure that may expose bone tissue to an infective risk have to be carefully assessed. Therefore, Dental Hygienists are extremely important as for the primary and secondary prevention of oral diseases, but also as for the maintainance of optimal hygienic conditions in patients that may develop a MRONJ.

Materials and Methods: All protocols foresee an accurate past medical history assessment with a focus on type, modality and assumption of Bisphosphonates as well as on the presence of risk factors for ONJ; the clinical examination; radiology; oral hygiene assessment; periodontal assessment; coltural bacterial and fungine research; motivation and instruction to home oral hygiene; planning of a protocol of oral hygiene with appropriate follow up.

Results: We propose the following protocol that foresees at least 30-40 days before the initial use of antiresorptive treatment: a general medical and dental assessment, with periodontal charting, and radiological and photographic documentation. In absence of tissue alterations a Minimally Invasive Non Surgical Therapy (M.I.N.S.T.) and Full Mouth Ultrasonic Debridement protocol can be hypothesized. It foresees a professional oral hygiene with accurate debridement of root surface till the bottom of the periodontal pouch under local anesthesia. An alternative, when tissue allows it, a FM-

EPAPT (Full Mouth Erythritol Powder Air Polishing) Guided Biofilm Therapy oral hygiene protocol may be proposed. Fluoroprophylaxis. Home oral hygiene education.

In patients that already assume antiresorptive therapy, the same protocol may be substantially used, avoiding the most invasive procedures. All patients will undergo follow up controls.

When an initial ONJ stage is encountered, the following procedures may be proposed: the use of topical ozone; the use of laser therapy (Nd:Yag 1064 nm, diodes GaAs 904-910 nm)

Conclusions

As for ONJ, dental hygienists play an extremely important role of primary (to reduce risk factors of ONJ), secondary (early diagnosis of ONJ), and tertiary (to improve quality of life and reduce pain) prevention.