in our patients. Combination of ICD and highly-conformal RT in managing HNC could be of some benefit in OM prevention in accordance with available literature2, this probably reflects dose reduction to oral mucosa and salivary glands as observed in our previous experience as well3.

Bicarbonate sodium oral-rinse in patients with oral mucositis induced by chemotherapy and radiotherapy: does it give a real chance for management?

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Aim: Oral mucositis (OM) is an acute complication of radio treatment and chemotherapy of head-neck cancer. OM is characterized by erosive-ulcerative lesions, often complicated by fungal over infections. The most important discomfort of OM is pain, which can also be debilitating for nutrition and all stomatognathic functions. In 2004 MASCC/ISOO published guidelines for OM treatment, that have been revised in 2007, 2014 and 2019. Many agents have been tested for the prevention, treatment, or relieve symptoms of OM, and sodium bicarbonate is one of mouth-rinses most widely recommended. In the section Basic oral Care of MASSC/ISOO guidelines, it has been reported that use of sodium bicarbonate is an effective and inexpensive method for the treatment of pain secondary to OM but, at the best of our knowledge, there is no scientific evidence. Aim of this paper is to review the efficacy of sodium bicarbonate oral-rinse for the treatment of radio/chemo therapy-induced oral mucositis.

**Methods:** A literature search has been carried out to review the efficacy of the sodium bicarbonate in preventive or treatment of OM induced by radiochemio therapy.

Results: Basic oral care strategies are always and strongly suggested for OM management; but no evidence has been reported in the international guidelines for mouthwash prescription. Moreover, most indications of suggested clinical practice are based on expert consensus opinion. Several mouthwashes have been proposed; interestingly, there is a lack of agreement, especially for the use or not of sodium bicarbonate and chlorhexidine (CHX) mouthwashes. MASCC and ESMO guidelines suggested to rinse with "harmless" sodium bicarbonate and to avoid the CHX mouthwash in every condition. On the contrary, Italian Health Ministry recommendations (2014) advised CHX rinses for the prevention and benzydamine

mouthwash for the control of symptoms and signs of OM. Furthermore, the literature contains conflicting results on the use of the sodium bicarbonate oral-rinse for both preventive and therapeutic management of OM. In fact, some authors successfully report the use of sodium bicarbonate in the treatment of mucositis pain, but in association with other medication, for example lidocaine and diphenhydramine. Systematic reviews show an inefficient anti-microbical activity of sodium bicarbonate: a randomized control trial of benzydamine versus sodium bicarbonate for prophylaxis of OM shows that 19% of patients treated with sodium bicarbonate needed to be treated with oral antifungal agents. Sodium bicarbonate seems to be effective in reducing pain during treatment, but there are not significant results in sodium bicarbonate rinses for preventive purposes: a trials study shows that the first evidences of oral mucositis in group treat by sodium bicarbonate was found in forth weeks of treatment, while the appearance of mucositis in placebo group was occurred in the third week. Besides, no protective action has been showed against secondary infections in OM.

Conclusion: Unfortunately, no evidence has shown in the literature on the real therapeutic action of sodium bicarbonate oral-rinse for the prevention and/or management of OM; probably the concurrent association with drugs or substances doesn't reveal its real effectiveness. Further studies are needed to demonstrate whether it is actually useful in the management of oral mucositis.

Patients suffering with hereditary angioedema requiring periodontal treatment: prophylaxis of acute attacks, a novel short-term protocol

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Aim: C1-inhibitor (C1-INH) related hereditary angioedema (C1-INH-HAE) is a rare pathological condition caused by a deficiency or a functional alteration of serum protein C1-INH, with a reduced prevalence varying from 1.09 to 1.151/100,000 for habitants. Clinical manifestations are represented by recurrent, potentially life-threatening episodes of cutaneous or mucosal edema. The present study analyzed the effectiveness of a specific short-term prophylaxis protocol for the management of C1-