

Editorial

Special Issue “Current Concept and Emerging Treatments in Oral Diseases”

Gianluca Tenore 

Department of Oral Sciences and Maxillofacial Surgery, Sapienza University of Rome, 00161 Rome, Italy; gianluca.tenore@uniroma1.it

The attention of scientific research has grown in recent years on how to achieve more early and accurate diagnosis of oral diseases, and to carry out more efficient management of them. In fact, this attention is due to several reasons. Above all, it is due to the fact that there is a noticeable increase in the diagnosed Head and Neck Cancers (HNCs) worldwide, and the impact of early diagnosis and efficient management is widely reported to be effective on the prevention of oral cancers and the improvement of the patients quality of life.

Secondly, medically compromised patients are confronted daily in our dental practice, and achieving adequate management with new concepts and tailored treatment strategies may decrease the high risk of significant comorbidities. Additionally, the introduction of new therapies and drugs is growing more and more in the medical field, and there is an obvious need to study and report their possible collateral effects on the oral cavity and how to manage these effects. Since many of the new therapies and drugs in many circumstances show successful results for many critical diseases, there is a need to detect, prevent, and manage their collateral effect. This issue can be clearly shown in the case of some anti-resorptive drugs for the management of bone metastases and their reported collateral effect on the oral cavity called Medications-Related Osteonecrosis of the Jaws (MRONJ), and the same issue can be shown in the case of myeloablative conditioning regimens and Hematopoietic Stem Cell Transplantation (HSCT) for the management of onco-hematologic patients and their reported collateral effect of mucositis.

The idea of proposing this Special Issue was to give an opportunity for recent and relevant research that studies new concepts to help in the early diagnosis of oral diseases and that investigates new treatment modalities for different oral diseases and complications. In response to the call for this Special Issue, eight papers were submitted and five of them have been accepted and published.

Two papers studied concepts for the diagnosis of oral cancer [1,2]. In the study by Aló et al. [1], immune cell populations, including the qualitative and quantitative immunohistochemical analyses, were assessed in sixteen samples of squamous precancerous (preinvasive) and twenty-five samples of cancerous lesions obtained from the oral cavity and larynx of forty-one patients. The analysis revealed the presence of differences in the immunohistochemical profile between preinvasive and invasive squamous cell lesions without significance statistically. Therefore, the authors suggested, in conclusion, carrying out further studies on larger series of patients focusing on site-specific lesions due to the possible presence of usefulness of this investigation in driving the treatment strategy in both preinvasive and invasive squamous cell lesions of the oral cavity and larynx.

The second paper was studied retrospectively the correlation between Oral Squamous Cell Carcinoma (OSCC) and some reported risk factors; including tobacco, alcohol, and Family History of Cancer (FHC) [2]. These risk factors were assessed on 239 patients with a confirmed diagnosis of OSCC (Test group) and 239 patients without history and/or diagnosis of oral cancer (Control group). The study revealed that patients with a high rate of tobacco consumption and drinker patients showed a significant risk of developing OSCC. For the FHC, the General Family History of Cancer (GFHC) showed a marginal risk



Citation: Tenore, G. Special Issue “Current Concept and Emerging Treatments in Oral Diseases”. *Appl. Sci.* **2021**, *11*, 11744. <https://doi.org/10.3390/app112411744>

Received: 30 November 2021

Accepted: 6 December 2021

Published: 10 December 2021

Publisher’s Note: MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



Copyright: © 2021 by the author. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

and the Family History of Head and Neck Cancer (FHHNC) showed a notable risk without statistical significance. Based on this experience, the authors confirmed the possible presence of an association between alcohol and tobacco as risk factors and the OSCC. Additionally, they proposed the need for further evaluation of the GFHC and FHHNC as risk factors of the OSCC.

The other three papers were investigating the effectiveness of different treatment modalities of different oral diseases [3–5]. In the paper by Della Monaca et al. [3], the experience of the investigators in the treatment of patients undergoing total or subtotal glossectomy and contemporary reconstruction with flaps, and without lip-splitting incision and mandibulotomy, were presented retrospectively. Forty-one patients were recruited and studied comprehensively. The authors found that the “pull-through” operation is almost universally performed in cases in which an anterolateral buccopelvectomy is required, while in the case of tumours involving the posterior third of the tongue or the base, most surgeons still prefer to perform removal through a lip-splitting transmandibular approach. The authors on the basis of this experience considered that the “pull-through” resection can be routinely used in the resection of malignant tumours involving the posterior third of the tongue.

The different management modality of different oral diseases was studied in another paper [4]. This paper was investigating the effectiveness of photo-biomodulation (PBM) for the prevention of Oral Mucositis (OM) in patients undergoing conditioning regimens for allogeneic HSCT (aHSCT). A PBM prevention protocol was applied to twenty patients undergoing conditioning regimens for aHSCT (Test group) and twenty patients who underwent aHSCT and were not subjected to laser therapy were recruited retrospectively to compare the obtained results (Control group). The study revealed the effectiveness of the preventive protocol of PBM on the decrease of severity and duration of OM; where eight patients in the test group did not experience OM during their hospitalization period, and the mean duration of OM in the PBM group was significantly lower than that of the control group.

The fifth paper was investigating the effectiveness of PBM (808 nm) on the management of major aphthae in a randomized double-blinded controlled trial [5]. A total of sixty patients were selected, thirty patients were subjected to a PBM protocol (Test group), and thirty patients were subjected to a switched-off laser placebo. The effectiveness of PBM was assessed through the assessment of the duration needed for the complete healing and the evaluation of pain on a daily basis by the visual analog scale (VAS). The authors found that the PBM protocol accelerated the healing recovery and reduced the pain.

Funding: This research received no external funding.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: Not applicable.

Acknowledgments: I would like to express my sincere thanks to all the authors and peer reviewers for their valuable contributions. This Special Issue would not have been possible without their valuable and professional work. I would also like to express my sincere gratitude to the editorial team for their professionalism, valuable support, and assistance.

Conflicts of Interest: The author declares no conflict of interest.

References

1. Aló, P.L.; Ciciarelli, M.; De Felice, F.; Quintiliani, C.; Corsi, A.; Polimeni, A. Immunohistochemical differences in squamous precancerous and cancerous lesions of the oral cavity and the larynx: Preliminary data. *Appl. Sci.* **2021**, *11*, 2048. [[CrossRef](#)]
2. Tenore, G.; Nuvoli, A.; Mohsen, A.; Cassoni, A.; Battisti, A.; Terenzi, V.; Della Monaca, M.; Raponi, I.; Brauner, E.; De Felice, F.; et al. Tobacco, alcohol and family history of cancer as risk factors of oral squamous cell carcinoma: Case-control retrospective study. *Appl. Sci.* **2020**, *10*, 3896. [[CrossRef](#)]

3. Della Monaca, M.; Terenzi, V.; Raponi, I.; Priore, P.; Battisti, A.; Cassoni, A.; Nocini, R.; Tenore, G.; Brauner, E.; Romeo, U.; et al. "Pull-through" resection for total and subtotal glossectomy involving the posterior third of tongue. *Appl. Sci.* **2020**, *10*, 8580. [[CrossRef](#)]
4. Mohsen, A.; Tenore, G.; Rocchetti, F.; Del Vecchio, A.; Ricci, R.; Barberi, W.; Cartoni, C.; Iori, A.P.; Pippi, R.; Polimeni, A.; et al. Photo-biomodulation as a prevention modality of oral mucositis in patients undergoing allogeneic hematopoietic stem cell transplantation. *Appl. Sci.* **2020**, *10*, 7479. [[CrossRef](#)]
5. Pasquale, C.; Colombo, E.; Benedicenti, S.; Signore, A.; Amaroli, A. 808-Nm near-infrared laser photobiomodulation versus switched-off laser placebo in major aphthae management: A randomized double-blind controlled trial. *Appl. Sci.* **2021**, *11*, 4717. [[CrossRef](#)]