

## Rehabilitation protocol of an edentulous patient with atrophic ridges after osteoradionecrosis

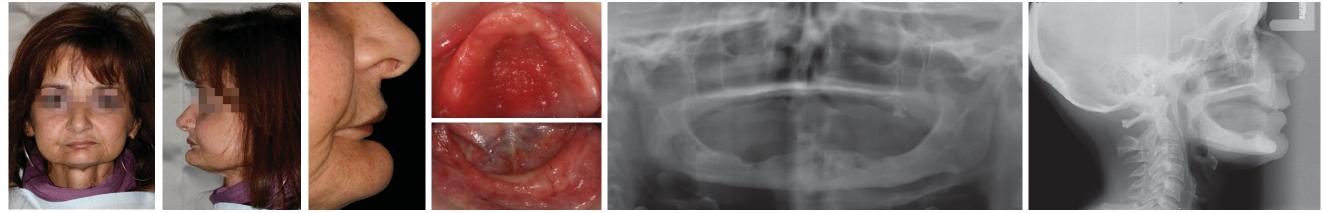
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## Introduction

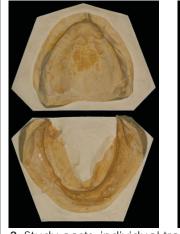
Patients undergoing radiation therapy for treatment cancer of the oral cavity are at risk of developing bone post-extraction radionecrosis. When this occurs in a patient with atrophy of the alveolar ridge, the probability of the existence of serious defects is high with obvious anatomical, functional and aesthetic commitment. The use of implants in these cases can be addressed but it is always a risk, as such, in situations of a total edentulous patient a protocol available will be the rehabilitation with conventional total mucous-supported prosthesis.

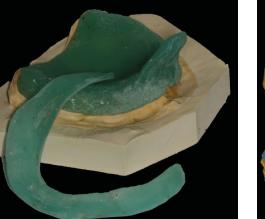
## **Clinical case description**

Female patient, 40 years-old, total edentulous with residual atrophic ridges and bearer of complete upper mucus-supported denture. Previous history of carcinoma of the oral cavity with consequent partial right glossectomy. Subsequently suffered an episode of post-extraction osteoradionecrosis in the 4th quadrant which resulted in significant loss of mandibular structure. Rehabilitation according to a conventional complete mucous-supported prosthesis protocol.

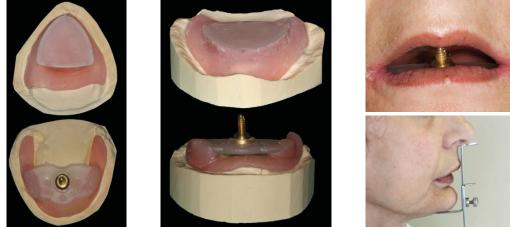


1. Initial photographs: extra e intra oral. Orthopantomography and teleradiography

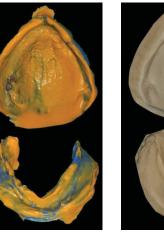




2. Study casts; individual trays; master impression and master casts















3. Functional and aesthetic analysis, facial arch transference and neutral zone determination







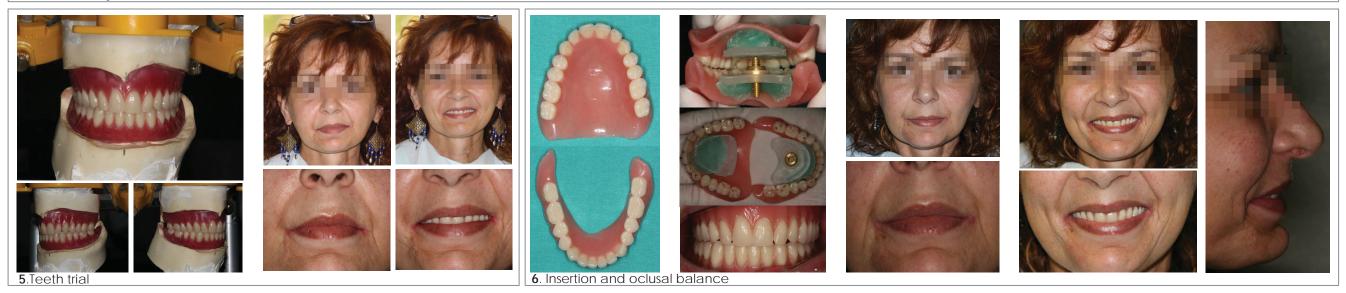








Intermaxillary dinamic record and mounted master casts in the articulator



## Conclusion

Atrophic ridges constitute a challenge in oral rehabilitation. In cases of bone radionecrosis in addition to the atrophy of the ridge, this presents considerable defects that affect the stability/retention of the rehab. However, through a careful clinical protocol, namely: determination of the neutral zone and realization of dynamic intermaxillary record based on gothic arch tracing, health, function and aesthetics can be restored. Despite anatomical constraints has been possible to improve patient quality of life and wellness without the use of implants.

and impact on oncological treatment. Journal of Cranio-Maxillo-Facial Surgery 40 (2012) 303-309 ; Pitak-Arnnop P et al. Management of osteoradionecrosis of the jaws : Ananalysis of evidence. EJSO 34 (2008) 1123-1134 ; Lyons A et al. Osteoradionecrosis of the jaws: current understanding of its pathophysiology and treatment. . Oral Surg Oral Med Oral Pathol Oral Radiol Endod 2008:105:e1-e6