

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ
قُلْ لَوْ كَانَ الْبَحْرُ مَدَادَ كَلِمَاتِ رَبِّي لَنَفِدَ الْبَحْرُ
قَبْلَ أَنْ تَنفَدَ كَلِمَاتُ رَبِّي وَلَوْ جِئْنَا بِمِثْلِهِ مَدَدًا
صَدَقَ اللَّهُ الْعَظِيمُ
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Introduction

Loss of natural teeth has functional and psychosocial consequences that can in many cases be declined with complete dentures. However, the outcome of complete denture therapy is variable and relies on patients' factor, as well as the skill of clinicians and laboratory technician making the denture.⁽¹⁾

Maxillary edentulism may represent up to one-third of the denture market, however mandibular edentulism is much less frequent.^(2,3) Phonetics, esthetics, functional efficiency and comfort are key elements of successful complete denture treatment.⁽⁴⁾ Maxillary overdenture has shown to be an accepted treatment option for the partially edentulous maxilla, especially if opposed by natural teeth to avoid a situation of natural versus artificial occlusion, which cause Kelly syndrome.⁽⁵⁾

Prosthetic treatment planning for the partially edentulous patient is greatly influenced by physical factors, such as bone quantity and quality, maxillo-mandibular relationship, gag reflex, congenital and acquired palatal defects, mucosal sensitivity, muscles attachments, the patient's ability to clean the prosthesis and the patient's general health. These factors, as well as financial considerations are in favor of overdentures rather than fixed prostheses.^(6, 7)

When only a few teeth remain or implant are used, the design rationale for overdentures is similar to that for complete dentures. To improve both the retention and stability of a maxillary complete overdenture, it is essential to establish a proper posterior palatal seal (PPS). Overdentures may be retained with bars, magnets and resilient denture liners to improve retention, stability and achieve better patient acceptance.

Maximum tissue coverage is desirable to offer adequate retention. However, removal of palatal coverage has proved to be successful in some patients who suffer from gagging sensation or who can't adapt to complete palatal coverage. Thus the question that this study was done to answer is to "what extent the palatal coverage could be reduced without affecting the retention of the overdenture and without overloading the supporting abutments."