Case Report

Prosthodontic Treatment of a Patient with Combination Syndrome: A Clinical Case Report

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Abstract
Combination syndrome commonly occurs in patients with a completely edentulous maxilla opposed by a bilateral distal-extension removable partial denture. This syndrome poses a considerable challenge to dentists. The symptoms of the syndrome consist of anterior maxillary bone loss, mandibular bone loss, tuberosity overgrowth, and alveolar ridge canting. All of these effects render prosthetic treatment more difficult, and although it is preferable to use dental implants for functional support, complex cases still require conventional prosthetic treatments for medical or financial reasons.

This clinical report presents the prosthodontic management of a patient exhibiting combination syndrome along with a discussion of relevant literature.

Keywords: Combination syndrome, distal-extension RPD

Introduction
The oral rehabilitation of patients with an edentulous maxilla opposed by natural mandibular anterior teeth is a considerable challenge for many clinicians. These cases pose many potential problems, including loss of bone from the anterior edentulous maxilla and super-eruption of unopposed mandibular anterior teeth. Kelly (1972) proposed the term combination syndrome for this oral condition and its resultant clinical features. The Glossary of Prosthodontic Terms has defined combination syndrome as: the characteristic features that occur when an edentulous maxilla is opposed by natural mandibular anterior teeth, including loss of bone from the anterior portion of the maxillary ridge, overgrowth of the tuberosities, papillary hyperplasia of the hard palatal mucosa, extrusion of mandibular anterior teeth, and loss of alveolar bone and ridge height beneath the posterior mandibular removable dental prosthesis bases—also called anterior hyperfunction syndrome.

Kelly (1972) observed 20 patients equipped with complete maxillary dentures opposing distal-extension removable partial dentures (RPD). After three years of follow-up, six of these patients showed a reduction of the anterior bony ridge height (1.35 ± 0.83 mm) on lateral cephalometric radiography. Meanwhile, an increasing bone level of the tuberosities (1.38 ± 0.36 mm) was noted in five patients. Kelly (1972) proposed the preservation of posterior teeth to support lower partial dentures and a more stable occlusion to avoid combination syndrome. Preservation