

A case report of a free end saddle telescopic denture using a magnetic attachment for maxilla molars.

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Introduction

It is known that partially edentulous patients were not in favor of wearing removable partial dentures(RPDs) at the point of comfortable wearing, aesthetic aspect and the function. It is common for the treatment of the unilateral distal extension defect with more than three molars(Kennedy Class II) to choose bilateral design of RPDs in consideration of the long-term preservation of abutment teeth and the residual ridge and of the movement of RPDs. However, considering patient discomfort certain problems remain in bilateral design. We report the case that patient satisfaction was improved at the point of comfortable wearing, aesthetic aspect and the function, using unilateral RPD design by applying a Konus telescopic crown and magnetic attachment.

Case Report

The patient was a 45-year-old male. The chief complaint was malfunction of the maxillary left molar bridge. This bridge was fabricated in a few years ago, and he began to feel uncomfortable from a few months ago. The bridge was moving subsequently, and he was no longer able to masticate on left side.



Fig.1 Frontal view of remaining dentition at the initial visit

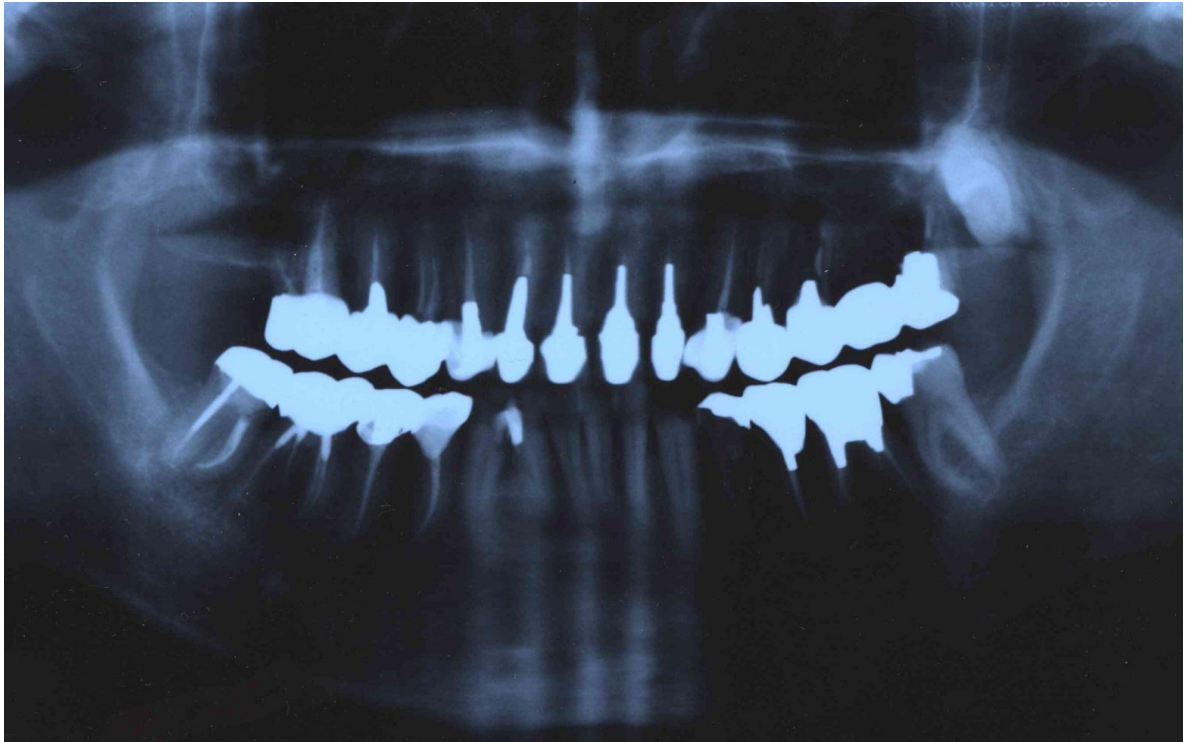


Fig.2 Panoramic radiograph at the initial visit

As shown in the Fig.1, the veneering crown of the maxillary left lateral incisor(#22) has been fractured. Panoramic radiograph showed root fracture of maxilla left second premolar(#25) and second molar(#27), cervical caries of first premolar(#24) and a poor canal treatment of canine(#23). Remaining teeth had been suffering from mild periodontal disease as a whole.

Treatment Planning and Procedures

After removing the bridge of the left maxillary molars, immediate resin plate denture(#24~#27) was inserted at the same time as the extraction of #25 and #27(Fig.3 & 4). The denture was arranged to bilateral design by setting wire clasps on #13, #16 and #23.

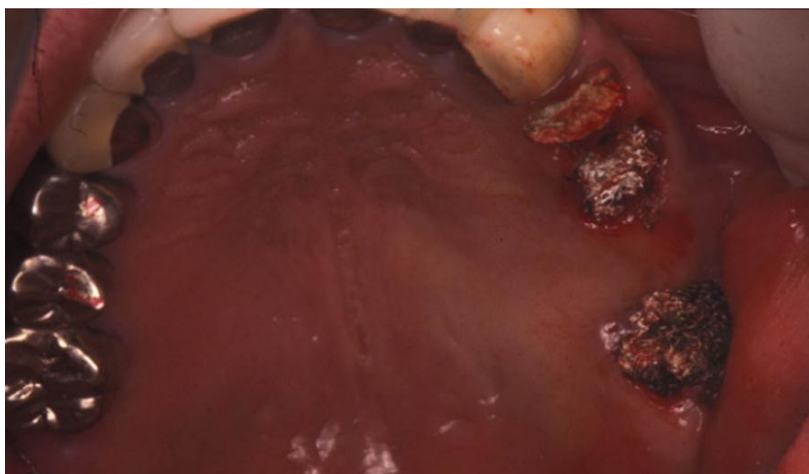


Fig.3 Occlusal view immediately after #25 and #27 extraction.



Fig.4 Occlusal view with immediate denture

A final denture was fabricated after root canal treatment of #23 and #24.

Considering comfortable wearing and aesthetic aspect, Konus telescopic denture was selected as final denture(Fig. 5~7). The design was as follows;

#23, #24 and #25 were selected as the abutment teeth. Konus telescopic crown was applied to #23 and #24.

Magnetic attachment was applied to #25 because the poor condition of it.

In this case due to less inter-maxillary space at the palate side of #24, the telescopic denture was reinforced by applying the metal teeth(Fig. 7).

After obtaining retentive force of telescopic crown following the delivery of the denture, the magnetic assembly was embedded in the denture with auto polymerizing resin. The patient was satisfied with comfortable wearing, aesthetic aspect and function.



Fig.5 Occlusal view without final denture.



Fig.6 Occlusal view with final denture



Fig.7 Final Konus telescopic denture with magnetic attachment

Conclusions

The final denture was arranged to unilateral design by using a magnetic attachment with a Konus telescopic denture and was got sufficient satisfaction of the patient with comfortable wearing, aesthetic aspect and the function. In addition, somewhat suggestion was provided for the indication of the unilateral denture by the combination of Konus telescope and magnetic attachment.

References

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