A case changed from fixed superstructure to removable superstructure for elderly patients

M.Iwamoto[1,2],J.Ashizawa[2],W.Atsuta[2],T.Kanno[2],T.Mizuguchi[2],J.Tanaka[2]

[1]MI General Dental Clinic,Shizuoka Japan
[2]Clinical Implant Society of Japan

Introduction

In defect prosthetics, the usefulness of implant treatment is widely recognized and is becoming a common treatment. As a result, the superstructure may fracture or design changes may be necessary. In this study, we experienced a case in which an elderly patient was changed from a fixed superstructure to a removable superstructure in consideration of the possibility of becoming a long-term care patient in the future.

Case report

1.Patient Information

The patient was a 77-year-old woman, and the main complaint was that the teeth were wobbly and painful when chewing, and the gums were swollen. I had experience with implant treatment at other dental clinics for more than 10 years, and I had a fixed prosthetic device for implant abutments in 13, 23, 24, 26, 27, 28, 35, 36, 37, 44, 46, and 47.

2.Treatment Procedure

In December 2017, a tooth with poor prognosis in the upper jaw was extracted under inpatient management, in February 2018, the superstructure of the upper jaw was removed, and in March 2018, the remaining tooth that was judged to have a poor prognosis was extracted under inpatient management. As of October 2023 (5 years later), no abnormal findings were found in the oral cavity, and no abnormal findings such as pronounced bone resorption or peri-implantitis were observed on X-rays.

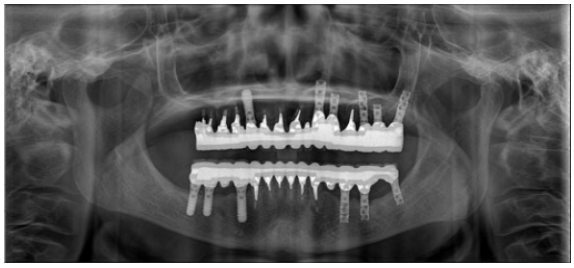

Fig.1 Panoramic radiograph at the first examination

Fig.2 Intraoral photograph after tooth extraction on the upper right mortar

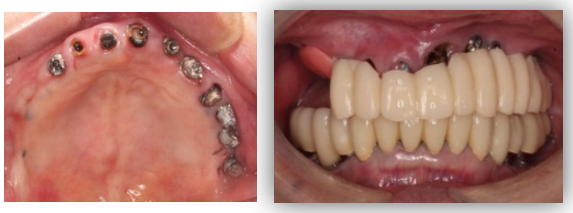

Fig.3 Intraoral photograph After superstructure removal and after fitting a temporary tooth.

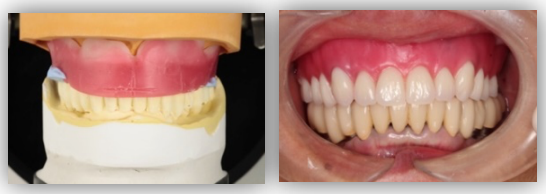

Fig.4 Fabrication of a denture after extraction of a tooth with a poor prognosis.
(bite registration, denture trial fitting, bite-Seating impression, trial fitting of the metal base).

Fig.5 Denture completed

Fig.6 Magnetic attachments were fitted to the denture.

Fig.7 Intraoral photo after fitting the keeper of a magnetic attachment.

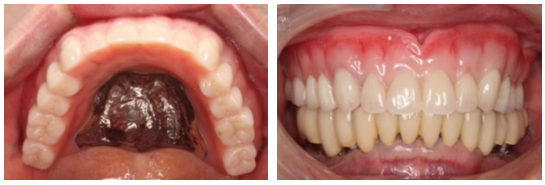

Fig.8 Intraoral photo after wearing denture.

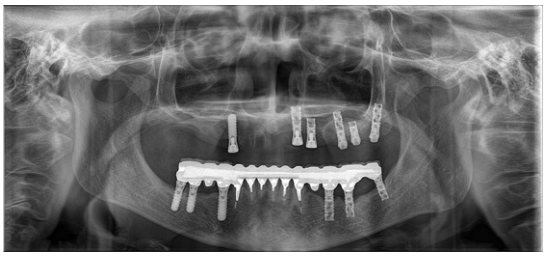

Fig.9 Panoramic radiograph in July 2018

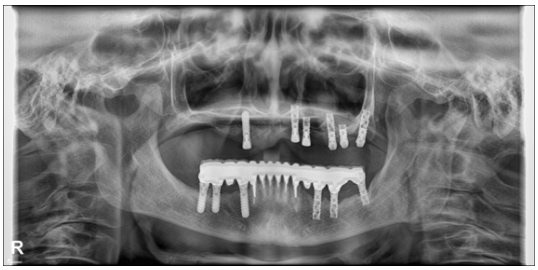

Fig.10 Panoramic radiograph in October 2023

Results

We obtained excellent results.

Discussions/Conclusions

This time, we changed the design of the superstructure of a patient who had undergone implant treatment at another clinic in the past. Due to the deterioration of systemic diseases, surgical procedures and additional implant placement were not possible, and in anticipation of the need for long-term care, cleanability was emphasized, and the treatment policy was decided after sufficient discussion with the patient and family. Areas that are difficult to remove were polished to avoid lacerations due to exposed abutments, and implant overdentures were created. This time, I realized that it is very important to determine the treatment plan and provide oral cleaning guidance not only to patients but also to their families. Therefore, it is necessary to develop further guidelines and explain future design changes to patients in advance.

References

1) J Tanaka,Evaluation of the level of need for design changes to implant overdentures Dental Outlook 2015;8:242-250

2) J Tanaka: Fundamentals and clinical applications of implant over dentures new edition -Focused on applying magnetic attachments, Ishiyaku Publishers Inc, Tokyo, 2020, 148-155.