

Introduction

This case report presents the prosthetic restoration of a patient with a maxillary fibula free flap that was placed 10 years prior. A conventional workflow was utilized to design an implant retained maxillary partial denture for the patient.



Fig 1a-b. Patient initial presentation to clinic and initial tooth try-in.

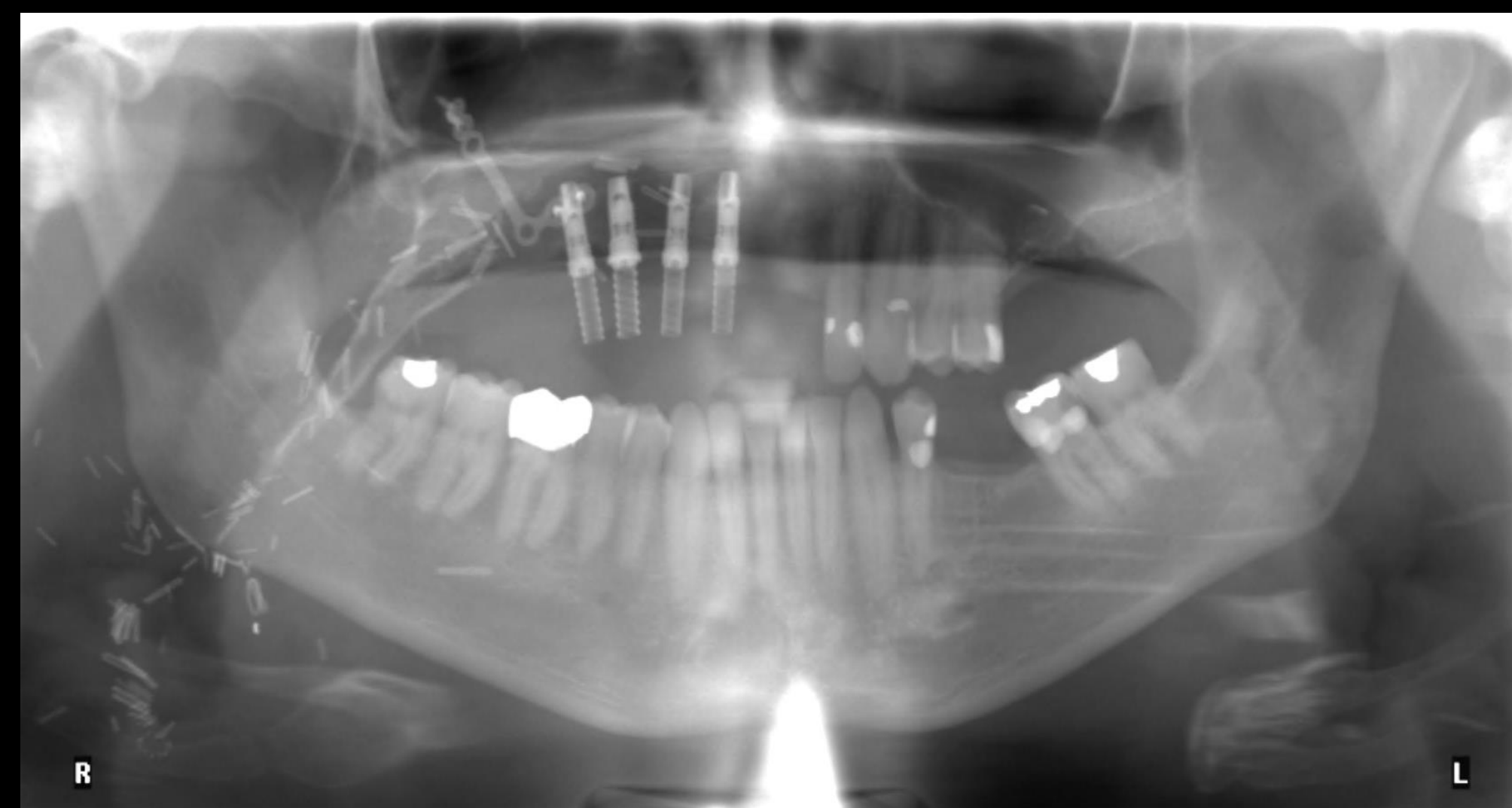


Fig 2. Initial panoramic radiograph of patient.

Case Presentation

A 45-year-old male patient had a previous diagnosis of chondroblastic sarcoma in the maxilla that was resected 10 years ago and reconstructed with a fibula free flap with 4 dental implants. The patient did not have the 4 implants in the flap restored since his procedure and presented with temporary cylinders attached to the implants. Conventional procedures to fabricate the implant retained overpartial denture included border-molding, impressions, and jaw relation records.

Due to the severe angulation of 2 of the 4 implants and limited restorative and vestibule space, it was decided to utilize 2 implants for locators to provide retention in the final prosthesis. Tissue management of the implant sites was difficult due to the nature of the flap. Multi-unit abutments were placed to adjust for the height of the tissue and to avoid any further surgical intervention for tissue manipulation. The definitive implant retained partial denture was processed with Lucitone 199 acrylic and delivered.



Fig 3a. After tissue resection around existing implants.

Fig 3b. Altered temporary cylinders to widen sites for accessibility with suppuration present at site #8.



Fig 4a. Interim overpartial.

Fig 4b. Locators on multi-unit abutments for #6 and #7 implants.

Outcome

The patient tolerated the interim and the final implant retained partial denture well and was pleased with the treatment.

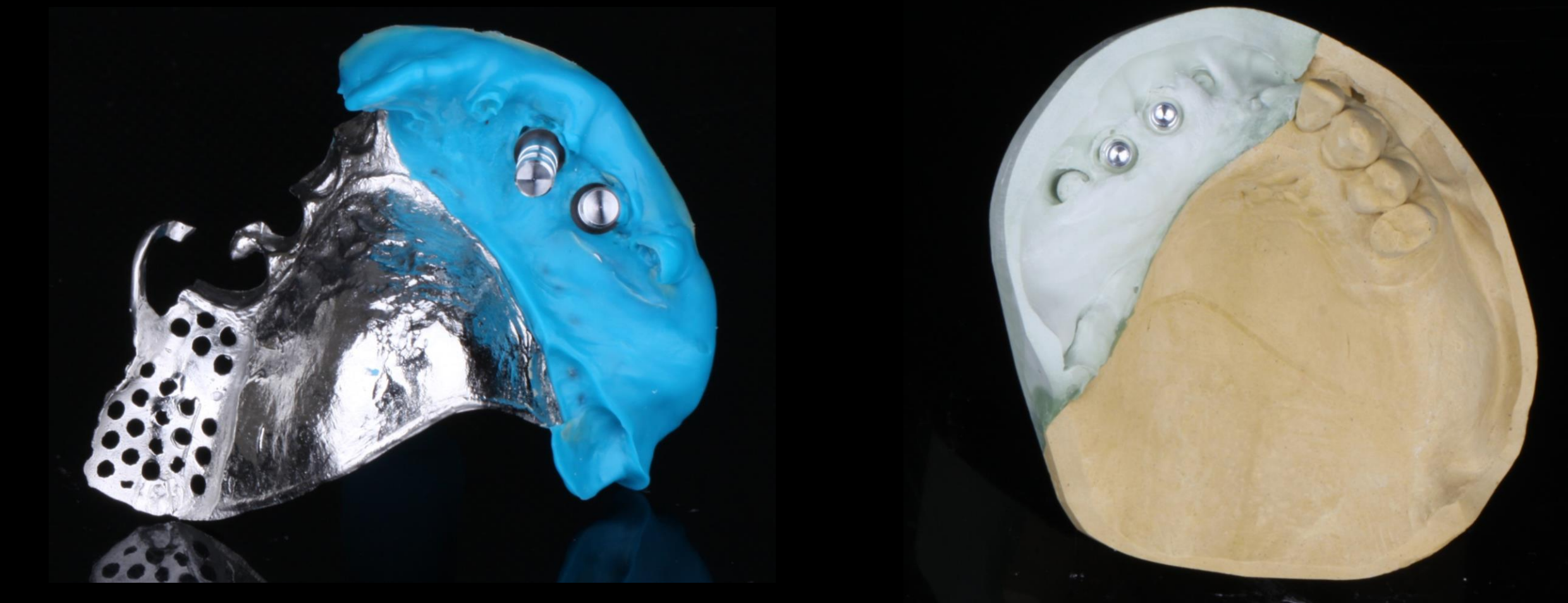


Fig 5a. Framework locator pickup impression with light body PVS.

Fig 5b. Altered cast poured from pickup impression.



Fig 6. Patient presentation with definitive prosthesis on day of delivery.

Conclusions

Implant retained partial dentures are a viable treatment option for patients with reconstructed maxilla using fibula free flap and dental implants.

