

Photogrammetry and 3D Printing for Re-Implantation and Immediate Provisionalization in a Patient with Failed Zygomatic Implants: A Case Report

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Abstract

Dentistry is an evolving science, and digital technology in dentistry, especially Prosthodontics, has been continuously introduced in complex patient care. This clinical report presents the management of failed zygomatic implants in a patient with multiple risk factors and subsequent surgical and prosthetic treatment, including immediate provisionalization on the day of re-implantation.

Initial Presentation

- ❖ A 62-year-old female presented six months after prosthesis delivery with mobility of a maxillary zirconia fixed prosthesis supported by two endosteal and two zygomatic implants.
- ❖ CC: "I had my prosthesis delivered 6 months ago and now I feel some mobility in it."
- ❖ HbA1c = 8%, History of Periodontitis, failed implants.

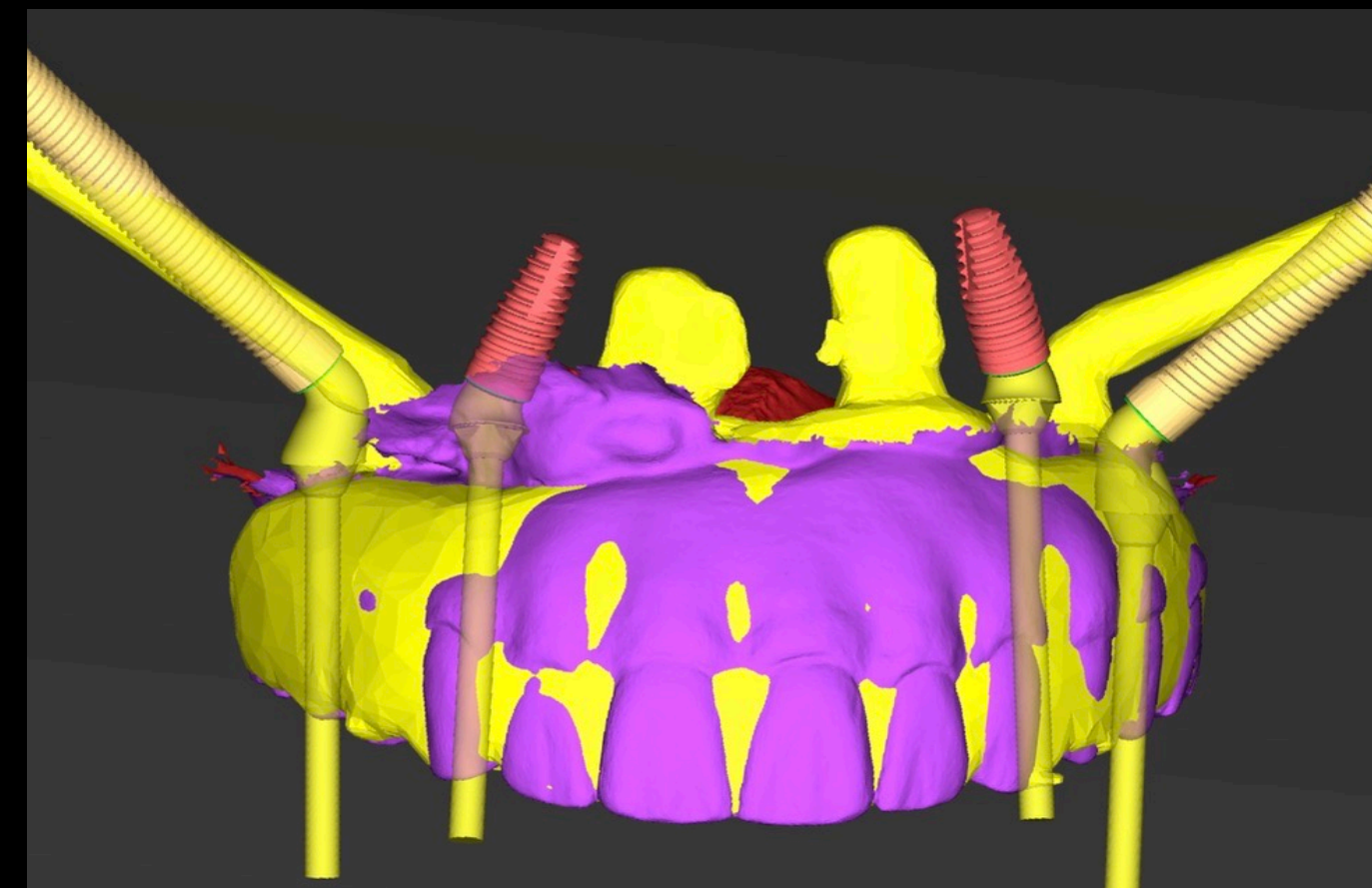
Treatment Plan

- ❖ Reducing HbA1c levels.
- ❖ Explantation of failed Zygomatic implants and placing two new implants.
- ❖ Immediate provisionalization with 3D printed prosthesis.

Technique Advantages

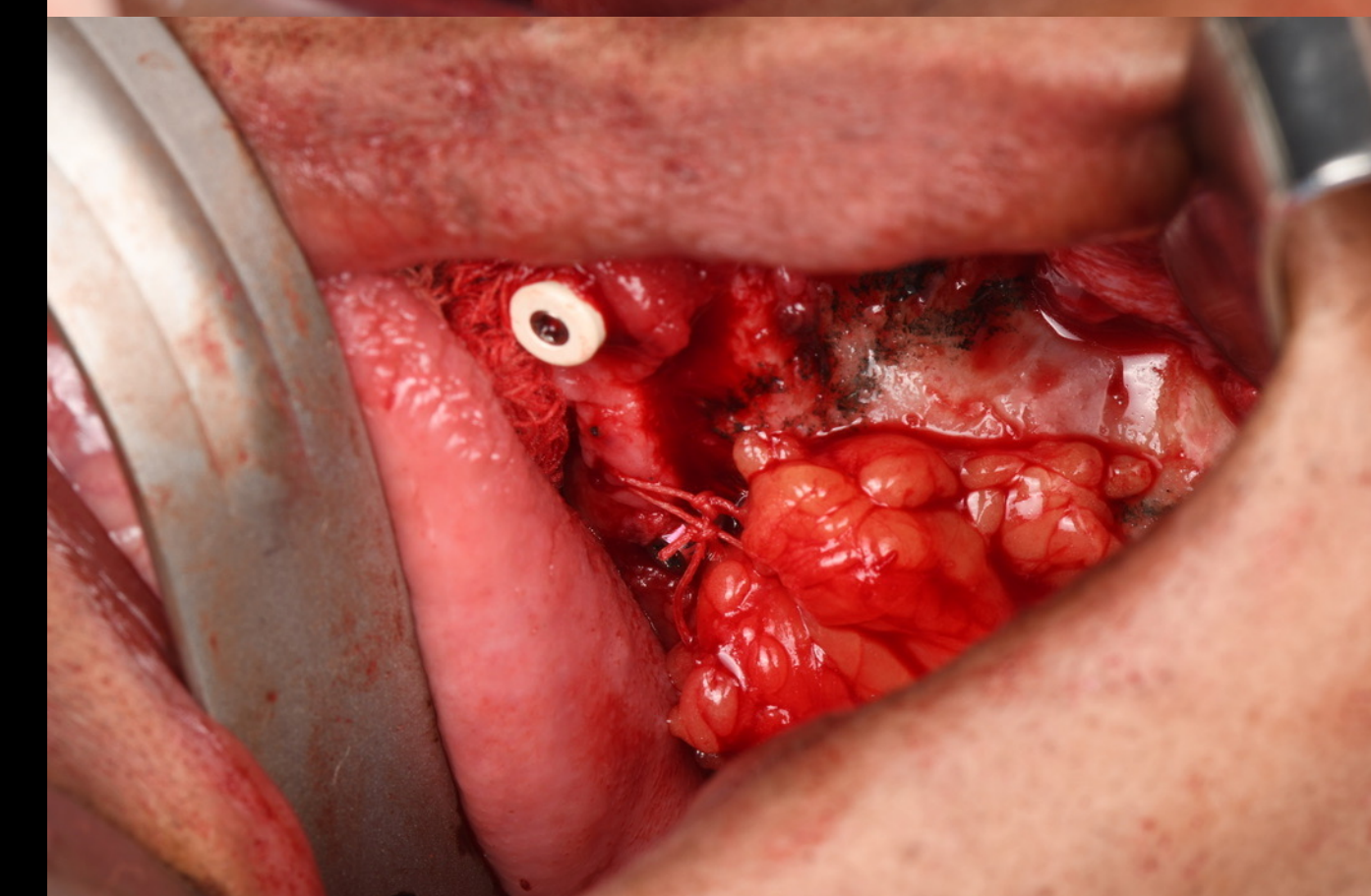
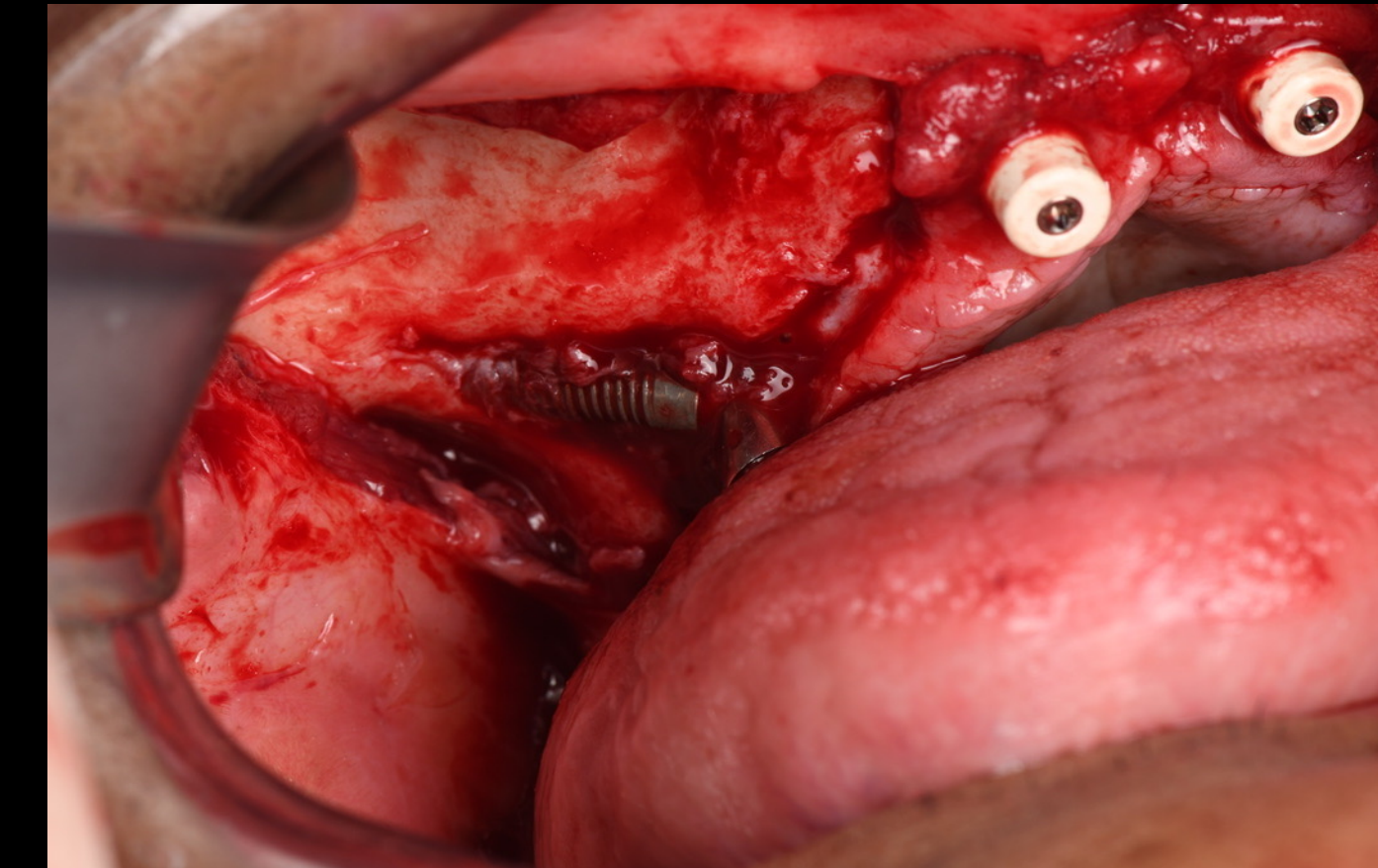
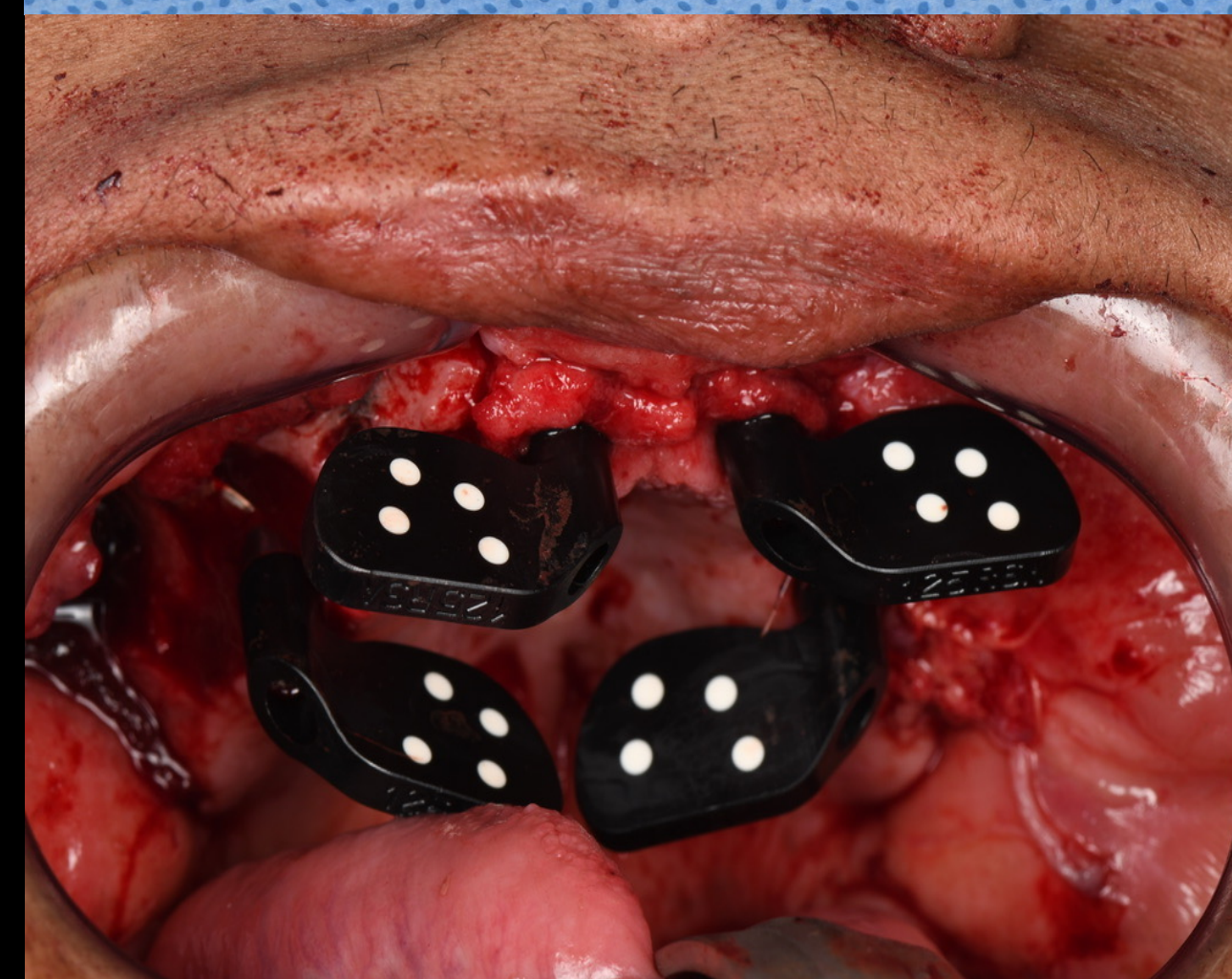
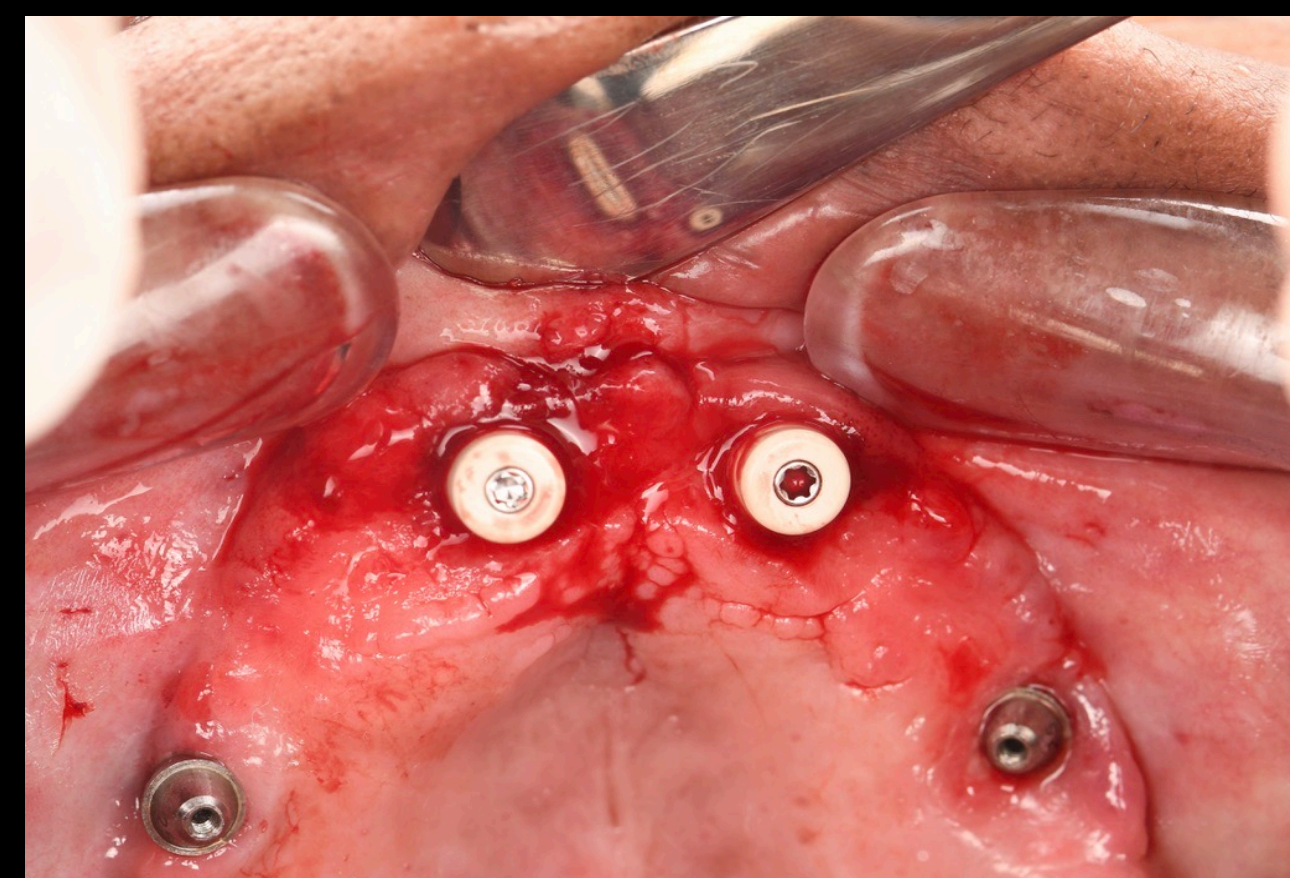
- ❖ By utilizing digital impression with Photogrammetry delivering the provisional fixed prosthesis was accurate and time efficient.
- ❖ The patient was satisfied with the esthetics and function and appreciated the comfort of a fully digital workflow.
- ❖ Predictable planning.

Diagnosis and Treatment Planning



Clinical Presentation

Surgical Sequence



Post-OP

