

# From Edentulism To Full Arch Implant Restorations: A Digital Workflow

Ruba Halasa<sup>1</sup>,DDS , Bin Yang <sup>1</sup>,DMD, MSc, PhD, FACP, Rand Harlow<sup>1</sup>, DDS, FACP, Dima Ghunaim<sup>1</sup>, DDS, MS, FACP, FAAMP

<sup>1</sup> Advanced Specialty Program in Prosthodontics, College of Dentistry, UIC, Chicago, IL, USA

## Abstract

This poster introduces a streamlined digital workflow for restoring a completely edentulous patient, transitioning from rapidly fabricated complete dentures to a full-arch implant-supported prosthesis. The process emphasizes speed, precision, and high patient satisfaction.

## Initial Presentation

66-year-old fully edentulous male with well-controlled type I diabetes. Maxillary and mandibular implants are in place, but interim dentures don't fit.  
CC: "My dentures don't fit after surgery, and I can't use them."

## Treatment Plan

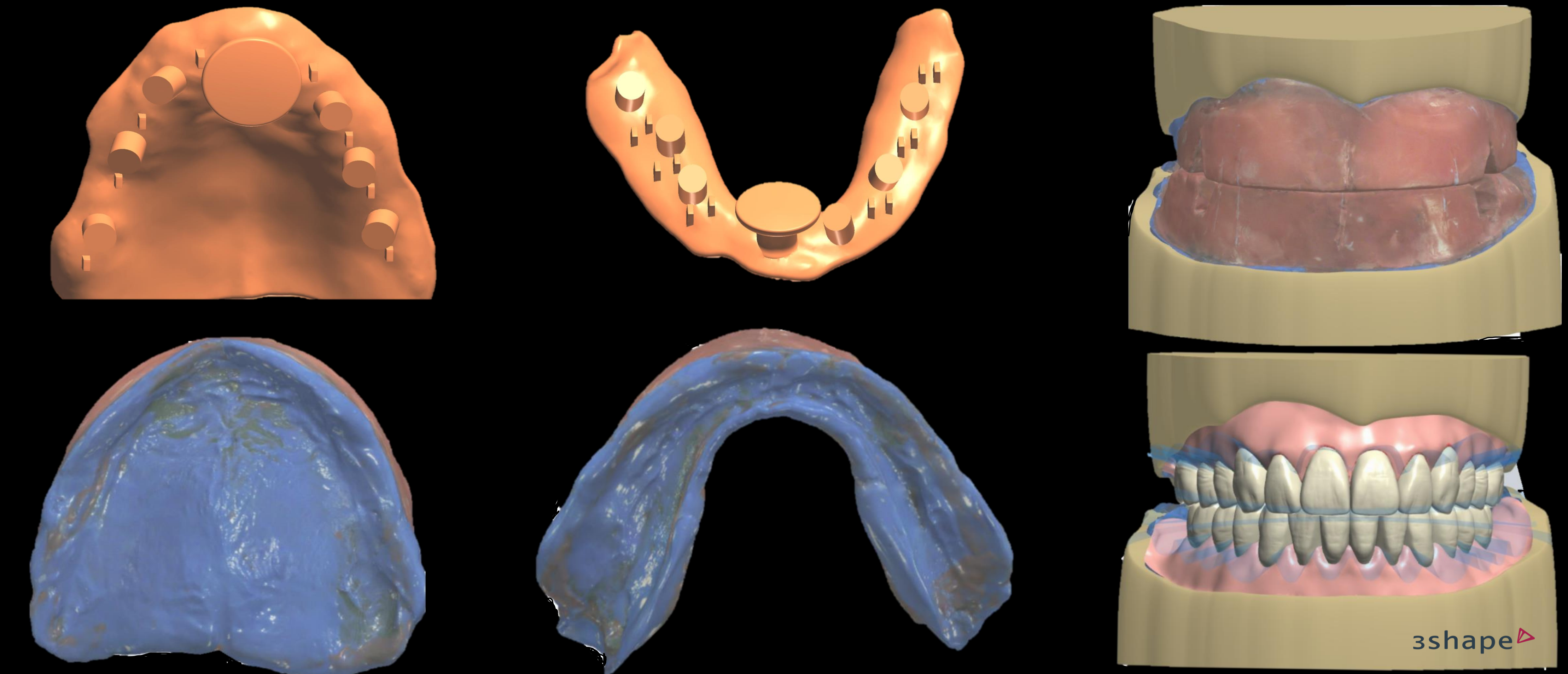
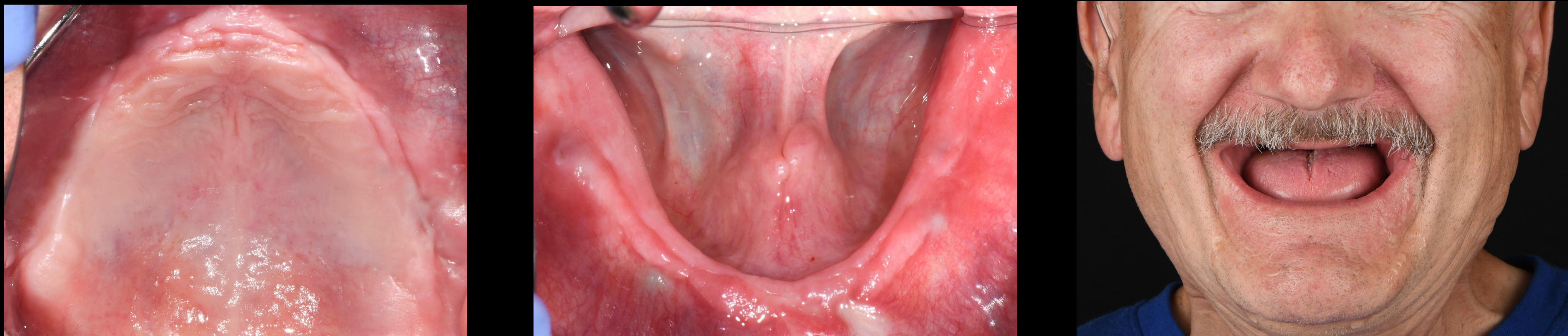
Treatment to include fabricating interim maxillary and mandibular dentures, followed by implant-supported interim prosthesis, and ultimately implant supported monolithic prosthesis.

## Technique Advantages

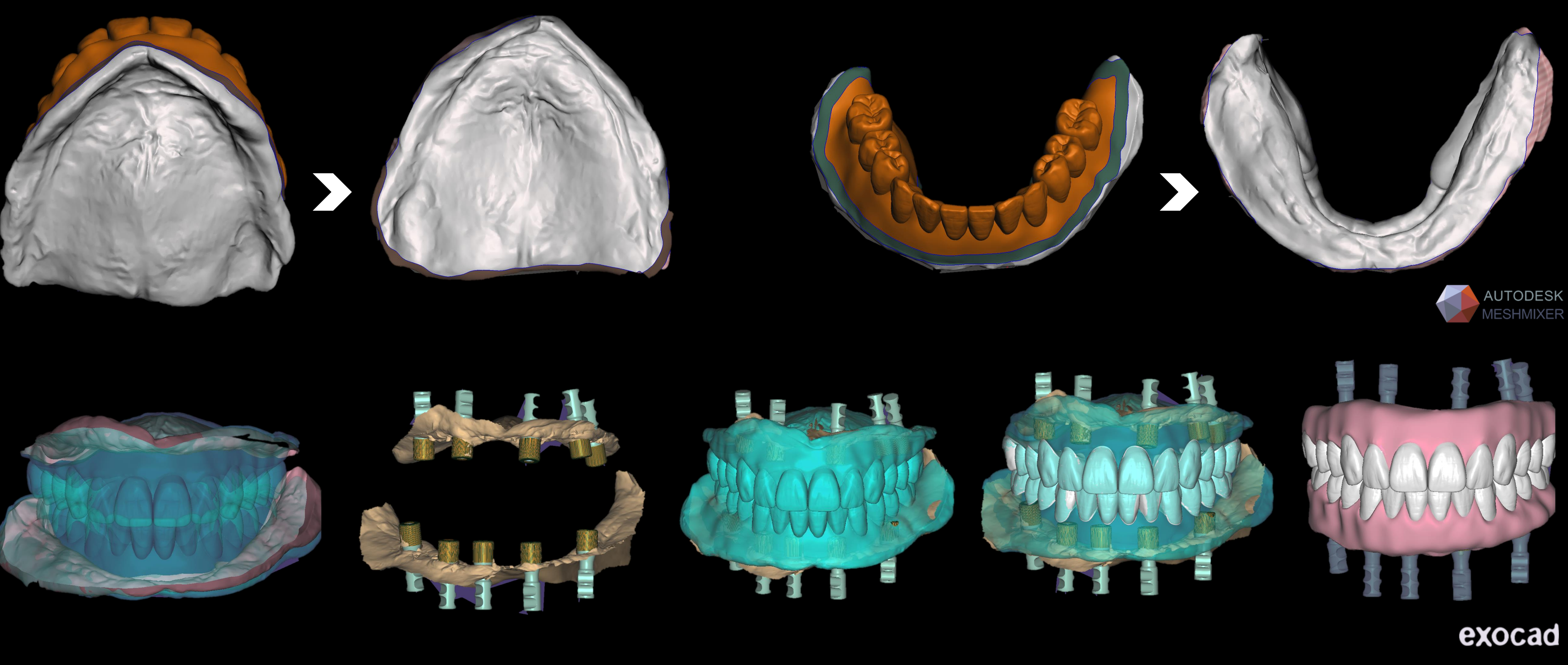
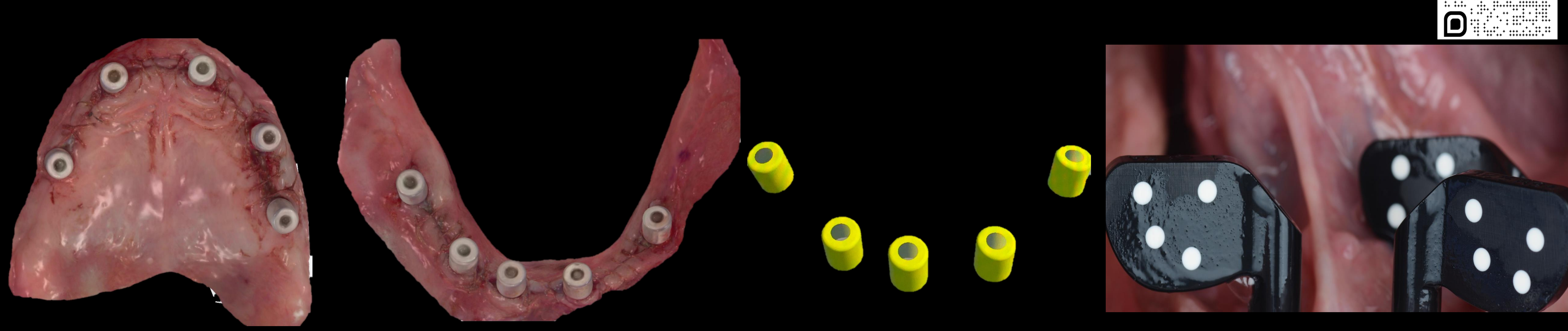
- ❖ Interim dentures produced in two visits with excellent fit.
- ❖ Digitally designed custom trays ensured precise fit, with integrated beams for secure bite registration.
- ❖ Photogrammetry enabled efficient and accurate delivery of provisional implant-supported fixed dentures, and the merging technique ensured predictable alignment without the need for TADS (Temporary Anchorage Devices)
- ❖ High patient satisfaction with comfort, esthetics, and function.

## Clinical Presentation

### Initial Presentation & Digital Denture Workflow



### Digital Interim Implant-Supported Prosthesis Workflow



Patient's Experience



AUTODESK  
MESHMIXER

exocad