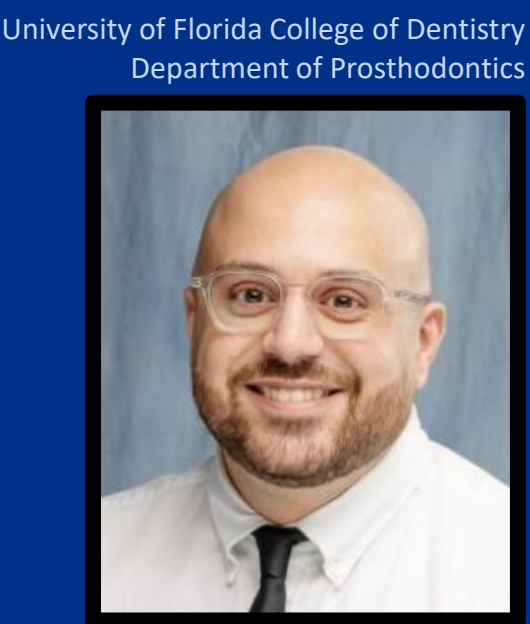


Digitally Driven Dual-Arch Implant Rehabilitation Using the Straumann EXACT Workflow

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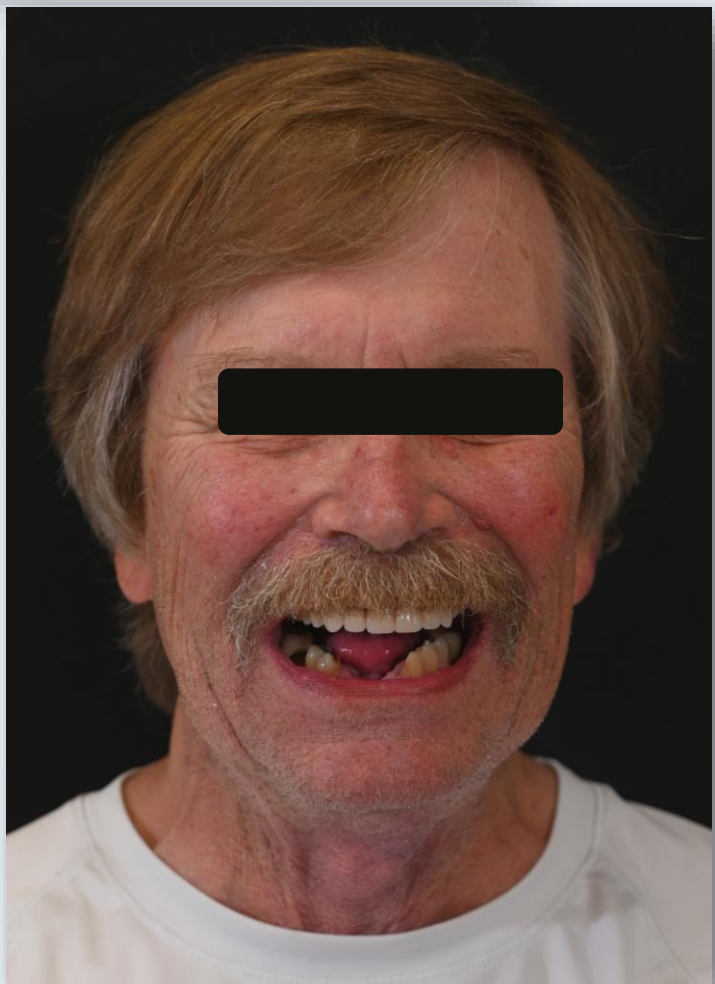
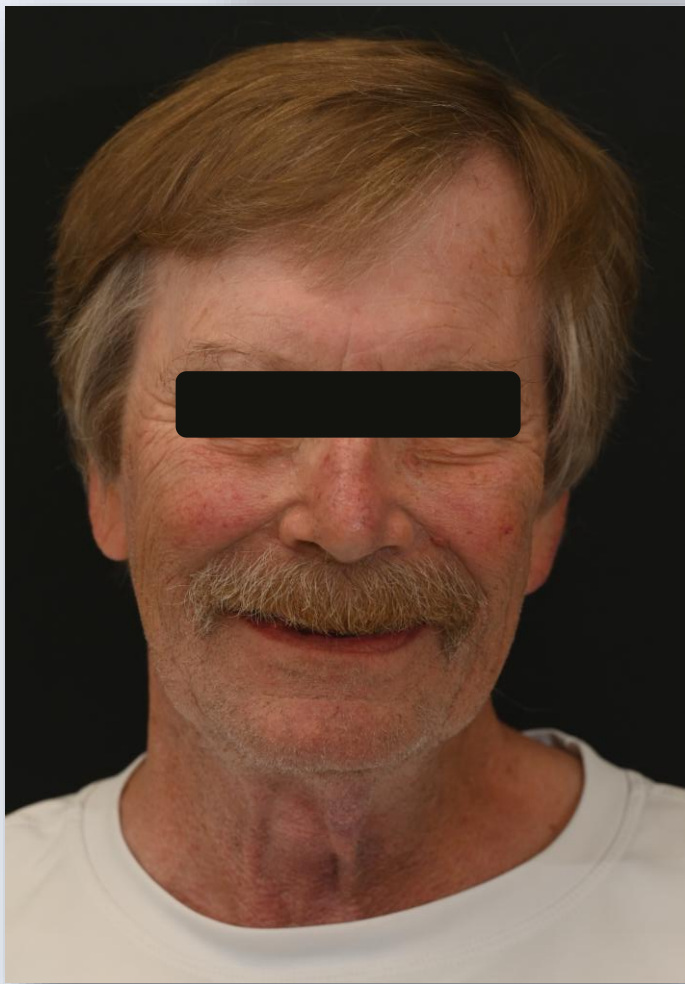
PATIENTS ORAL STATUS

A 75-year-old male presented with ill fitting maxillary complete denture. Clinical and radiographic evaluation revealed an edentulous maxillary arch and a partially edentulous mandibular arch with terminal dentition.

PURPOSE

To demonstrate the application of a fully guided, digitally integrated implant workflow for dual-arch rehabilitation in a compromised edentulous patient and assess prosthetic outcomes at delivery.

PRE-TREATMENT PRESENTATION

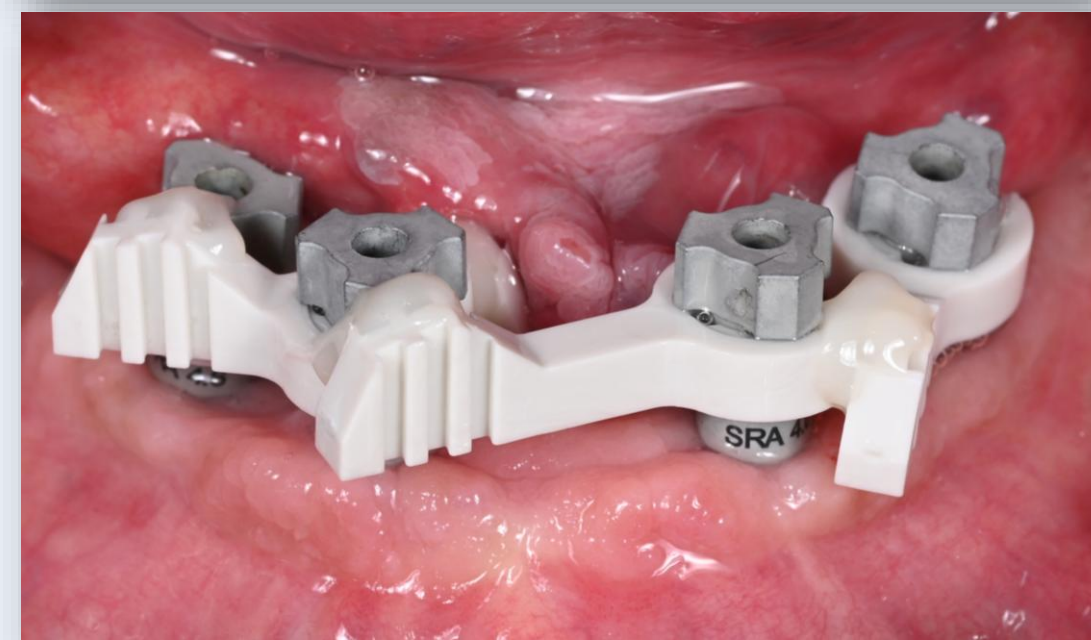
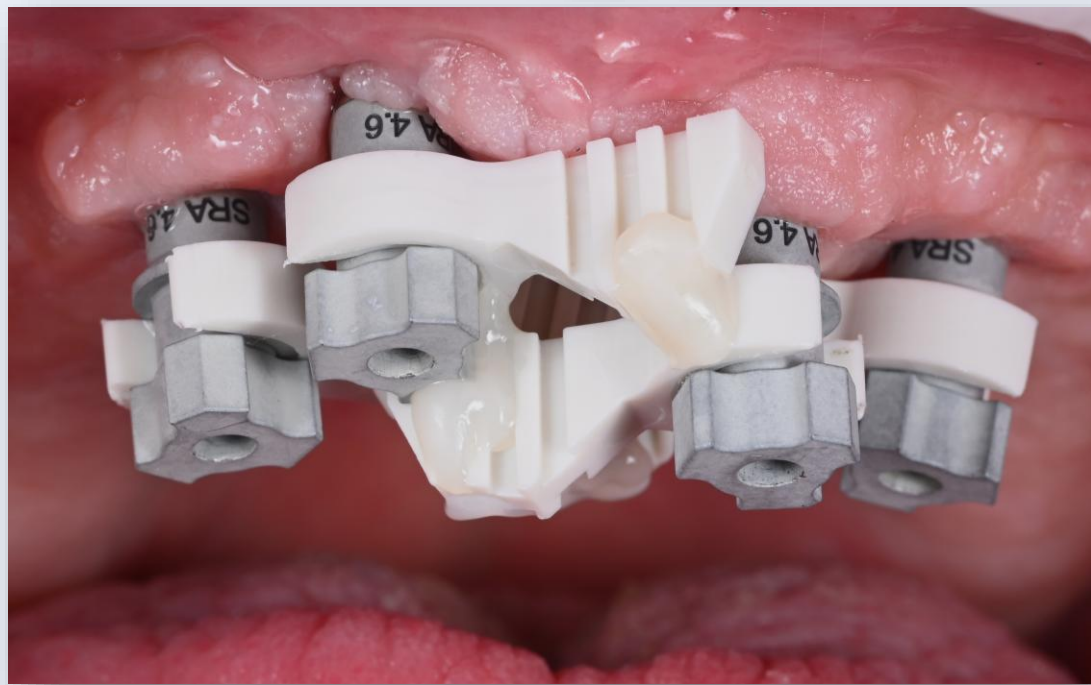


MATERIALS & METHODS

Following osseointegration and provisional restoration, the following digital steps were executed:

- 1) Intraoral scans captured provisional prostheses and interarch relationship
- 2) Straumann BASE scan bodies connected via LINK components scanned to record implant positions
- 3) Digital files transferred for CAD design of titanium frameworks
- 4) Frameworks fabricated via CAD/CAM milling
- 5) Passive fit verified using Sheffield test with periapical radiographic confirmation
- 6) 3D-printed prototype evaluated for esthetics, phonetics, and occlusion

DIGITAL WORKFLOW DOCUMENTATION



REFERENCES

DISCUSSION & CLINICAL RELEVANCE

Full-arch implant rehabilitation with conventional workflows is technically demanding, requiring physical models, custom trays, and analog verification jigs each a potential source of error. The Straumann EXACT workflow integrates guided surgery, intraoral scanning, and CAD/CAM fabrication into a single model-free digital sequence. Direct intraoral capture of implant positions via BASE scan body–LINK components eliminated analog impression steps, and CAD/CAM-milled titanium frameworks achieved passive fit. The 3D-printed trial prosthesis enabled refinement of esthetics, phonetics, and occlusion before definitive fabrication, reducing irreversible material commitment and chair time.

POST-TREATMENT OUTCOME

