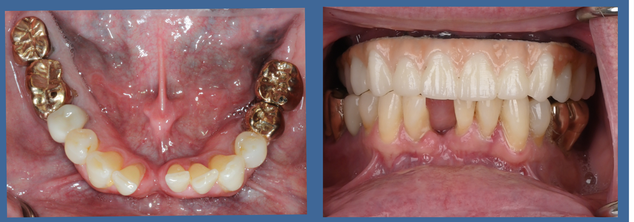
# A Comprehensive Approach to Immediate Loading of Provisional Full Arch Restoration Utilizing Existing Implants

LT Won Yu, DDS, DC, USN; Anton Petrich, DDS, MS, FACP, DC, USN; Stacy Yu, DDS, FACP, DC, USN
Naval Postgraduate Dental School, Bethesda, MD

## INTRODUCTION & CASE DESCRIPTION

The shift from impending edentulism to implant-supported full-arch restorations has transformed oral rehabilitation. This case report presents a strategy for accurate pick-up and immediate loading of provisional restorations within the framework for patients with existing implants. The approach includes fully guided implant surgery, enhancing precision and predictability.

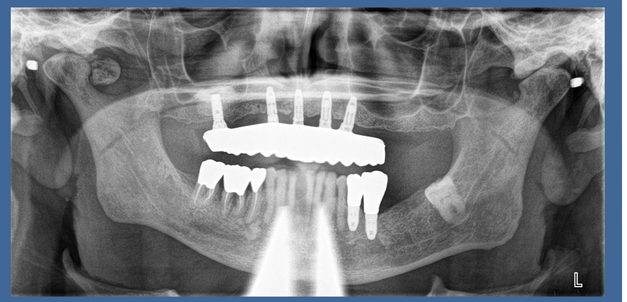
## PRE-OP



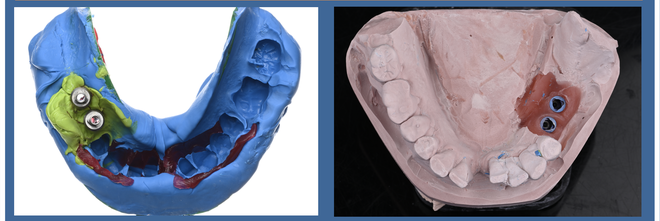
Patient presented with terminal mandibular dentition

## MATERIALS AND METHOD

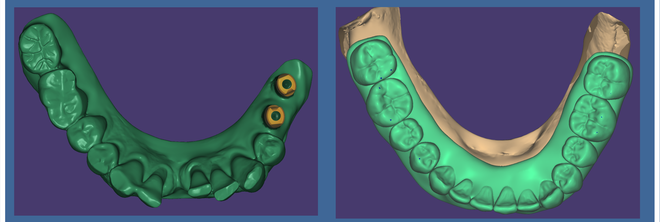
Comprehensive intraoral and extraoral examinations included: intraoral scans, diagnostic casts, CBCT, FMX, and jaw relation records.



## PRE-SURGICAL PLANNING

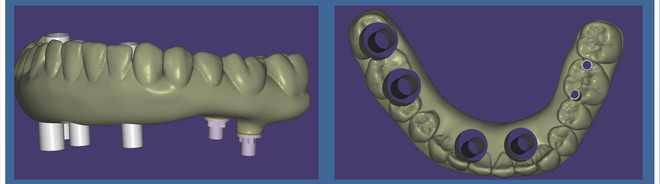


Impression and master cast of mandibular arch.



Scanbodies placed and scanned on existing implants.
Full arch digital wax-up made.

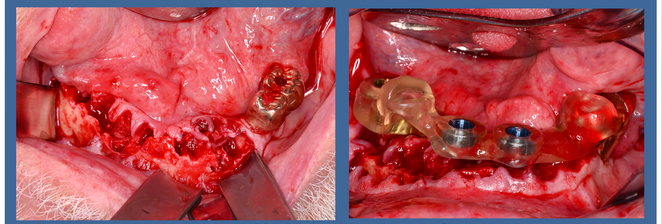
Digital implant planning completed.
Tooth supported surgical guide designed and fabricated.



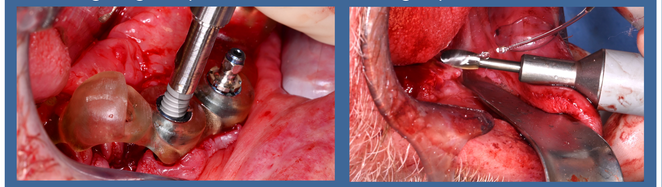
Conversion prosthesis indexed to existing implants.
Designed with access for intraoral pickup of planned sites.

## SURGERY

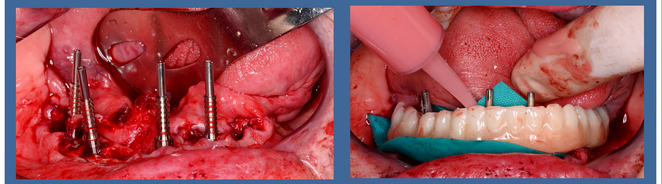
Conversion prosthesis milled with Ti-bases luted at existing implant positions. Occlusion verified on articulator.



Mandibular teeth extracted.
Surgical guide placed on both remaining implant restorations.

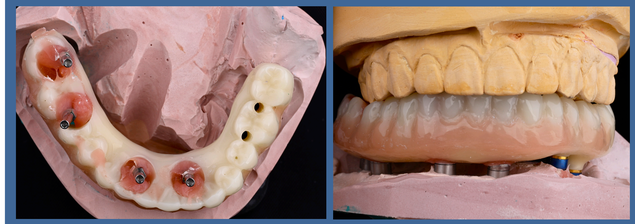


Fully guided implant placement and alveoloplasty completed.



Multi-unit abutments and temporary cylinders placed. Conversion prosthesis fixated to existing implants. Cylinders picked up intraorally.

## DELIVERY



Occlusal adjustment and assessment on the articulated cast.
Prosthesis finished and polished.

Conversion prosthesis delivered with minimal clinical adjustments.
Planned occlusion verified.

## CONCLUSION

Guided surgery ensures predictable implant positioning, reducing surgical complexity and postoperative complications. This report demonstrates the efficacy of using existing implants in achieving precise implant placement as well as a seamless delivery of an immediate provisional full arch restoration.

## REFERENCE

Papaspyridakos, P., Bedrossian, A., De Souza, A., Bokhary, A., Gonzaga, L., & Chochlidakis, K. (2022). Digital workflow in implant treatment planning for terminal dentition patients. Journal of Prosthodontics, 31(6), 543-548.

## DISCLAIMER

The views expressed in this article reflect the results of research conducted by the author and do not necessarily reflect the official policy or position of the Department of the Navy, Department of Defense, the Uniformed Services University of the Health Sciences, nor the United States Government. I am a military service member or federal/contracted employee of the United States government. This work was prepared as part of my official duties. Title 17 U.S.C. 105 provides that copyright protection under this title is not available for any work of the United States Government. Title 17 U.S.C. 101 defines a U.S. Government work as work prepared by a military service member or employee of the U.S. Government as part of that person's official duties.

## CONFLICT OF INTEREST

No conflict of interest to disclose.