

CASE STUDY

InnerView Validates Long-Term Implant Success in a High-Risk Tooth Replacement

Real-time data confirmed full osseointegration in a site with a history of endodontic failure



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Welcome to the New Standard in Diagnostics

At Perimetrics, we believe that better diagnostics lead to better outcomes. From implants to natural teeth, the earlier you can detect subtle changes in stability, the more confidently you can treat—and the longer your work will last.

This case study collection was created to showcase real clinical examples where Quantitative Percussion Diagnostics (QPD) changed the course of treatment, revealed hidden risks, and helped clinicians take proactive steps before failure occurred.

Whether you're looking to improve patient care, reduce costly complications, or enhance your diagnostic confidence, InnerView delivers the insights traditional tools often miss—non-invasively and in just seconds.



Explore what's possible when you can see beneath the surface.



Patient Case: Investigation of the Structural Integrity of a Dental Implant with InnerView®

Case Snapshot



PATIENT:
66-year-old female dental hygienist; fractured, non-restorable tooth #3i.



TECHNOLOGY USED:
InnerView QPD, YOMI robotics, CBCT.



VISIT TYPE:
Extraction with ridge preservation/PRF, implant placement, long-term monitoring.



FINDINGS:
Two years post-op, InnerView showed consistent mobility value of 45 (favorable osseointegration).



HISTORY:
Prior endodontic treatment and vertical bone loss; implant placed with YOMI robotics 5 months post-extraction.



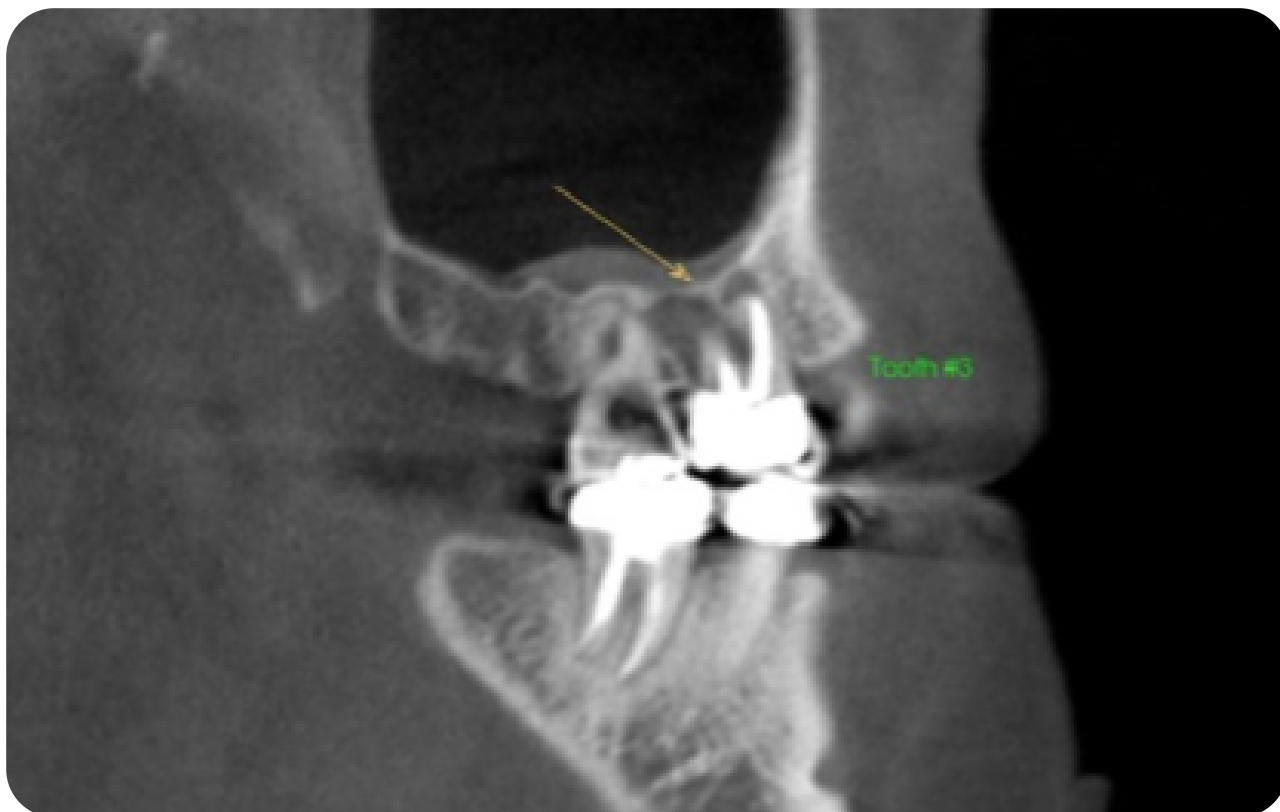
OUTCOME:
Implant #3i stable; patient functioning successfully on final screw-retained crown.

Chief Complaint:

"My tooth is cracked and I am not eligible for another root canal."

Patient Overview

The patient was a 66-year-old dental hygienist who presented with a fractured, non-restorable tooth #3i. Following extraction with ridge preservation and PRF, a dental implant was placed five months later using YOMI robotic guidance. A final screw-retained restoration was delivered, and the patient has been functioning successfully on the implant since 2023.



Challenge

While traditional diagnostics revealed clear risk factors, they lacked the precision to assess implant integration — a critical factor in predicting long-term success. Without more definitive data, the stability of the restoration could not be confirmed with confidence.

Initial Clinical Findings

Traditional Diagnostic Methods

CBCT and clinical findings revealed:

- Bone loss in furcation on tooth #3 with a history of endodontic treatment with re-treatment
- Deep periodontal pocket between teeth #2 and #3, secondary to localized vertical bone loss
- Vertical infra-bony loss mesial to tooth #2

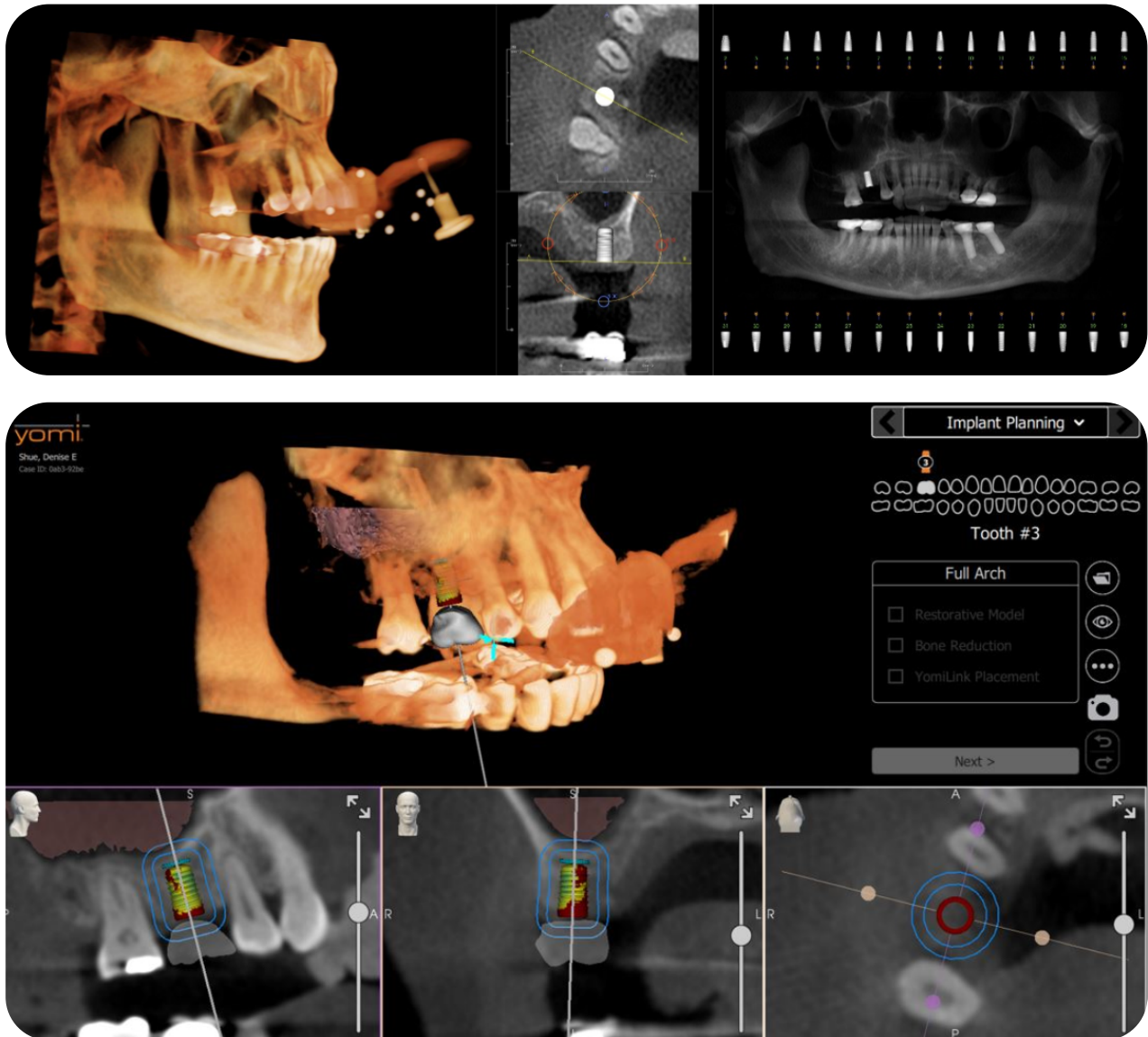
Treatment Solution

Phase I

Surgical extraction of tooth #3 with ridge preservation and PRF under IV Deep Sedation/GA

Phase II

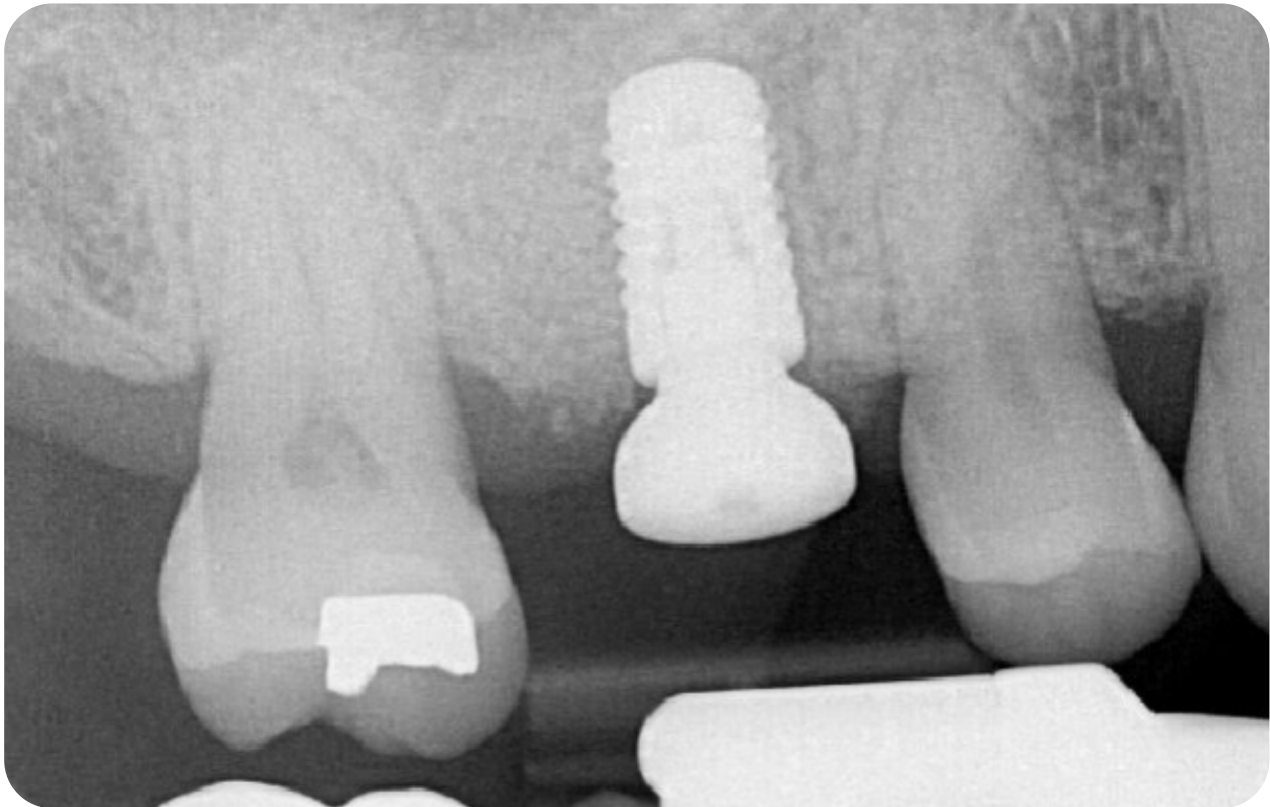
Surgical placement of dental implant #3 via YOMI robotic guided planning and surgery



Treatment Plan Based on Initial Diagnosis, cont.

Phase III

Ready to restore check at 4 months post-operation.



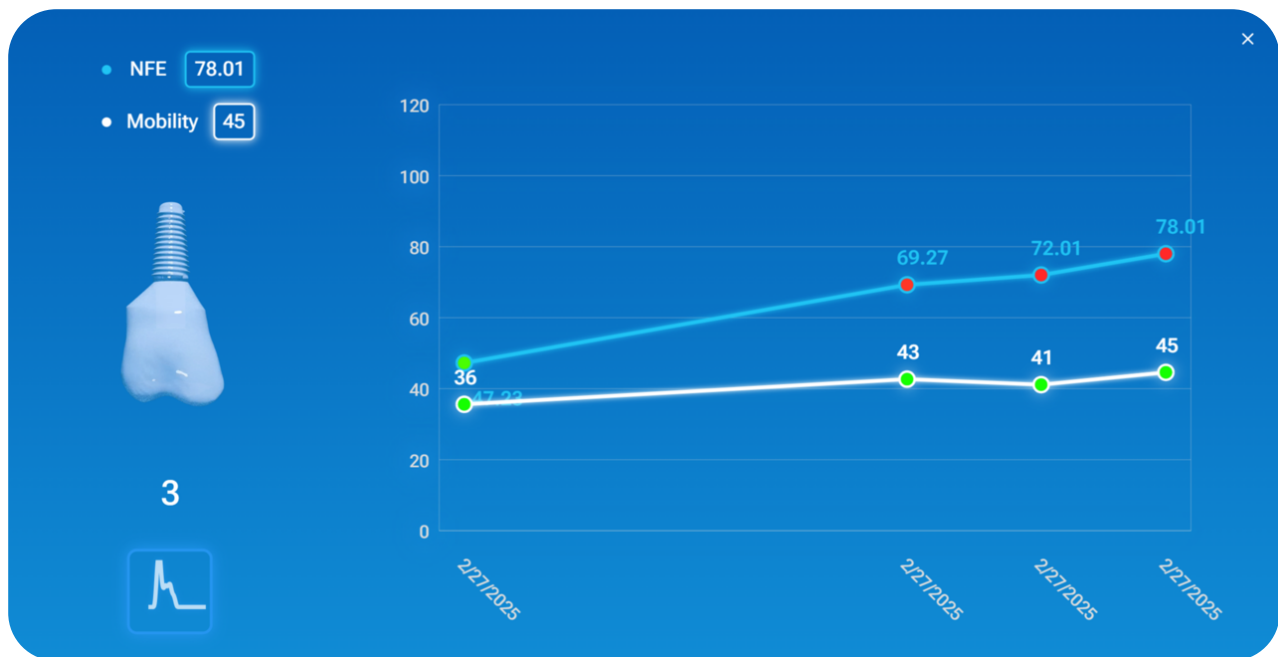


Final screw-retained restoration and testing with InnerView two years post-op

The InnerView Examination Process

InnerView provides quantifiable data on tooth and/or implant stability. The handpiece delivers four percussive taps to the tooth or implant at any stage and measures energy return to support the evaluation of:

- External tooth and /or implant mobility
- Defects that are undetectable by xrays or visual inspection
- Early signs of failure before symptoms appear



Results

At two years post-restoration, InnerView testing confirmed implant #3i had a consistent mobility value of 45, indicating favorable osseointegration. The test was repeated four times, each showing stable results within the good integration range.

Traditional diagnostics such as CBCT, RFA, percussion, and torque testing can only detect structural issues once they are advanced. InnerView provided quantifiable stability data that guided treatment decisions and confirmed long-term integration. These results gave the clinician confidence to proceed with final restoration and validated the implant's favorable condition.

“InnerView gives us a snapshot of the internal structural integrity of a tooth that may not be identified clinically or radio graphically”

-Bao-Thy N. Grant, DDS, Board-Certified Oral & Maxillofacial Surgeon

ABOUT THE AUTHOR

Bao-Thy N. Grant, DDS Board-Certified Oral & Maxillofacial Surgeon

Dr. Grant is a Board-certified Oral and Maxillofacial Surgeon in California. After graduating from the University of Southern California with a Bachelor's in Business Administration and School of Dentistry, she completed her surgical residency at Montefiore Medical Center / Albert Einstein College of Medicine, where she served as Chief Resident and was inducted into the Leo M. Davidoff Society for teaching excellence.

She is on staff at St. Joseph Hospital of Orange, Mission Hospital and Children's Hospital of Orange County, and serves as the Team Oral and Maxillofacial Surgeon for the Anaheim Ducks.

Dr. Grant lives in Orange County with her husband and two children.



The Future of Dental Diagnostics

This case demonstrates how InnerView provided insights traditional methods couldn't — enabling better decision-making, and improved outcomes.

InnerView enables clinicians to:

- ✓ Identify areas of potential concern before symptoms appear
- ✓ Make more informed, data-driven treatment decisions
- ✓ Monitor long-term implant stability

Want to learn more about how InnerView can transform your practice? [Book a 10 minute demo today!](#)



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See InnerView in action—scan to book a demo!

