

## 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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# InnerView®

# 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.

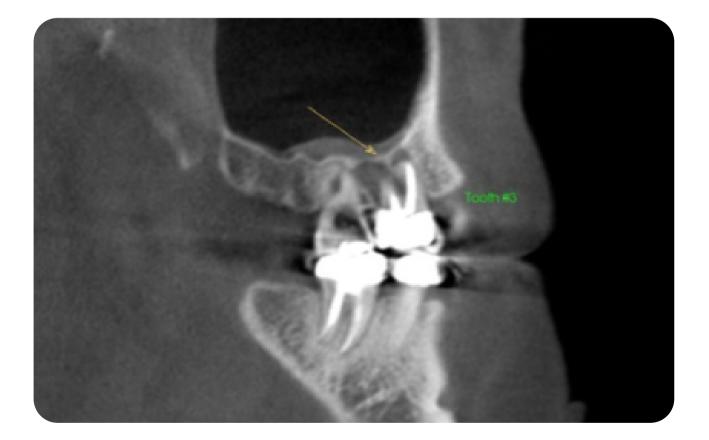
# Patient Case: Investigation of the Structural Integrity of a Dental Implant with InnerView<sup>®</sup>

### **Chief Complaint:**

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

#### **Patient Overview**

Patient is a 66-year-old female dental hygienist who presented with a symptomatic, nonrestorable, and fractured tooth #3. The tooth was surgically extracted with ridge preservation and PRF. A dental implant was placed 5 months later via YOMI robotics. Final screw-retained restoration was subsequently completed, and the patient has been functioning on the dental implant since 2023. This case is presented to evaluate the current values of osseointegration using InnerView.



#### **Diagnostic Summary**

Traditional diagnostics identified the obvious risks, but lacked the precision to evaluate implant integration — which was critical for the long-term success of this restoration.

#### **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 retreatment
- Deep periodontal pocket between teeth #2 and #3, secondary to localized vertical bone loss
- Vertical infra-bony loss mesial to tooth #2

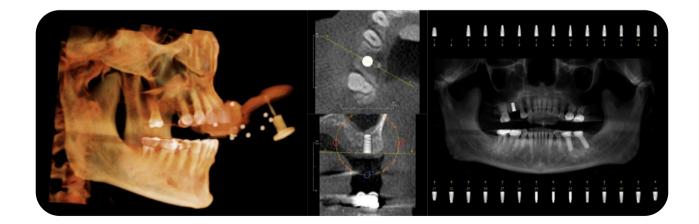
### **Treatment Plan Based on Initial Diagnosis**

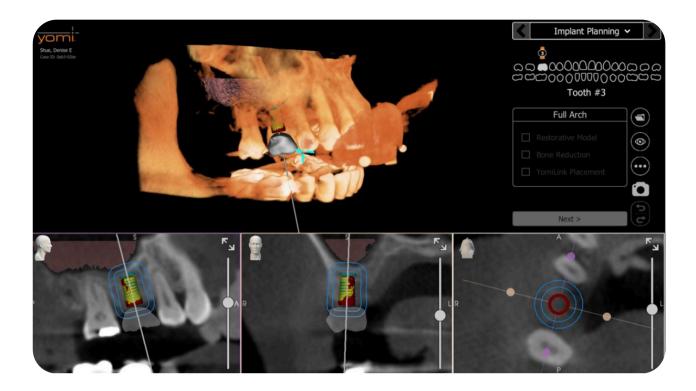
#### Phase I

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

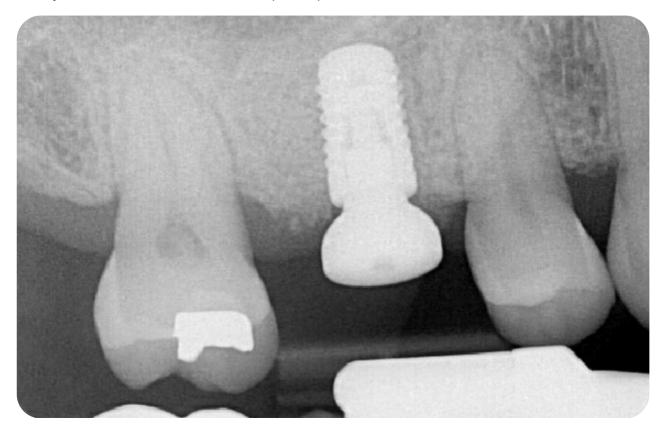




#### Treatment Plan Based on Initial Diagnosis, cont.

#### Phase III

Ready to restore check at 4 months post-operation.



#### Phase IV

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



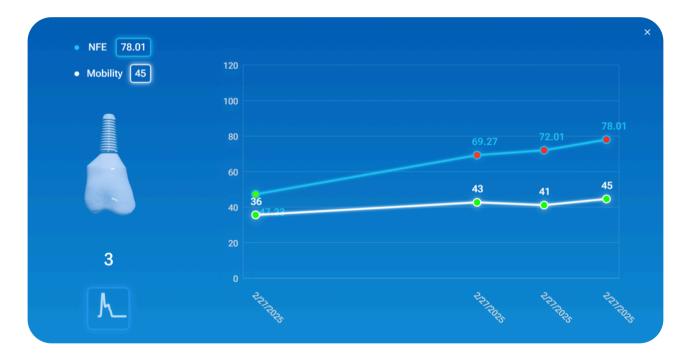


# Final screw-retained restoration and testing with InnerView two years post-op

#### **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 detect:

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



#### What InnerView Revealed

#### Tooth #3

Low numerical values in mobility, confirming that the dental implant has successfully healed and achieved full osseointegration with the bone.

This image shows the InnerView app displaying mobility on implant #3 tested 2 years post-restoration. A mobility value of 45 indicates favorable osseointegration.

## Key Takeaways: Why InnerView is a Game-Changer in Diagnostics

Traditional diagnostic tools (X-rays/CBCT, RFA, percussion and torque test) are only able to detect structuralabnormalities to an extent.

- InnerView identified mobility and quantified the stability of the implant, leading to more effective treatment.
- Post-treatment scans confirmed that stability is progressing well and appears to be in a favorable condition to process with final restorations.

#### 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 earlier detection, better decision-making, and improved outcomes.

InnerView enables clinicians to:

- ✓ Detect early-stage issues before symptoms appear
- $\checkmark$  Make more informed, data-driven treatment decisions
- ✓ Monitor long-term implant stability

Want to learn more about how InnerView can transform your practice? <u>Book a 10 minute</u> <u>demo today</u>!





See InnerView in action—scan to book a demo!!

