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InnerView®

CASE STUDY

Monitoring Implant Stability Before Final Restoration

How InnerView Provided Quantitative Data to Guide Implant Restoration Decisions

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perimetrics 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.

Assessing Implant Stability Before Final Restoration

**The information in this case study pertains to future capabilities, currently under clinical evaluation - Not yet FDA cleared*

Case Snapshot

PATIENT:
35-year-old with history of trauma and endodontic treatment to #7–9; chief complaint: loose front tooth (#9).

VISIT TYPE:
Surgical extraction, immediate implant, stability monitoring prior to final restoration.

FINDINGS:
At 5 months, implant #9 showed low mobility and stable ERG, confirming osseointegration.
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HISTORY:
Multiple traumatic injuries; endodontic treatment and restorations on tooth #9

TECHNOLOGY USED:
InnerView Quantitative Percussion Diagnostics (under clinical evaluation).

OUTCOME:
Proceeded with screw-retained temporization; InnerView supported safe progression toward final crown.

Assessing Implant Stability Before Final Restoration

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Patient Overview

A 35-year-old patient presented with a chief complaint: “My front tooth is loose.”
Tooth #9 had sustained multiple traumatic injuries over the years—first as a teenager, and again as a young adult—resulting in endodontic treatment to teeth #7, #8, and #9.

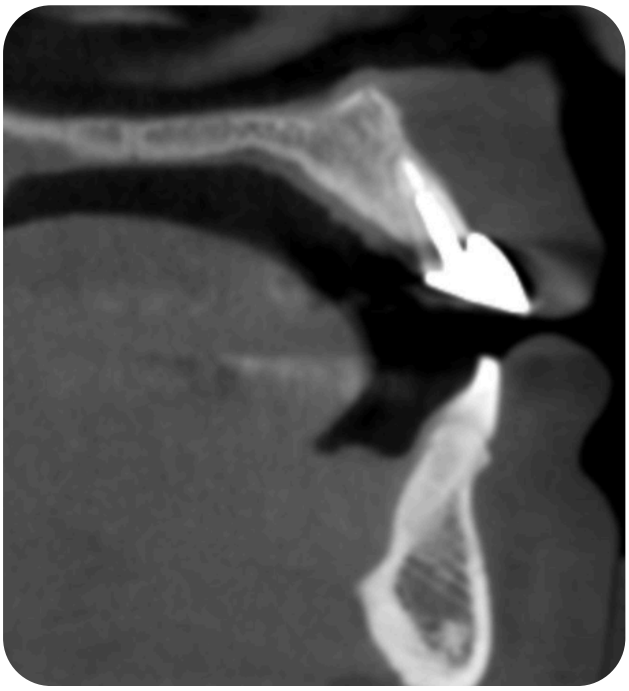
Initial Clinical Findings

Traditional Diagnostic Methods

Cone Beam CT (CBCT) and clinical evaluation revealed:

- 1+ mobility on the restoration of tooth #9
- No facial edema or drainage
- Existing endodontic treatment on tooth #9

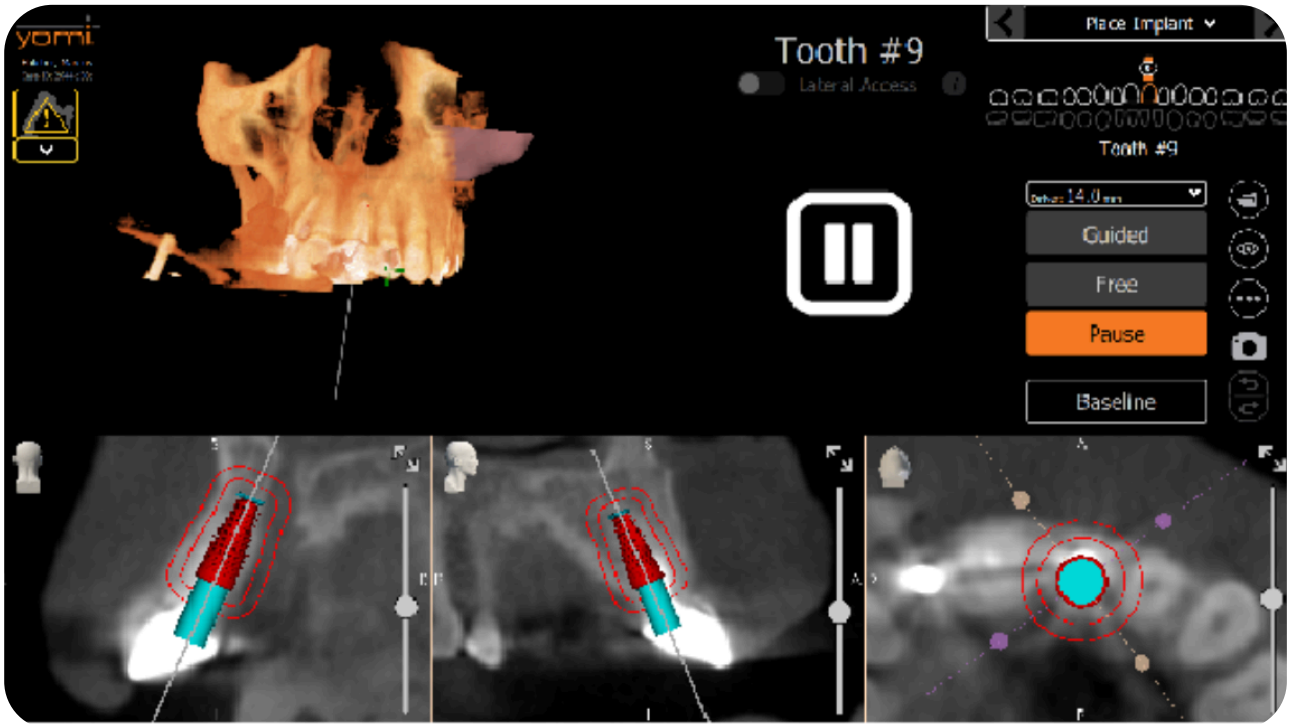
At this stage, traditional diagnostics suggested the implant site was viable, but further data was needed to guide the next phase.



Treatment Plan

Phase I: Surgical Extraction and Immediate Implant

Tooth #9 was extracted with ridge preservation and PRF under IV deep sedation. An immediate implant was placed using robotic-guided YOMI surgery.



Yomi-guided implant placement for tooth #9 ensured precision in angulation and depth.

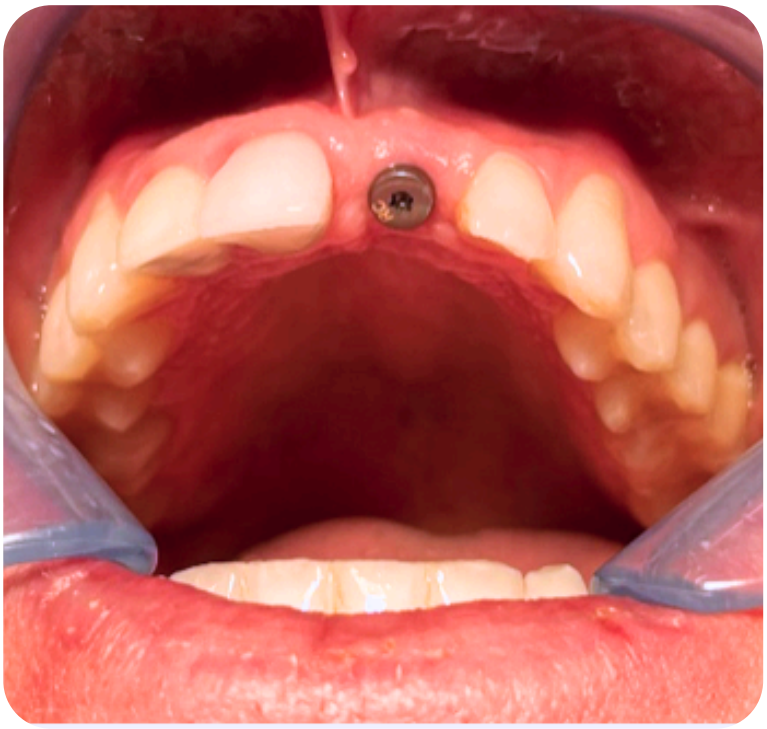
Phase II: Readiness Check Using InnerView

At the 5-month mark, prior to moving into the restoration phase, the team performed a follow-up check using InnerView to evaluate implant stability.

Phase III: Screw-Retained Temporization and Monitoring

With osseointegration confirmed, the clinician proceeded with screw-retained temporization to:

- Develop gingival architecture
- Test-drive the dental implant under function
- Verify oral hygiene prior to final restoration



Ready to restore check at 4 months post-operation. Screw-retained temporization allowed functional testing and soft tissue shaping prior to the final crown.

Solution: How InnerView Guided the Next Phase

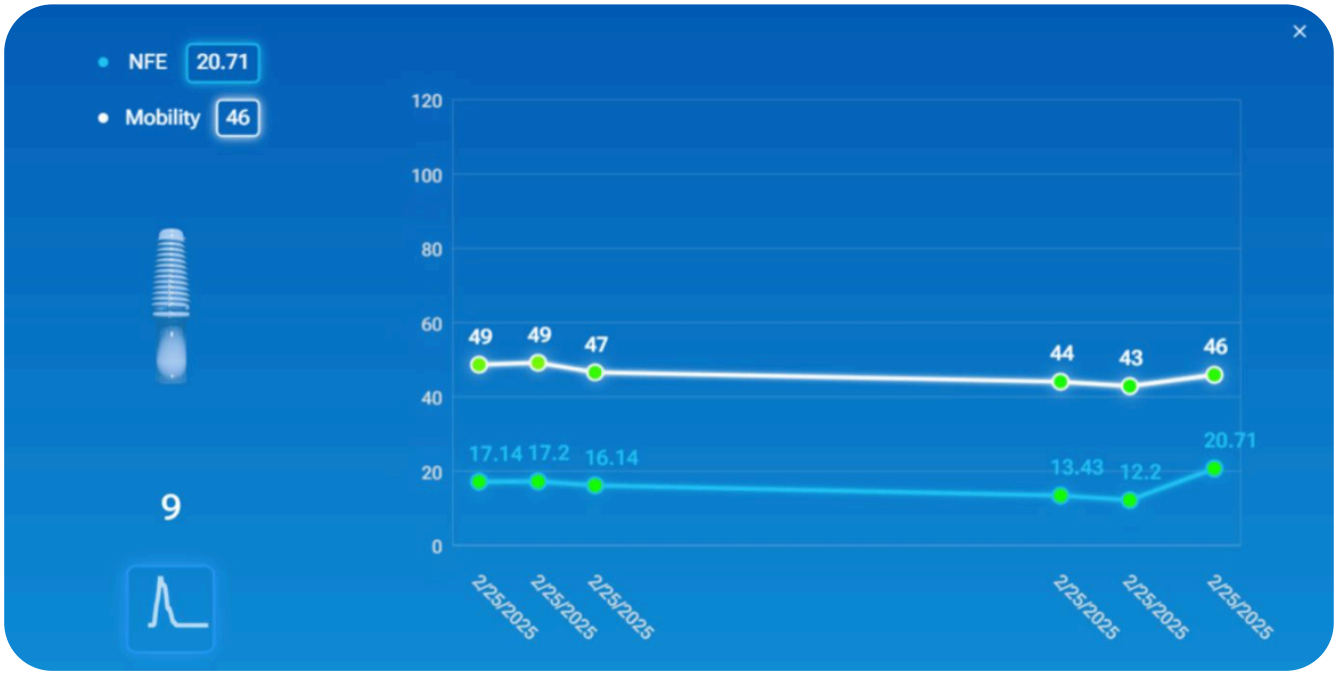
InnerView provides quantifiable data on tooth, and/or dental implant stability. The handpiece delivers four percussive taps to the tooth or an implant at any stage, and measures energy return.

This allows clinicians to evaluate:

- The overall tooth or implant mobility
- Substructure defects undetectable by X-rays
- Early signs of implant failure—even before symptoms appear

In this case, InnerView revealed:

- Implant #9 demonstrated low mobility values, confirming the implant had osseointegrated well and was structurally stable.
- The Energy Return Graph (ERG) showed a stable Gaussian curve with only slight bumps—signs of minor structural variability but nothing significant enough to delay restoration.



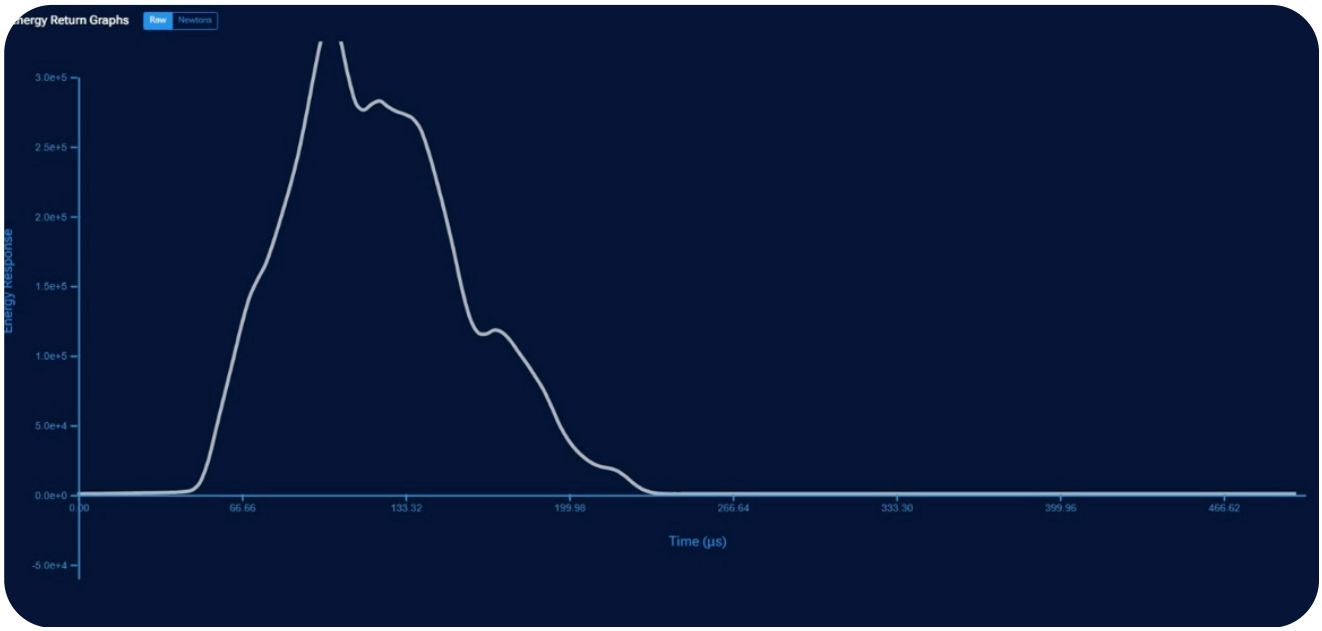
InnerView mobility assessment at 5 months post-surgery for implant #9. Quantitative data supported the healing process and integration.

What InnerView Revealed

InnerView provided quantitative mobility data on implant #9, tested at 5 months post-surgery. The results showed:

- Mobility Score: 46
- Interpretation: Within the normal healing range, indicating the implant had integrated well with surrounding bone.
- Energy Return Graph: A Gaussian-shaped curve was observed, with slight undulations suggesting minor residual instability, but not enough to warrant intervention.

This data gave the clinician confidence to proceed with temporization while continuing to monitor implant stability closely.



A stable Gaussian curve confirmed good osseointegration. Small fluctuations suggested minor residual instability, prompting cautious progression to temporization with ongoing monitoring.

Takeaways & Clinical Impact

Traditional diagnostic tools (X-rays, percussion, CBCT) are only able to detect structural abnormalities to an extent.

- InnerView 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.

"Our patients love reviewing the values and trends seen with InnverView. It gives them real benchmarks to be mindful of to help preserve the integrity of their existing dentition."

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

The Future of Dental Diagnostics

Without InnerView, our understanding of the implant's condition would have been limited. This technology has enabled us to monitor the restoration process with greater precision and provides an additional method for assessing implant stability, serving as a valuable supplementary tool.

InnerView enables clinicians to:

- Identifies areas of potential concerns before clinical symptoms appear
- Make more informed, data-driven treatment decisions
- Monitor trends in tooth and implant stability over time

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

BOOK A DEMO

See InnerView in action—scan to book a demo!