



DSI DENTAL
SOLUTIONS

Clinical Case

in Implant Dentistry

Three-Year Evaluation of Hard and Soft Tissue Condition Following Implant-Supported Restoration with DSI Dental Implants

CASE STORY

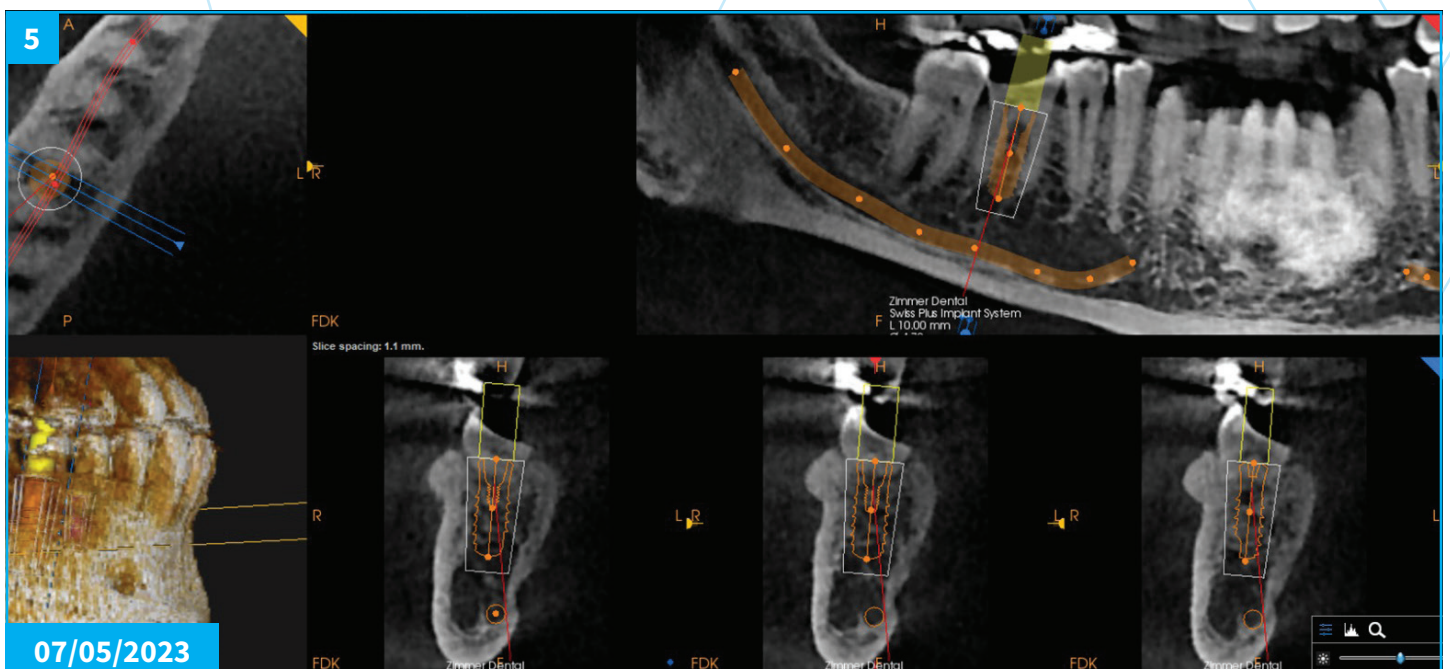
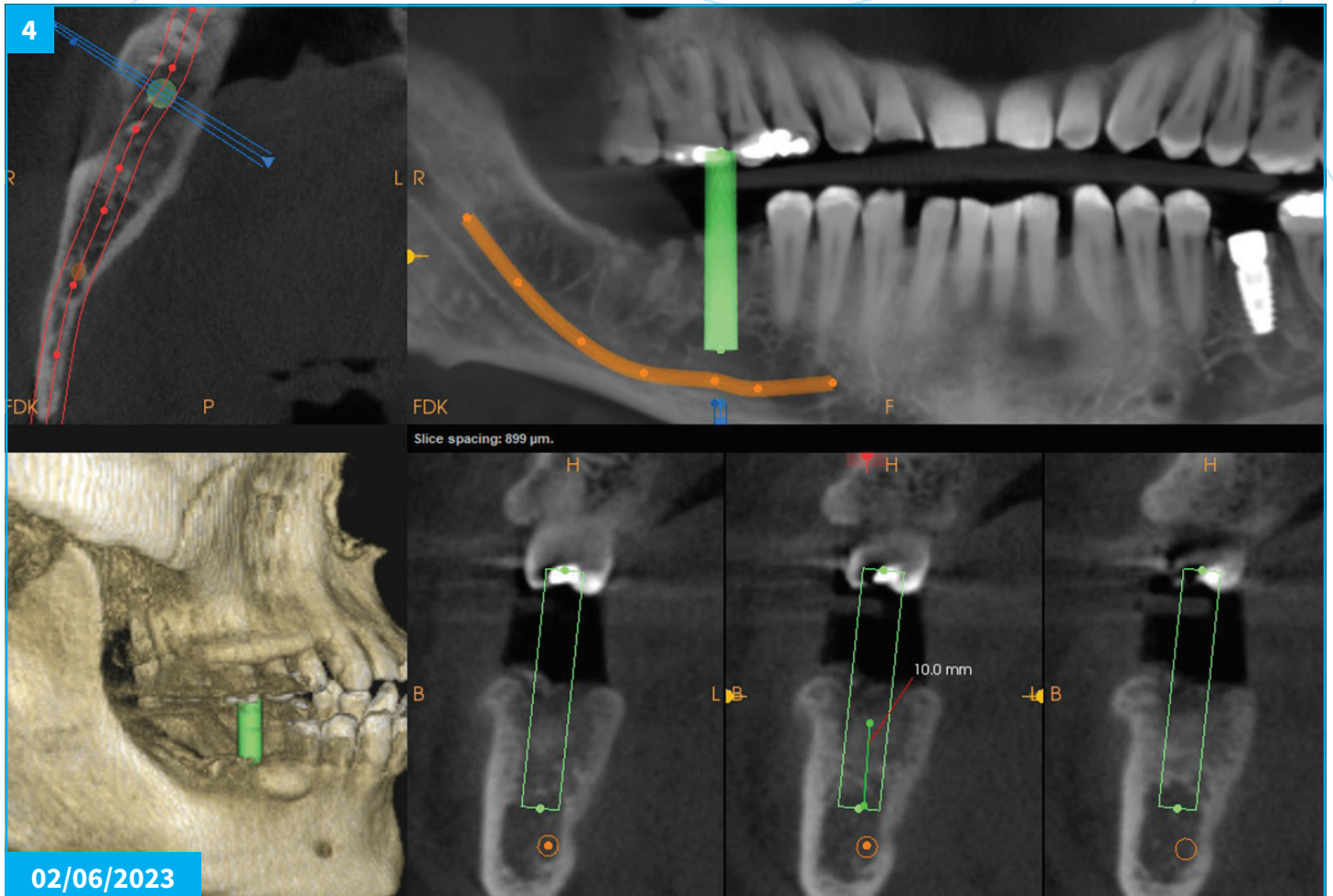
A patient presented with functional impairment and partial tooth loss in the posterior mandible. The main complaints included reduced chewing efficiency, and the need for a long-term, biologically stable restoration.



After comprehensive clinical and radiographic evaluation, a treatment plan was established to restore function and preserve peri-implant tissues using DSI Premium Implant System and a fully digital workflow. The case was documented from implant placement in 2023 through annual follow-ups in 2024, 2025, and 2026, with a specific focus on the dynamic changes of peri-implant bone and soft tissue levels over a 3-year period.

INITIAL STATE

CBCT imaging was used for precise implant planning, including evaluation of bone volume and anatomical landmarks. Digital planning allowed optimal implant positioning to ensure long-term stability and prosthetic-driven placement. Intraoral and periapical images confirmed the clinical condition prior to surgical intervention.

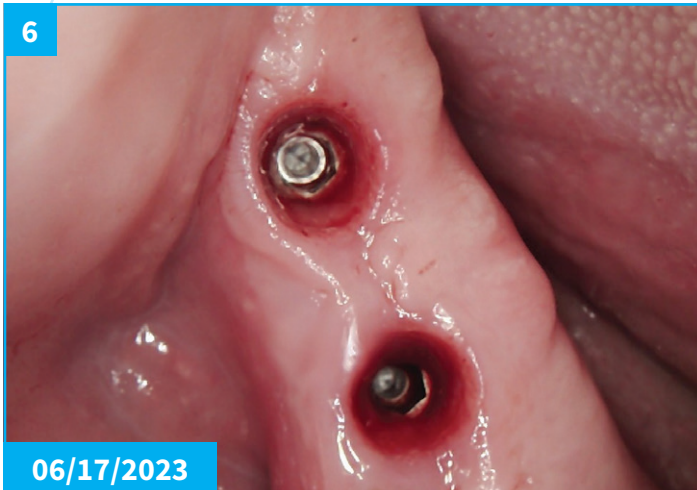


SURGERY

A flap approach was performed under local anesthesia. Osteotomies were prepared following the digital treatment plan, respecting biological principles and anatomical limitations.

Two DSI Premium Mountless Implants were placed with high primary stability. The implants were positioned to allow optimal emergence profile and long-term crestal bone preservation.

Primary closure was achieved, and DSI Concave Healing Caps were placed to support soft tissue architecture during healing.



HEALING STAGE

After the initial healing period:

- Soft tissue maturation was observed around the healing caps
- No signs of inflammation or peri-implant complications were noted
- Favorable gingival contour development was achieved

The concave design of the healing caps contributed to the formation of a stable peri-implant soft tissue seal.

FINAL RESTORATION

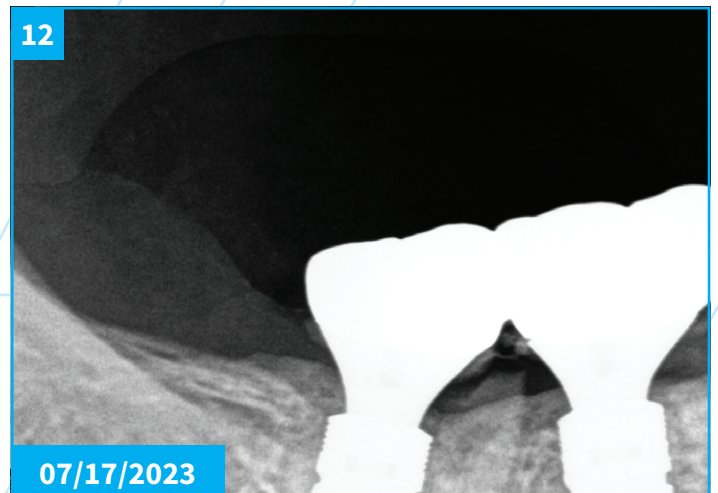
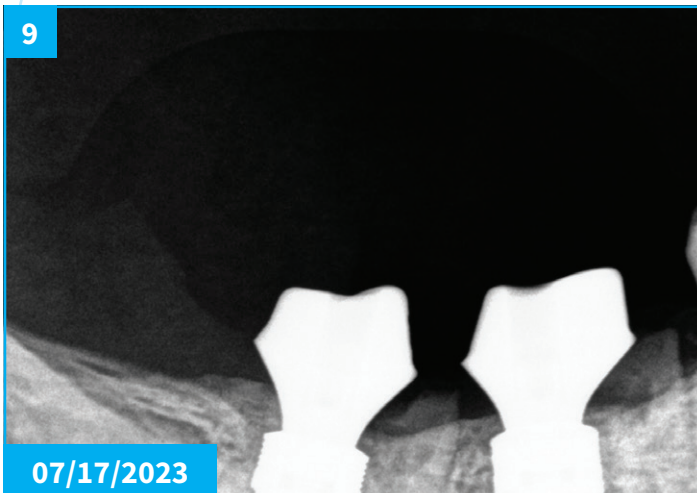
Following successful osseointegration:

- Digital impressions were taken
- Screw-retained implant-supported restorations were fabricated using custom abutments

Final restorations demonstrated:

- Proper occlusal integration
- Natural emergence profile
- Radiographic confirmation of stable crestal bone levels

Clinical and radiographic images confirmed successful functional and esthetic outcomes at delivery.

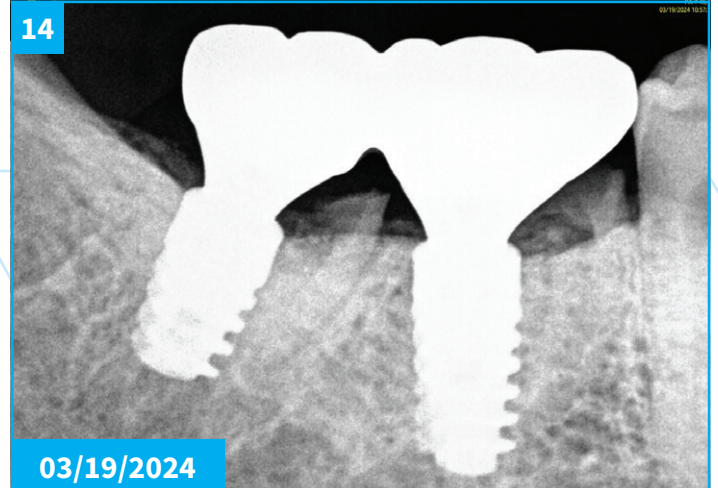


FOLLOW-UP – 2024

One-year follow-up evaluation showed:

- Stable peri-implant soft tissue contours
- Absence of inflammation or recession
- Radiographically preserved crestal bone levels

The implants remained fully functional with excellent tissue response.

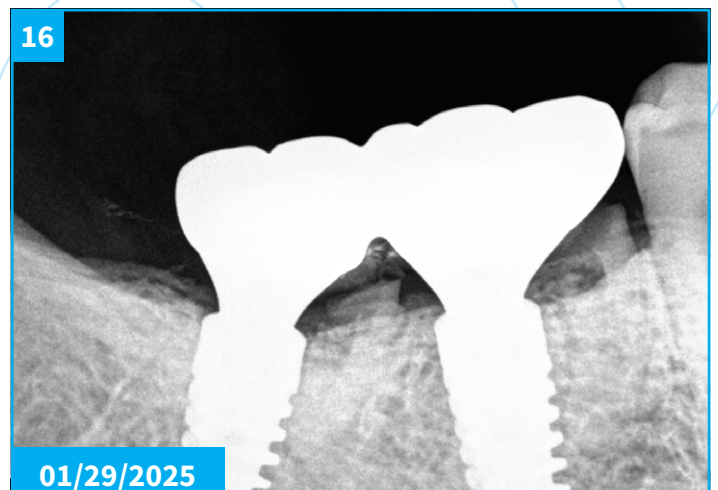


FOLLOW-UP – 2025

At the two-year follow-up:

- Continued soft tissue stability was observed
- No signs of peri-implant bone loss
- Prosthetic components remained intact and functional

Radiographic analysis confirmed long-term osseointegration and biological stability.

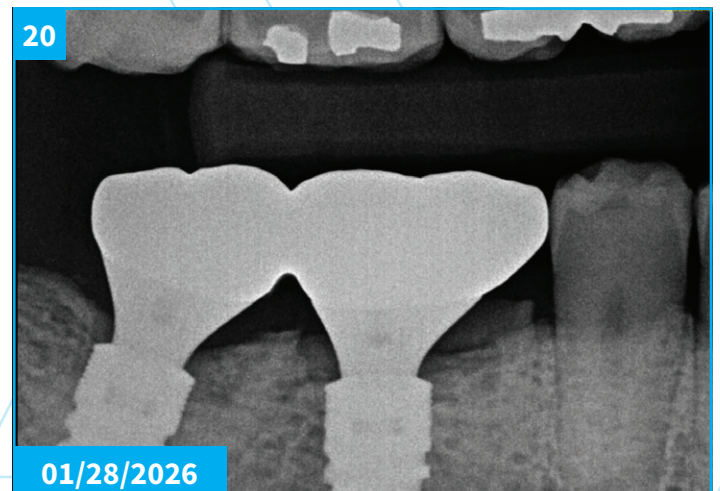
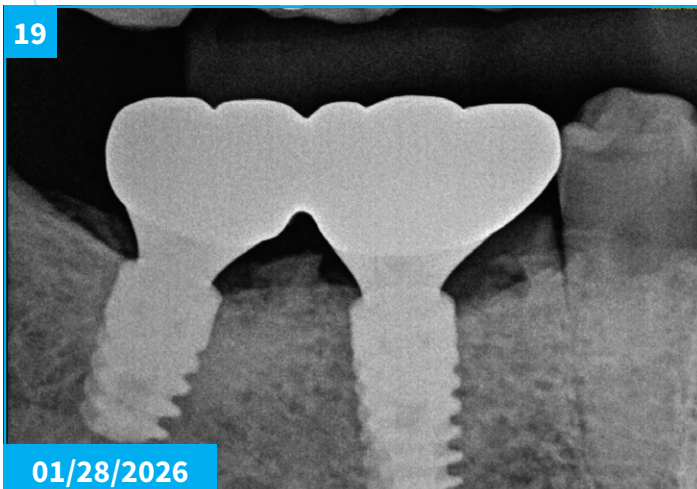


FOLLOW-UP – 2026

At the three-year follow-up:

- Peri-implant bone levels remained stable
- Soft tissues demonstrated healthy morphology and color
- The restorations maintained functional integrity under occlusal load

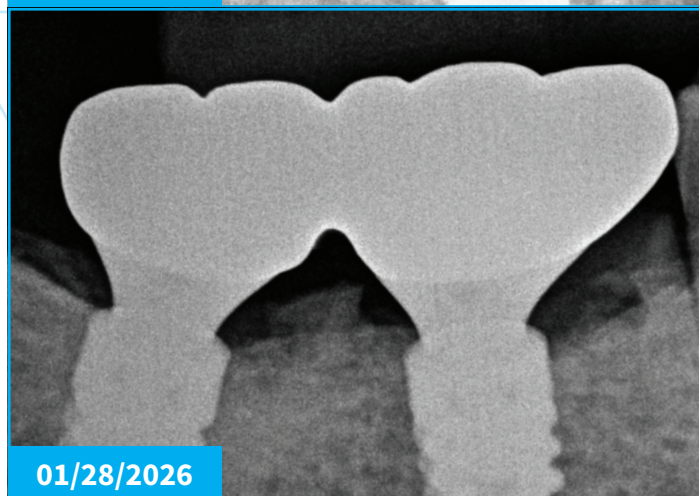
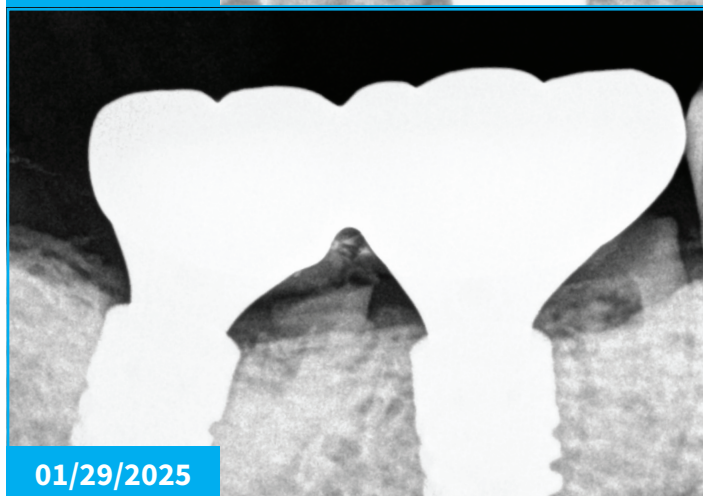
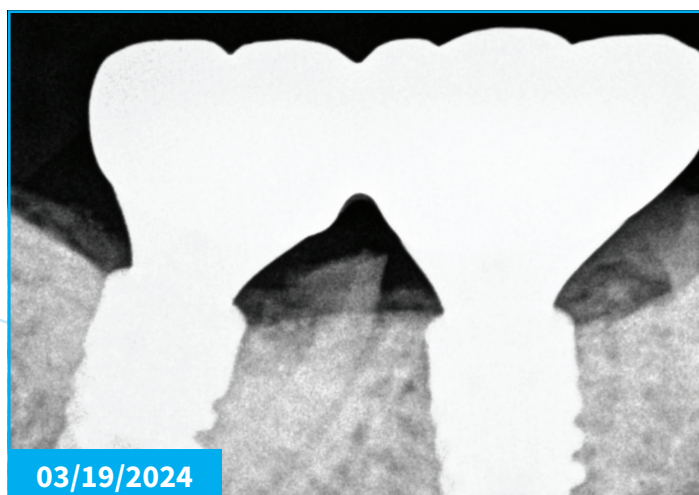
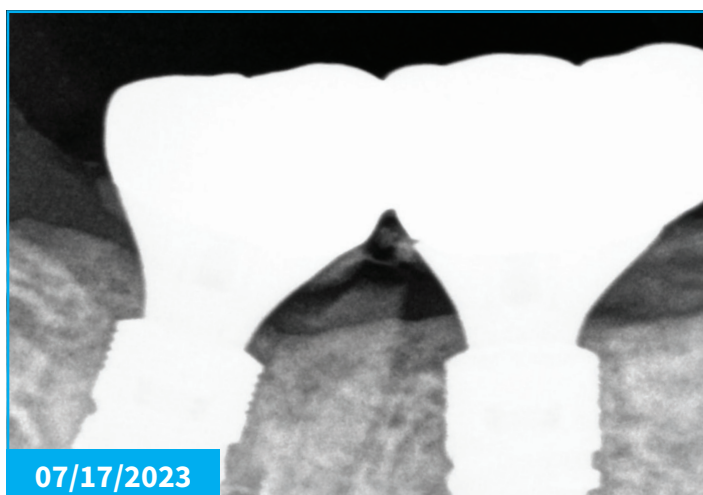
Both clinical and radiographic evaluations confirmed long-term hard and soft tissue stability, validating the treatment protocol and implant system used.



CONCLUSION

This three-year clinical follow-up demonstrates that implant-supported restorations using DSI Dental Implants provide predictable and stable outcomes. The combination of accurate digital planning, biologically driven surgical techniques, and appropriate prosthetic components resulted in excellent preservation of peri-implant hard and soft tissues over time.

Conditions of hard and soft tissues after implantation:



Materials used for this case:
made by DSI Dental Solutions

DSI Premium Implant Mountless
DSI Concave Healing Caps



All stages of the treatment, including planning, surgery and crown design, are done by the residents of Dr. Carmy's Year-long Implant Hands-on course at Dental Implant Institute of the West Coast, California, USA



Dr. Carmy M. Michael DDS

A graduate of University of Western Ontario Schulich School of Medicine & Dentistry with a degree of Doctor of Dental Surgery 2004 with a 6 months residency. Also a graduate of Cairo University, School of Dentistry 1993 with a 1 year residency. Extensive training in the field of Dental Implantology and Digital Work Flow in Dentistry, A journey that started over 10 years ago and is still ongoing. Certified in Oral Sedation through DOCS and IV Conscious Sedation.

- Active member of the Academy of Osseointegration (AO)
- A Fellow of the Global Dental Implant Academy-CA (GDIA)
- A member of the International Congress of Implantologists (ICOI)
- Extensive training in Full Arch Restoration (Nobel and GDIA)
- A Certified Provider for Institute for Advanced Laser Dentistry (LANAP & LAPIP)
- Specialized training on 3 Shape & Exocad
- Fellowship from Dental Implant Association (DIA)
- Member with good standing in the CDA, MDA, ADA & OCDS
- Digital Work flow for Implant Restoration.