



SCIENCE MEETS UNIQUE SOLUTIONS



MOLARIS
A KeystoneDentalGroup Brand

MOLARIS WIDE

IMMEDIATE POSTERIOR INNOVATION

Supported by extensive research, the Molaris Implant Systems TILOBEMAXX® and I-HEXMRT™ pioneered “molar wide” 7, 8 and 9 mm diameter implants, designed for immediate placement in a molar extraction socket. The larger-than-conventional tapered implant body fits the natural shape as the implant engages with the bony perimeter walls achieving primary stability. The wider restorative platform allows for an emergence profile suitable for a molar restoration. Molaris implants with an enhanced surface and an adequate prosthetic platform help to minimize bone loss, support soft tissue and reduce treatment time.



IMPLANT OVERVIEW

MULTIPLE CONNECTIONS

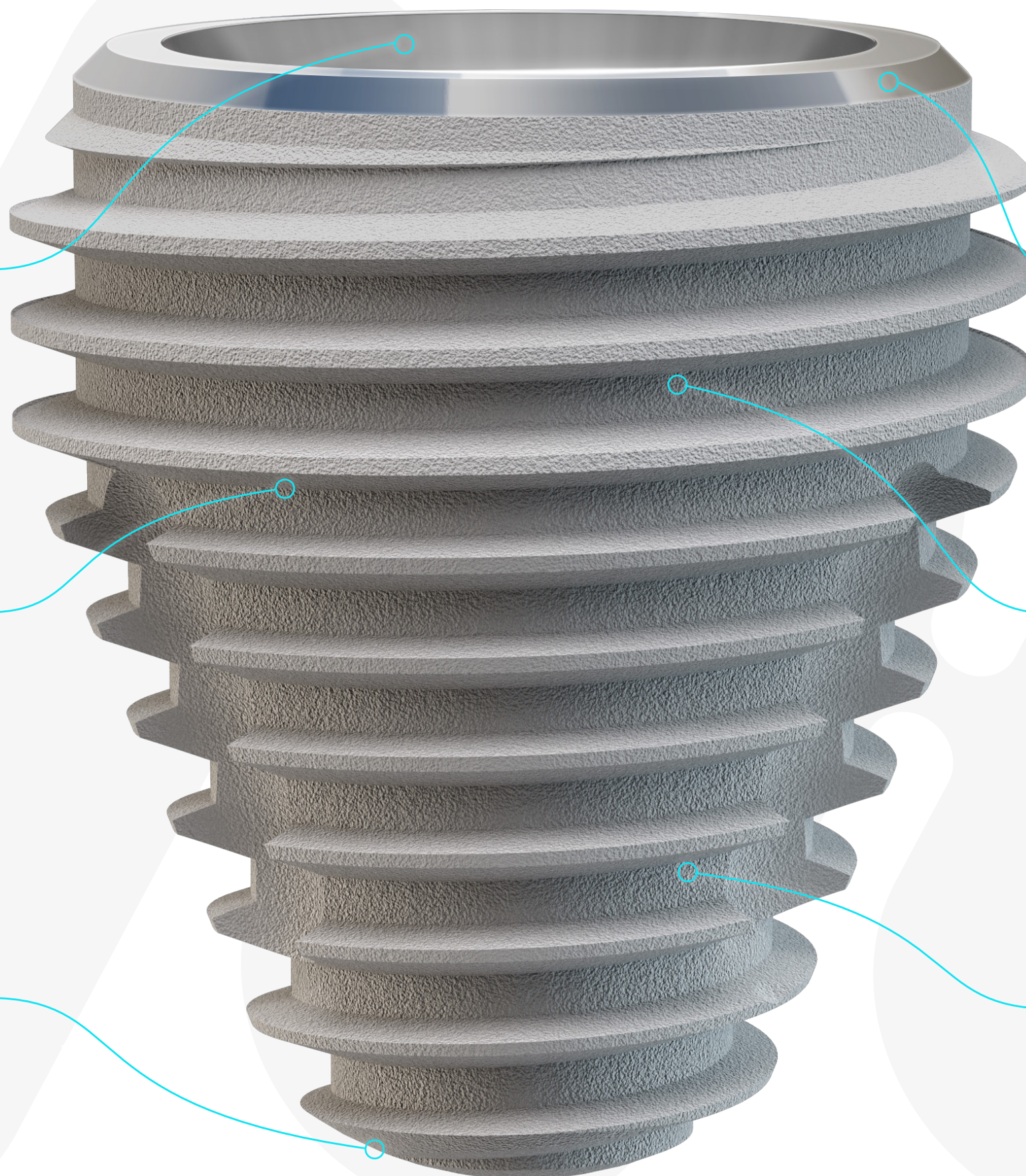
A versatile internal hex or a TiLobe® six-lobed internal connection provides a stable implant/abutment connection.

EXPANDING SHAPE

The wide body of the implant increases bone-to-implant contact for high primary stability in the molar extraction site.

ROUNDED APEX

The rounded apex protects the sinus floor and/or adjacent anatomical structures during implant insertion.



PLATFORM SWITCHING

The platform switch helps to maintain crestal bone and increase soft tissue volume around the implant platform.^{1,2,3}

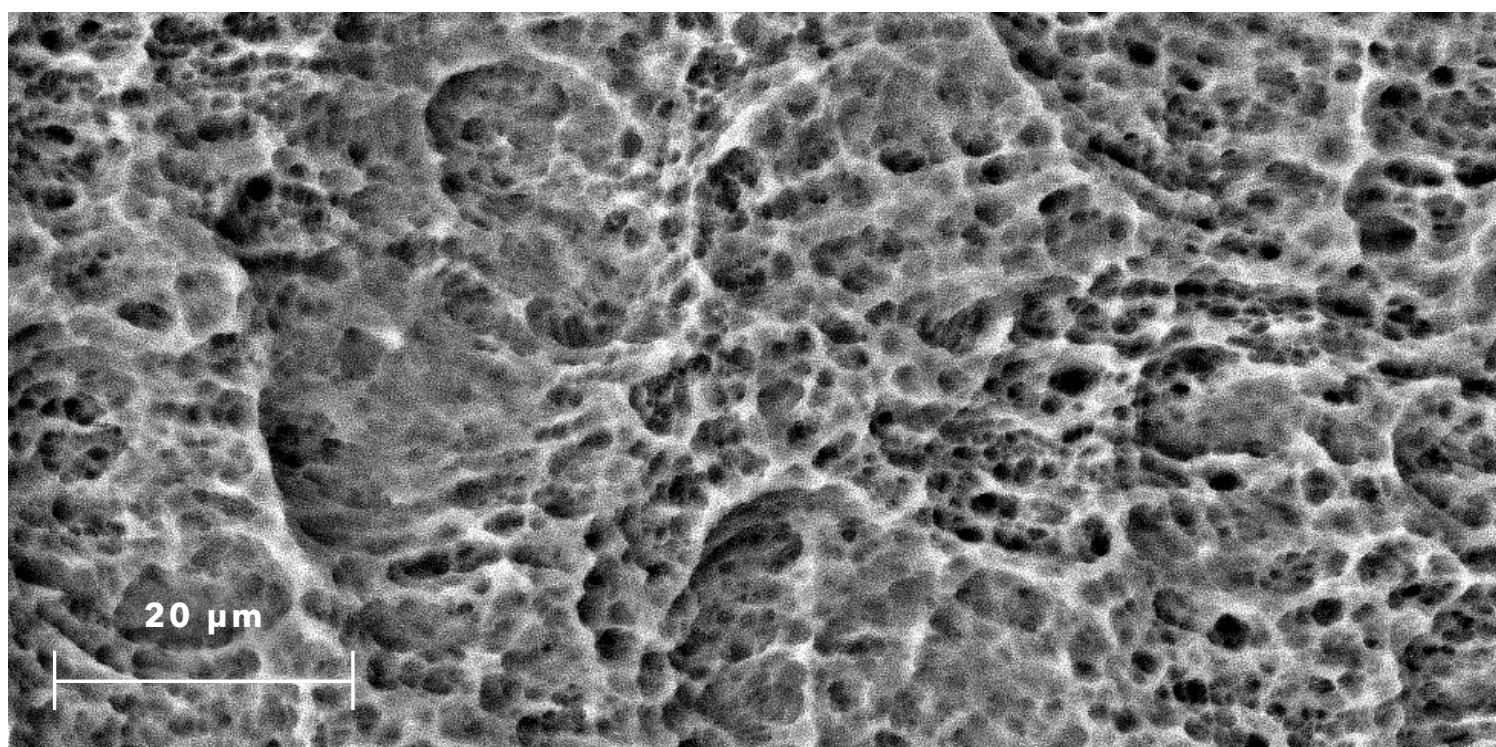
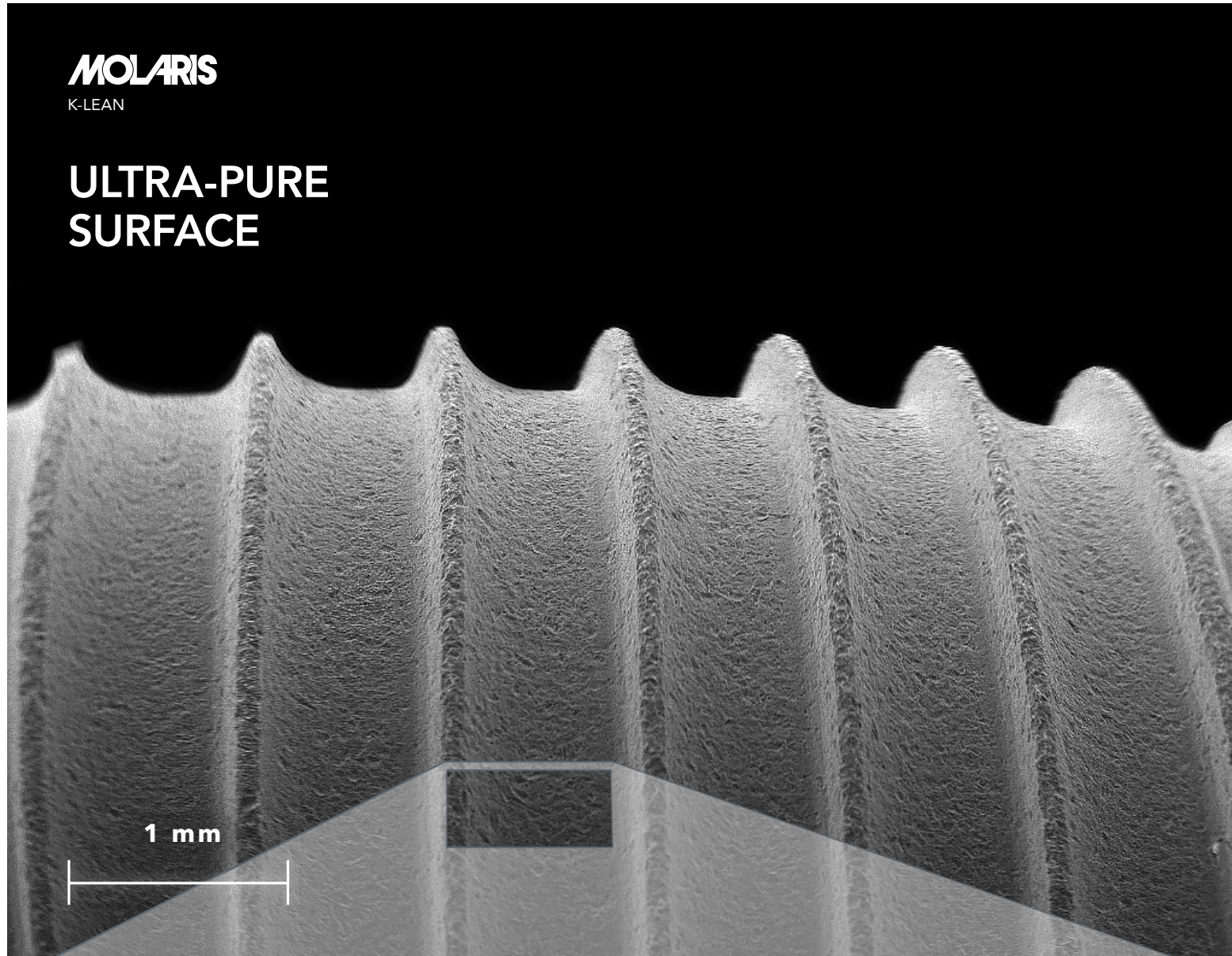
KLEAN

Sandblasted acid-etched surface, with an extensive multi-stage cleaning process, utilizes ultra-pure water (UPW) which removes undesired residues, providing a clean surface and maintaining an intact oxide layer.^{4,5,6}

TAPERED IMPLANT

Fully tapered implant body, with single-lead thread, allows for gradual bone condensing and engagement of the inter-radicular bone for high primary stability within the molar extraction site.

ULTRA-PURE SURFACE



KLEAN

The proprietary K-LEAN™ surface is created by two sequential stages: sandblasting, aimed at creating a porous surface topography, followed by acid etching, intended to generate micro-roughened surface structure. The surface treatment is completed by removing contaminants using ultra-pure water (UPW), a unique process acquired from the semiconductor industry.^{4,5,6}



STERILE R

LEADING in patient SAFETY

The innovative implant packaging utilizes a titanium sleeve, designed to prevent potential contamination of the ultra-pure K-LEAN™ surface.



FROM BDIZ EDI JOURNAL REPORT: SEM SURFACE ANALYSES OF 120 STERILE-PACKED IMPLANTS

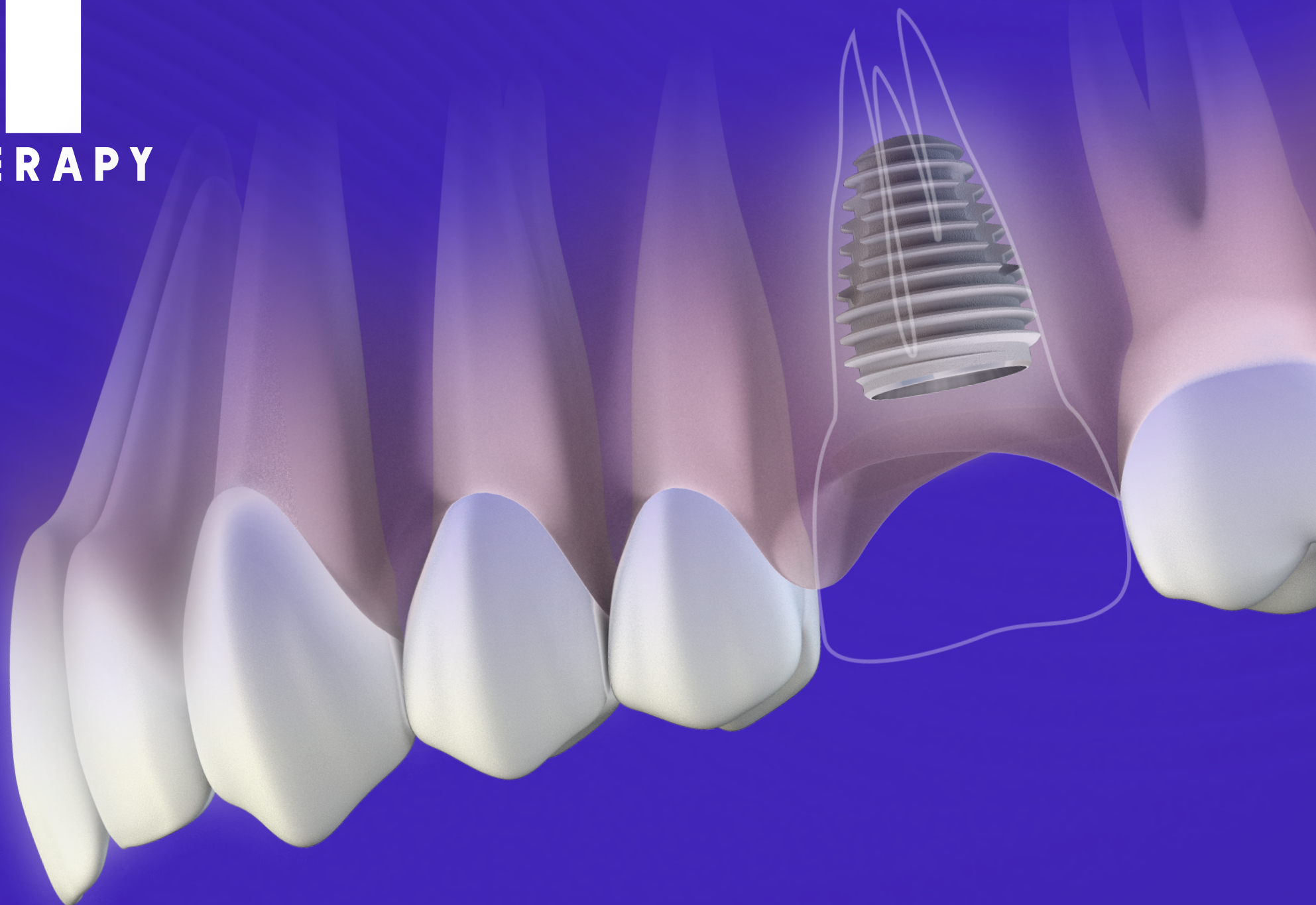
"PALTOP has decided to consistently clean their products with ultra-pure water (UPW), which is rather expensive to produce, compared to regular demineralized water, and is otherwise mostly employed by the semiconductor industry. XPS analyses of the implant surface thus cleaned show no traces of sulphur, silicon, zinc or chlorine, inorganic impurities frequently found in the XPS analyses of the sandblasted and acid-etched surfaces of implants by other manufacturers. The corresponding EDX analysis shows only the typical elements for grade 5 titanium..."⁶

MRT

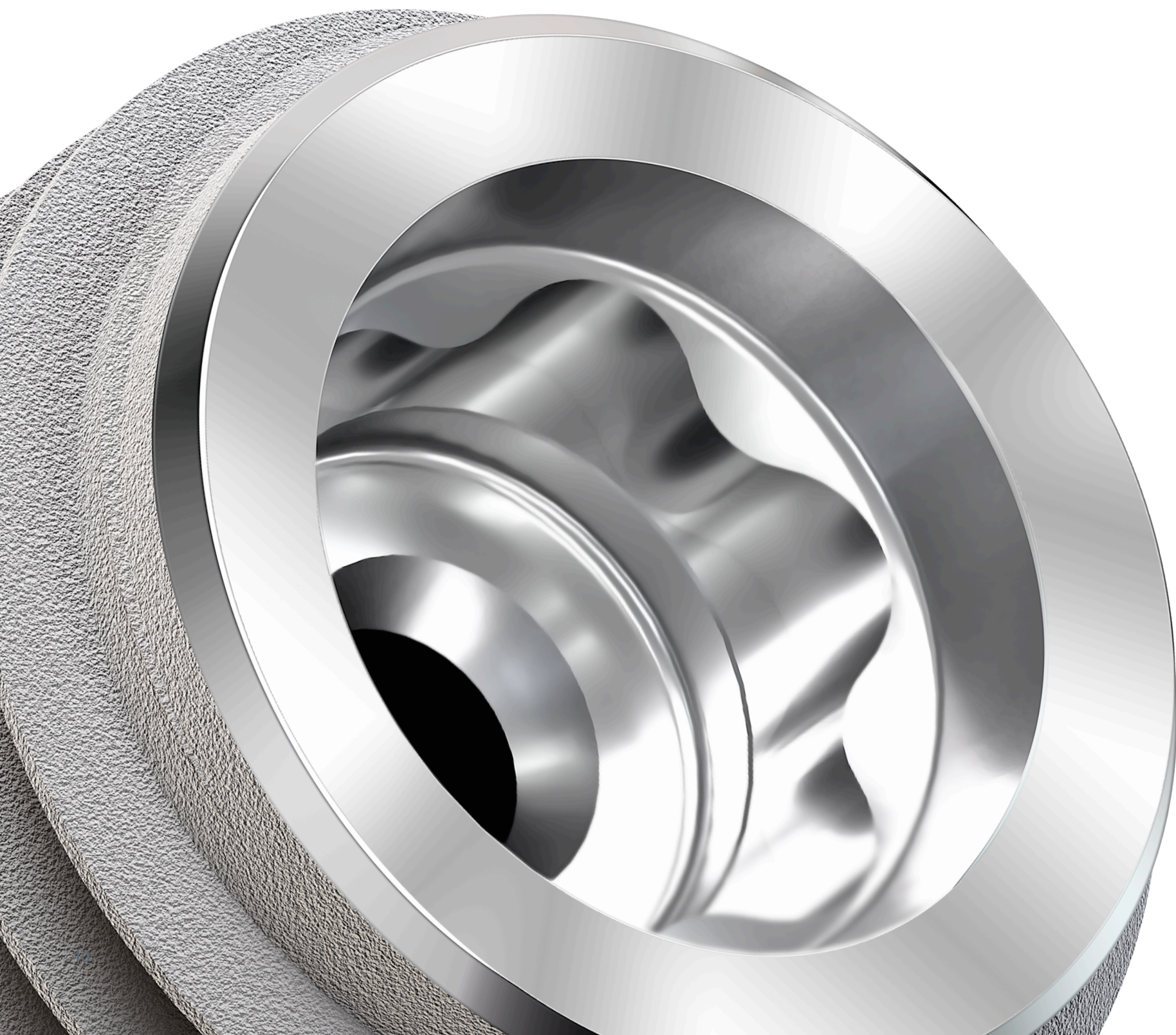
MOLAR REPLACEMENT THERAPY

**One Implant
One Surgery
One Visit**

Molar Replacement Therapy (MRT), an innovative treatment concept, can be achieved with the TILOBEMAXX® or the I-HEXMRT™ implants. These implants are designed to fit the natural architecture of a molar extraction site, providing implant stability and a restorative platform for an optimal prosthetic solution. MRT is a successful and predictable immediate treatment concept backed by published scientific studies.⁷⁻¹⁶ This treatment concept provides a practice differentiator and, most importantly, benefits patients by reducing the number of surgical procedures, overall treatment time and cost.



CLINICAL INSIGHTS



MOLARIS

SCIENCE MEETS UNIQUE SOLUTIONS



"The placement of the TILOBEMAXX® dental implant in immediate molar extraction sites has been a tremendous value to our practice and more importantly to our patients and referrals. The TILOBEMAXX® implant has significantly changed our management of molar extraction sites where we now provide predictable and highly successful immediate implant placement at the time of molar extraction. This technique has benefited our patients by reducing the number of surgical procedures and the overall treatment time, which translates to less appointments and less time away from home or work."

Michael Will, DDS, MD, FACS, Frederick, Maryland



"The TILOBEMAXX® implant is truly a game-changing development in implant dentistry. For immediate placement in molar extraction sites, particularly when there is no septal bone, the TILOBEMAXX® is not only the best choice, but quite often the ONLY choice! The superb initial stabilization along with its ideal wide prosthetic platform provides for predictable, anatomically compatible, and simplified outcomes in immediate molar implant restorations."

Richard B. Smith, DDS, New York, New York

CLINICAL INSIGHTS



Post-op 12 Weeks Healing
Periapical X-ray of immediately placed TILOBEMAXX® 7.0 mm diameter implant in site #3.



Soft-tissue
Healing Abutment removed exposing the TiLobe® connection.



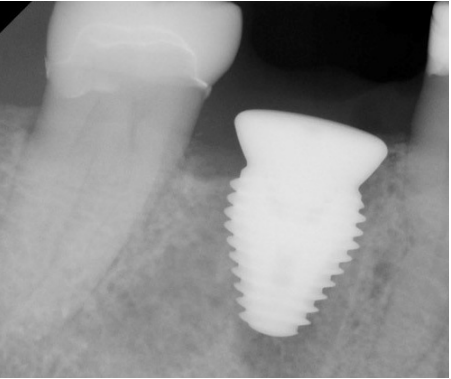
Final Crown
Final screw-retained monolithic zirconia crown for TILOBEMAXX®. The clinical screw utilized is the same for all implant diameters with a TiLobe® connection (from 3.5 to 9.0 mm).



Pre-op X-ray
Clinical X-ray with non-restorable tooth.



Molar Extraction
Atraumatic molar extraction site.



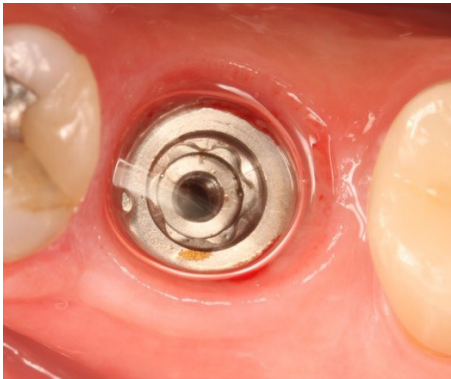
Implant Placed
TILOBEMAXX® 7.0 mm diameter implant with 8.0 mm × 3.0 mm healing abutment placed at time of surgery.



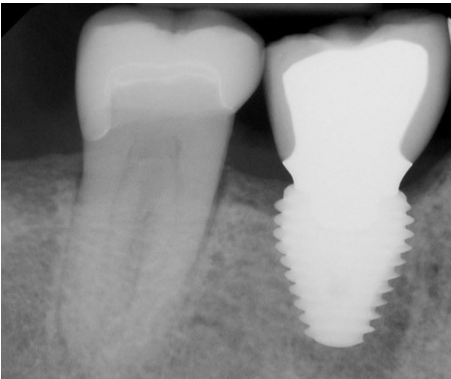
Occlusal View
Final screw-retained implant crown in place with proper contacts with adjacent teeth, before restoring the screw access hole.



Buccal View
The TILOBEMAXX® wide platform allows for the proper molar emergence profile, embrasure form, and interproximal contacts.



Post-op 12 Weeks Healing
Healing Abutment removed exposing the TiLobe® connection.



Final Crown
Final restoration for TILOBEMAXX®.

Courtesy: Mariano Polack, DDS, MS, and Joseph Arzadon, MD, DDS, PC

Courtesy: Richard B. Smith, DDS

IMPLANT SPECIFICATIONS

TiLobe Connection

Internal Hex Connection

TILOBEMAXX®

Platform

7.0 mm

9.0 mm

11.0 mm

Ø 7.0 mm

5.7 mm

15705K

15706K

15707K

Ø 8.0 mm

6.5 mm

15708K

15709K

15710K

Ø 9.0 mm

7.5 mm

15711K

15712K

15713K

I-HEXMRT™

Platform

7.0 mm

9.0 mm

11.0 mm

Ø 7.0 mm

5.7 mm

15864K

15865K

15866K

Ø 8.0 mm

6.5 mm

15867K

15868K

15869K

Ø 9.0 mm

7.5 mm

15870K

15871K

15872K

REFERENCES

1. Al-Nsour MM, Hsun-Liang C, Wang HL.Effect of the Platform-Switching Technique on Preservation of Peri-implant Marginal Bone: A Systematic Review. The International Journal of Oral & Maxillofacial Implants Volume 27, Number 1, 2012.
2. Cappiello M, Luongo R, Di Iorio D, Bugea C, Cocchetto R, Celletti R. Evaluation of peri-implant bone loss around platform-switched implants. Int J Periodontics Restorative Dent. 2008 Aug;28(4):347-55.
3. Prosper L, Redaelli S, Pasi M, Zarone F, Radaelli G, Gherlone EF. A randomized prospective multicenter trial evaluating the platform-switching technique for the prevention of post-restorative crestal bone loss. Int J Oral Maxillofac Implants. 2009 Mar-Apr;24(2):299-308.
4. Klein M, Tarnow D, Lehrfeld L. Marginal Bone Changes on Ultraclean, Micro-Threaded Platform-Switched Implants Following Restoration: 1- to 4-Year Data.
5. Compendium of Continuin Education in Dentistry. Article Vol. 41 No. 4. 2020. Singh Dhaliwal J, Rani Nakka David S, Ramizah Zulhilmi N, Kaur Sodhi Dhaliwal S, Knights J, Ferreira de Albuquerque Junior R. Contamination of titanium dental implants: a narrative review. SN Applied Sciences volume 2, Article number: 1011. 2020.
6. Dr. Dirk Duddeck, Dr. Hassan Maghaireh, Dr. Franz-Josef Faber and Dr. Jorg Neugebauer. SEM surface analyses of 120 sterile-packed implants. EDI Journal. 2014; 64-75.
7. Vandeweghe S, Ackermann A, Bronner J, Hattingh A, Tschakaloff A, De Bruyn H. A Retrospective, Multicenter Study on a Novo Wide-Body Implant for Posterior Regions. Clinical Implant Dentistry and Related Research. 2009, 1-12. Doi 10.1111/j.1708-8208.2009.00253.x.
8. Vandeweghe S, Hattingh A, Wennerberg A, De Bruyn H. Surgical Protocol and Short-Term Clinical Outcome of Immediate Placement in Molar Extraction Sockets Using a Wide Body Implant. J Oral Maxillofac Res 2011 (Jul-Sep);2(3):e1.
9. Vandeweghe S, De Ferrerre R, Tschakaloff A. De Bruyn H. A Wide-Body Implant as an Alternative for Sinus Lift or Bone Grafting. Int J Oral Maxillofac Surgery. 2011;69:e67-e74.
10. Vandeweghe S, Ackermann A, Bronner J, Hattingh A, Tschakaloff A, De Bruyn H. A Retrospective, Multicenter Study on a Novo Wide-Body Implant for Posterior Regions.
11. Atieh A.A./Payne A.G.T., Duncan W.J., DeSilva R.K., Cullinan M.P. Immediate Placement or Immediate Restoration/ Loading of Single Implants for Molar Tooth Replacement: A Systematic Review and Meta-Analysis. Int J Oral Maxillofac Implants. 2010; Issue 1, Vol. 25, p. 401-415.
12. Vandeweghe S, Defererre R, Tschakaloff A, De Bruyn H. Wide-Body Implant as an Alternative for Sinus Lift or Bone Grafting. Int J Oral Maxillofac Implants. 2011; June, Issue 69, Vol. 6, p. e67-74 (Epub 2011 Mar 21).
13. Vandeweghe S, Hattingh A, Wennerberg A, De Bruyn H. Surgical protocol and clinical outcome of immediate placement in molar extraction sockets using a wide body implant. Int J Oral Maxillofac Implants. 2009; Issue 1 Vol. 24, p. 186-217.
14. Smith R, Tarnow D Classification of Molar Extraction Sites for Immediate Dental Implant Placement: Technical Note. Int J Oral Maxillofac Implants. 2013; Issue 3, Vol. 28, p. 911-916.
15. Smith R, Rawdin S B., Kagan V. Influence of Implant–Tooth Proximity on Incidence of Caries in Teeth Adjacent to Implants in Molar Sites: A Retrospective Radiographic Analysis of 300 Consecutive Implants. Compendium. January 2020; Issue 1, Vol. 41, p. 38-42.
16. Scheid, Rickne C, and Julian B. Woelfel. Woelfel's Dental Anatomy. Philadelphia: Wolters Kluwer/Lippincott Williams & Wilkins Health, 2012; p. 161-163.



Headquarters Keystone Dental Group

154 Middlesex Turnpike
Burlington, MA 01803 USA
Tel: +1 781-328-3490
Toll-free: 866-902-9272
www.KeystoneDental.com