

## "NiTi Brush for Peri-implantitis"

(Since 2010 by HANS Korea)

### Global Standard for mechanical treatment of peri-implantitis

To explain "what's the NiTi Brush", we would like to mention a literature as below.




(HANS Korea has no commercial relationship with below literature)

Received: 12 January 2020 | Revised: 20 May 2020 | Accepted: 13 June 2020  
DOI: 10.1111/jcpe.13335

IMPLANT DENTISTRY

Journal of Clinical Periodontology WILEY

**Volumetric assessment of tissue changes following combined surgical therapy of peri-implantitis: A pilot study**

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**Funding information**: The study was supported by an Educational Grant of the Osteology Foundation, Lucerne, Switzerland

**Conclusions**: The peri-implant mucosa undergoes considerable volumetric changes after **combined surgical therapy**. However, tissue contraction appears to be influenced by the width of KM.

Link for literature: <https://onlinelibrary.wiley.com/doi/epdf/10.1111/jcpe.13335>

This literature mentioned as below.

"Subsequently, a meticulous and complete removal of granulation tissue was accomplished and the **exposed implant surfaces were decontaminated using a titanium brush** (Hans Korea Co., Ltd.)."

## About HANS Korea

Concept: Manage and treat the implant as like natural teeth. Do not remove the implant.

**Purpose: Development of NiTi Brush for peri-implantitis treatment.**

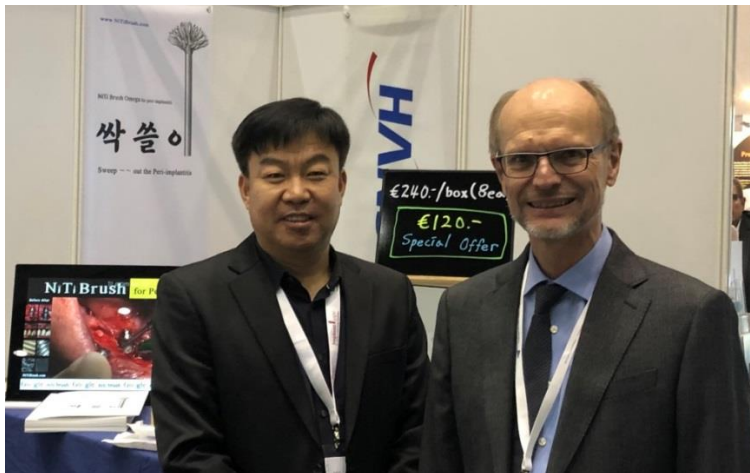
## History

### 2010: Establishment, Patent application for NiTi Brush

The inspiration of NiTi Brush for Peri-implantitis had been supplied through a meeting with two ITI fellows-Professor Dr. Baek-Soo Lee -Department of Oral and Maxillofacial Surgery, Kyung-Hee University, Seoul, Korea & DDS, PhD, FITI - Oral Surgeon Yasushi Nakajima in Osaka, Japan.

**2011:** FDA registration for NiTi Brush, Start sales the NiTi Brush in USA

**Meet the first customer in Germany(Jürgen Becker:** Department of Oral Surgery, Westdeutsche Kieferklinik, Universitätsklinikum Düsseldorf, 40225 Düsseldorf, Germany) during 2<sup>nd</sup> Implant expo-Dresden, Germany 2011.



**2012:** The clinical success case of NiTi Brush for peri-implantitis by Prof. Dr. Baek-Soo Lee in Korea

**2013: CE class2a** for NiTi Brush and start sales in EU.

**2014:** Japan FDA approval for NiTi Brush and start sales in Japan.

### **First Literature in Japan** "Comparison of Mechanical Removal Method on HA Coated Implant Surface"

Akihiro SUZUKI, Motohiro MUNAKATA, Tsuyoshi MATSUURA, Noriko TACHIKAWA, Shohei KASUGAI

Akihiro SUZUKI: Oral Implantology and Regenerative Oral Medicine, **Tokyo Medical and Dental University**

Motohiro MUNAKATA: Department of Prosthodontic Dentistry for Function of TMJ and Occlusion, Kanagawa Dental University

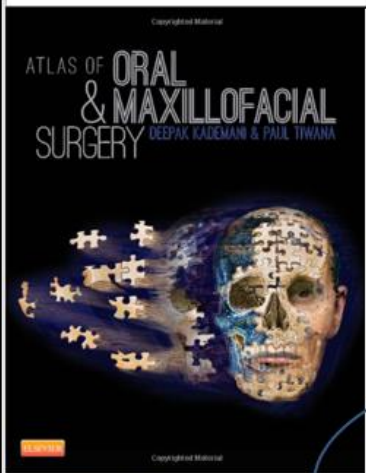
Tsuyoshi MATSUURA: Oral Implantology and Regenerative Oral Medicine, Tokyo Medical and Dental University

Noriko TACHIKAWA: Oral Implantology and Regenerative Oral Medicine, Tokyo Medical and Dental University

Shohei KASUGAI: Oral Implantology and Regenerative Oral Medicine, Tokyo Medical and Dental University

## 2015: First publication in USA

### Atlas of Oral & Maxillofacial Surgery 2015



**Atlas of Oral and Maxillofacial Surgery, 1e (Hardcover)**  
by Deepak Kademani, Paul Tiwana

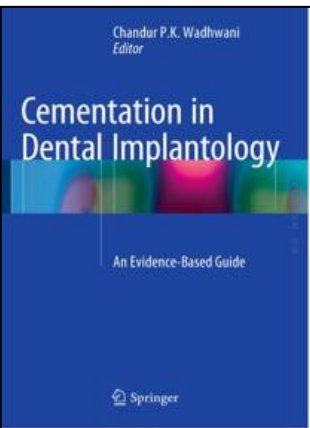
**FIGURE 25-5** A, A careful reflection of the flap, exposing the peri-implantitis defect. B, Latch-type titanium brushes—Salvin Dental. C, Titanium brushes mechanically removing bio-film. D, Citric acid soaked pellets—chemical debridement of bio-film. E, PRP to be mixed with autogenous bone from bone scraper. F, Placing the mixture of autogenous bone and PRP onto peri-implantitis defect. G, Regenerative bone graft in place.

**Step 3: Mechanical Debridement**  
The defect is visualized. Full access to the infected portion of the implant is necessary. Granulation tissue typically is found and is removed with curettes and scalars. Titanium or carbon fiber instruments are preferred. Rotary titanium brushes (Salvin Dental, Charlotte, North Carolina) are useful. The goal is to


debride and clean the implant and osseous defect of plaque, calculus, cement, or other foreign body material. Mechanical debridement can also be facilitated using #8 round burs and air abrasion with bicarbonate powder using a prophyl-jet (Figure 25-5, B and C).

Rotary titanium brushes(Salvin Dental, Charlotte, North Carolina) are useful. The goal is to debride and clean the implant and osseous defect of plaque, calculus, cement or other foreign body material

### Cementation on Dental Implantology (2015)



**Cementation in Dental Implantology: An Evidence-Based Guide**  
edited by Chandur P.K. Wadhvani



**Fig. 11.6 (a, b)** Use of titanium brush through a soft tissue fenestration to clean the implant site

report describes the use of the titanium brush (Fig. 11.6a, b). In this particular situation direct access was available through the soft tissue fenestration that existed, so no surgical flap was required. Debridement was carried out using the titanium brush on a conventional handpiece (Salvin). The site was carefully evaluated to confirm all undesirable material on the implant had been removed and cleaned with a prophyl-jet. In this particular situation direct access was available through the soft tissue fenestration that existed, so no surgical flap was required.

cal regenerative therapy. The use of bone graft material in combination with regenerative membranes might be considered in severe 3-wall defects. The possibility of re-osseointegration at contaminated implant surfaces was reviewed by Renvert et al. They concluded based on animal studies that re-osseointegration is not possible for the entire contaminated implant surface, with the finding largely access surgery

**2016: First literature in Italy by Dr. Mario Rocuzzo**



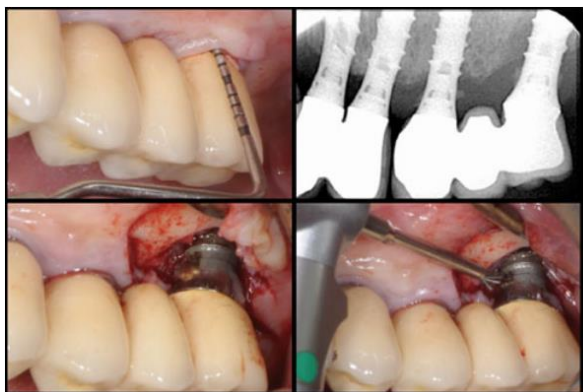
"I often use NiTi Brush to clean and decontaminate the surface of the implants affected by peri-implantitis, before attempting a regenerative procedure.

Its reduced dimension allow me to reach every area, even if the space is limited"



**Conclusion**

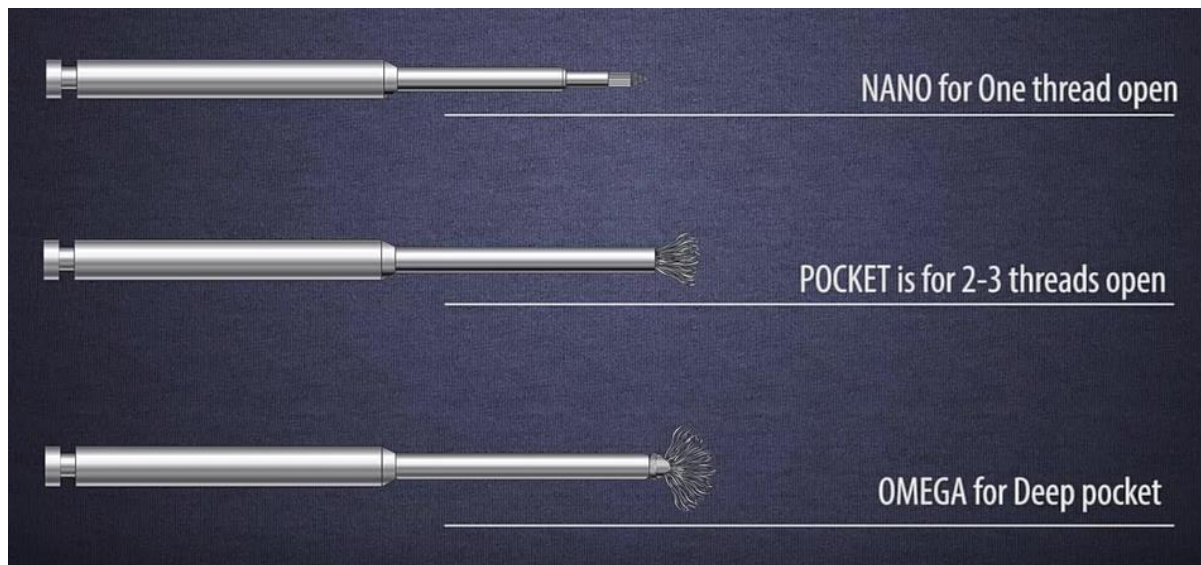
- Deep bone defect could be regenerated
- Peri-implant tissues could be restored to health, 8 years after placement



**2017: Start the sales of NiTi Brush in leading countries of EU**



**2018: Full line up of NiTi Brush models-Nano, Pocket and Omega**



Link for movie: <https://www.youtube.com/watch?v=4aD8y9nwGWA>

Catalogue: <http://www.nitibrush.com/upload/NiTi%20brush%20for%20periimplantitis%20Catalogue%20Rev003.pdf>

**2019: Renewal of CE class2a certificate**(expiry date: 26 May 2024)

**2020: Overcome the COVID19, First year for "+" profit balance in P&L statement**

***Epilogue: 10 years journey of NiTi Brush for peri-implantitis.***

2010, two ITI fellows-Professor Dr. Baek-Soo Lee & DDS, PhD, FITI Yasushi Nakajima and I(HANS Kim-owner of HANS Korea) discussed a topic of peri-implantitis sharing SAKE(traditional Japanese drink) in Osaka, Japan until the early morning. It's the starting of the NiTi Brush for peri-implantitis.

From the fall of 2011, I started the business trip for the promotion of "NiTi Brush for peri-implantitis". Prof. Hom Lay Wang(The University of Michigan School of Dentistry) was the first professor who started to use the NiTi Brush for peri-implantitis in USA. At the same time, during the AAP 2011, "Chrxxxxx Fxxx, PhD" of Institut Strauman AG(Peter Merian-Weg 12 CH-4052 Basel, Switzerland) visited HANS Korea's exhibition booth for a discussion of NiTi Brush. But, "NiTi Brush for peri-implantitis" was not completed products, and scientific evidence for NiTi Brush for peri-implantitis was not enough at that time.

Prof. J. Becker was the first professor who picked up the NiTi Brush in Europe during the 2<sup>nd</sup> Implant expo 2011, Dresden, Germany. And, dr. Mario Rocuzzo was the first doctor who released the first literature for "NiTi Brush for peri-implantitis" in Europe. Now, NiTi Brush for peri-implantitis is an important material of "Hans-on course of dr. Mario Rocuzzo" from 2017.

Some doctors said to me "Prof. Frank Schwarz is lecturing on your NiTi Brush in the lecture hall, do you know it?" in euoperio9-RAI, Amsterdam, Netherlands 2018. I never ever met Prof. Frank Schwarz, .but it's a fact.

10 years of long journey with sincere effort makes "NiTi Brush for peri-implantitis" a trustful solution of periimplantitis together with completed product range and reliable scientific evidence produced by the key opinion leader of implantology.

Korean old saying "10 years make mountain & river be changed".

You are seeing the game changer of peri-implantitis-the NiTi Brush for peri-implantitis, at this moment.

***"NiTi Brush": new identification & paradigm of peri-implantitis treatment***

***NiTi Brush, it's the history & evidence for future implantology.***

Presented only by HANS Korea

June 2021 HANS Kim

Founder & owner of HANS Korea