

DENTIS

TALK^{Vol.} 04

USA Ver. 

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First Half Year, 2020

DENTIS Newsletter

NEWS

- DENTIS Implant Cleaning Process System
- SAVE RIDGE KIT

AD

- ZENITH D
- Luvis C500
- SQ Guide

SEMINAR

- DWS 2019 Spain & Korea
- DWS 2020 Seoul, Korea
- GDIA Live-Patient Surgical Training Program

CLINICAL REPORT

- Maxillary Posterior Implant Placement Avoid Sinus with SQ GUIDE KIT
- Re-Implant Placement and GBR
- Utilizing "Root Banking" in Anterior Implant Case

2020, ALL NEW DENTIS!



An ALL NEW DENTIS, Happy New Year 2020!

DENTIS introduced a new marketing slogan to establish new resolutions based on a stronger business plan for 2020.

2019 was a busy year for DENTIS, with numerous new products launched. DENTIS will not stop here, but will look to 2020 as the year of an "ALL NEW DENTIS," with novel strategies and a vision for new resolutions. DENTIS – which is the only company with multi-dimensional business maps in the industry – will largely implement and release new businesses and products for more distinguished, dynamic marketing strategies. New aspects of DENTIS for 2020 include changes in all areas including orthodontics, management, academics, astral lamps, digital, bio, and implants.

[1. Orthodontics] DENTIS has prepared for the orthodontics program for a number of years, focusing on clinical/academic research and educational academies for clear aligner orthodontics and digital orthodontics, with DICA0 as the start. Now, DENTIS is officially launching the orthodontics program. There will be a professional organization on orthodontics encompassing software, as well as an academy for orthodontics.

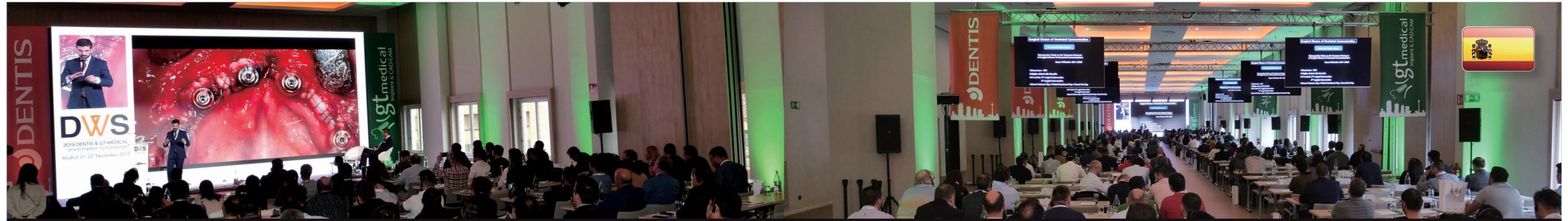
[2. Management Academy] DENTIS will start a new management academy to provide solutions to dentists who are just beginning their careers. The academy

will begin with the "Seminar for Successful Opening Suggested by DENTIS" in Seoul on February 1. The aim is to provide practical management skills that will minimize errors and help them be successful. Our instructors are dentists and professionals in various fields who will share actual examples from their careers.

[3. JCDD & GDIA] The clinical and academic sides of DENTIS look to grow significantly this year. JCDD, a global online clinical journal founded in 2019 and GDIA, the Global Dental Implant Academy of DENTIS, will be increasing the number of clinical seminars and symposiums throughout the year. These will be held in Korea and internationally.

[4. NEW Products] DENTIS will be launching several new products this year. We will now be offering small-sized astral lamps for the first time by Luvis. New materials for ZENITH, our 3D printer, are in the works and Ovis will introduce new gel-type lines. There will be additions to our implant line as well, including fixtures, prosthetics, and kits. We are excited for this year with the extensive lineups of innovative products that will be released.

This year, DENTIS has decided to go back to the fundamental basics of connecting with you, the customer.



Hola from Spain – Welcome to DWS 2019!

We hosted our Dentis World Symposium in Madrid, Spain from November 21st to 24th, 2019.

With 600 dentists from all over the world in attendance, there were lectures and hands-on events offered to international and national clinicians and workshops before the main symposium. Our keynote speakers, Dr. In Sung Jeon, Dr. Wongun Jang, and Dr. Jae Yoon Kim, shared clinical techniques and knowledge they've acquired throughout their careers.



Dr. Jin Kim and Dr. Tony Daher from the United States presented the sixth lecture on the unique subject of the "Ask the Experts' Forum" to answer questions on periodontics and prosthetics. The two lecturers, who are also leaders of GDIA, provided practical clinical information and tips by summarizing the FAQs that have appeared in GDIA programs and lectures all over the world.

Dr. Burak Demiralp from Turkey gave the seventh lecture on "The Dark and The Mysterious Side of Implantology." This covered the matter of infections around implant areas, among other topics in implantology. Dr. Demiralp analyzed the causes of infections and shared general clinical tips on prevention and treatment.

DAY1 – PRE SESSION



Check-in at DWS with 600 global users!



HOLA~The lecture will begin soon!



All lectures have been prepared! DWS ON AIR!



In-depth SAVE SINUS hands-on lesson that will include the most difficult aspects



Choose DICAON 4D for your Clear Aligner Orthodontics



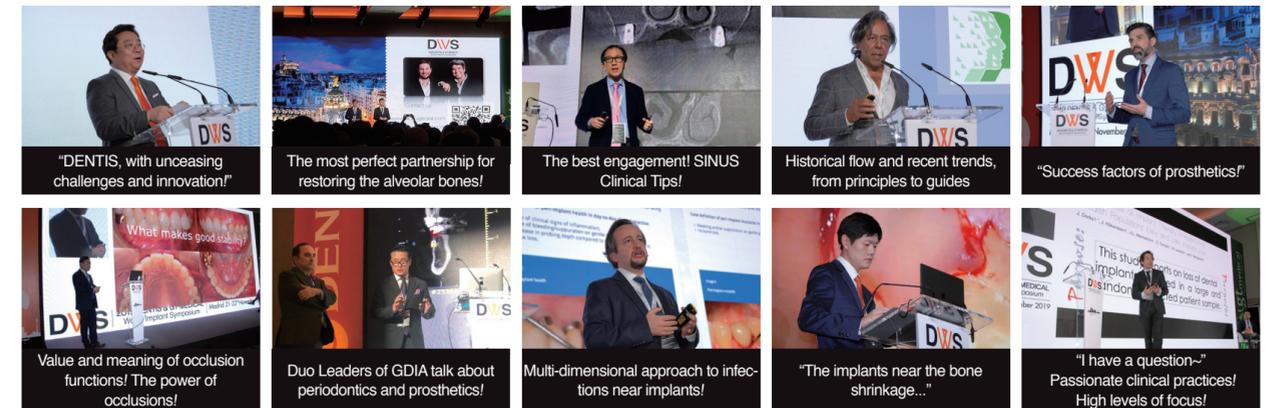
"The advantages of SQ are..." Point out the core explanations~



Special lectures on Simple Guide Plus for Russian users!



"I have a question~" Passionate clinical practices! High levels of focus!



Dr. Jae Yoon Kim from Korea presented the eighth lecture on the "Solution of Implant Surgery on Severe Bone Atrophy Areas," introducing an implant surgery solution for severe bone atrophy areas. He introduced GBR and the extension of the alveolar bone as treatment methods, his own clinical tips

for each technique, and successful treatment techniques. Dr. Ricardo Faria Almeida from Portugal gave the ninth lecture on "Aesthetic Complications in Treatment with Implants," sharing unique approaches to and treatments for the aesthetic problems of implants.

DAY2 – MAIN SESSION

Dr. Juan Lara Chao and Dr. Jose Luis Dominguez-Mompell Mico from Spain gave the first lecture of the day on "Vertical Bone Reconstruction in Oral Implantology," during which they provided their clinical opinions on the alveolar bone's recovery in implants. They shared a common clinical technique, culminating in a single opinion, as well as their own clinical know-how.

Zirconium Implants" to incorporate surgical perspectives and approaches for a historical flow.

Afterwards, Dr. In Sung Jeon from South Korea talked about general clinical issues and a new clinical guideline for a membrane treatment without the risk of drilling in sinus surgeries, delving into "A Novel Guideline of Sinus Membrane Perforation Repairing and Its Predictability." Dr. Joaquin Mendoza Caridad from Spain presented the third lecture on "Guided Surgery on

Dr. Wongun Jang of South Korea gave the fourth lecture on "Keys to Excellent Functional Occlusion in Implant Dentistry," to comprehensively share the meaning and values of occlusion in implants and core clinical tips. Dr. Samuel Olivan Molina from Spain gave the fifth lecture on prosthetics, titled "The Prosthesis, as A Success Factor in Our Treatments: New Advances and Prosthetic Solutions." Dr. Molina spoke about success factors and methods for prosthetics, and introduced the latest prosthetic solutions.



Global users browsing DENTIS products



Ask anything!



Enjoy the passion of Spain, "Flamenco"



Adiós DWS! See you next year~

For this event, DENTIS not only provided customized solutions for Spain and the Spanish distributor we are working with, but also shed light on our major products and solutions, to be shared with the rest of the world. The

primary products that gained attention were the GBR, SINUS, and RIDGE kits from SAVE. Furthermore, there was interest in the digital guide solutions of DENTIS, our wireless dust collectors and among other products.

Protocol for implants with high quality repeated cleaning, precise washing, and cutting-edge automation.

DENTIS Implant Cleaning Process System



VIDEO

Iterative
Cleaning

Ultra-
precise Cleaning

Automated
System

DENTIS
Implant

1



DENTIS Implant Cleaning Process System

Select verified raw materials with great quality such as titanium, and stock them only after inspecting them.

2



CNC Production

Produce implants with CNC equipment according to the automation process.

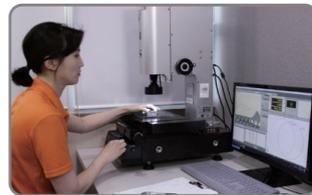
3



Primary Washing

Primary washing (fat removal) with four tubs to eliminate cutting out oil.

4



Inspection

The cleansed implants go through a verification process through sample tests using microscopes and assessment equipment.

5



Follow-up

Implants that have gone through inspection are subject to follow-up processes to remove debris, such as Burr.

6



Secondary Washing (half-finished product)

Cleansing through six tubs in a half clean room to match ultraprecise washing standards.

CHECK POINT 1



Purified Water Used for Washing

The water used for washing in all processes is "DI Water," which perfectly blocks any reproduction of bacteria or microorganisms, and goes through independent manufacturing and strict management.

7



Inspection

Assess the implant once more after the second washing.

8



Surface Process on Blasting

Blasting to make the implant surface rough, with methods such as SLA, RBM, and HA with robot automation equipment.

CHECK POINT 2



Robot Automation System

Monitor the process in real time and blast the various implant surfaces in detail.

9



Inspection

10



Surface Etching (SLA)

SLA products are additionally cleaned in three tubs to eliminate acid after etching the surfaces.

11



Tertiary Washing

Implants with completed surfaces are cleaned in six tubs in the half clean room.

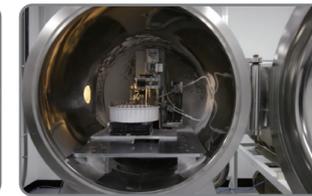
12



Quaternary Washing

There is another 7-tub cleansing in the clean room, going through a 13-step cleanse.

13



Surface Coating (HA)

HA products go through additional coating with HA powders in a separate room.

14



Additional Washing (HA)

HA surface implants that have gone through coating are cleaned again using five tubs.

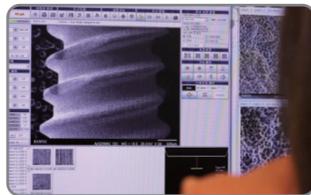
15



Cytotoxicity Inspection

Completed implants that have gone through the final cleanse are subject to cytotoxicity inspections.

16



SEM Inspection

Quality assessment through SEM inspections.

17



Packaging

Implants are placed in ampoules and packaged in carton boxes with automatic packaging.

18



Gamma Ray Sterilization

All DENTIS implants go through 100% gamma ray sterilization.

19



Sterilization Test

20



Completion and Release

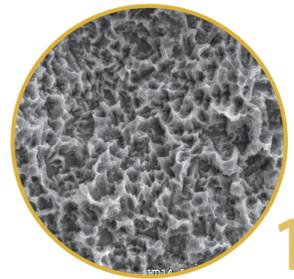
Completed products are stocked in the warehouse and released to the world.



Here at DENTIS, we strive to exceed the industry standards in quality and cleanliness!

SQ Submerged Qualified

STRESS-FREE Implant System for Surgeries without the Stress of Placement



SLA Surface

Applies great surface for synostosis / Robot automation process / Clean cleansing system



Tapered Body Dual & Open Thread

The recent implant design, which maximizes placement and early attachment



Perfect Collabo Line-up

SQ & S-LINE ABUTMENTS are even better together

"SQ" is a stress-free implant system that incorporates the latest design and surface for a stress-free surgery. It has an SLA surface with great osseointegration and implant designs that maximize early attachment and placement to share various products for better clinical results.

[SURFACE] "SQ" uses SLA surface for stronger attachment to the bone. It was developed to create a more effective, faster synostosis with a rough surface. The surface development process is done through a robotic, automatic system that results in a regular, clean surface. The 26-step cleaning process of DENTIS includes vacuum cleaning and a clean room, resulting in a clean and sterile implant. The implant also goes through various safety inspections and monitoring to ensure that there are no remnants of residual acid.

[DESIGN] "SQ" uses tapered designs for difficult fixtures to secure, like molars. They can be placed at the bottom part of the crestal bone via self-tapping, without any additional drilling. It uses dual threads and a tapered design for

easy depth control and applies open threads to help prevent bone injury. Dual threads and the sharp conchoids can control the placement depth and provide fast, soft placement without any trapping. It is designed with three blades with wide cutting edges. The thick blade at the top helps to prevent osteolysis and makes immediate loading slightly easier.

[PERFECT COLLABO] "SQ" has various lineups with better clinical results when used together. Major products include SQ WIDE, SQ Surgical Kit and the S-Line Abutment. SQ carries the "SQ WIDE" line, which is useful in extracting posterior teeth and the immediate placement of failed exchanges. It also offers SQ-customized surgical kits. Recently, it has been improved for multi-dimensional drills, which led to enhanced placement as the lower part of the second drill is attached to the drilled part from the first drill. The "S-Line Abutment" secures a more aesthetic and functional emergence profile when used with the SQ.

Focus Investigations on the SQ SURGICAL KIT

<p>Lindemann Drill Can change the paths with side cuts</p>	<p>SQ Straight Drill Develop a fixture placement hole</p>	<p>Step Drill 2.8 Develop a fixture placement hole</p>	
<p>Step Drill Develop a fixture placement hole / Drill control expresses the diameter of the fixtures</p>	<p>Drill Extension Used to expand length when the drill is short</p>	<p>Countersink Used to widen the holes of the control bone</p>	<p>1.25 Hex Driver Used to control the cover screw, abutment screw and healing A/B (*Option)</p>
<p>No-mount Driver Used to place or remove fixtures with handpieces</p>	<p>Ratchet Driver Used to place or remove fixtures with ratchets (*option)</p>	<p>Probe Depth Gauge Use to measure the lengths of the placement hole and tissue height</p>	<p>SQ Parallel Pin for Drill Confirm paths after drilling</p>
<p>Path Guide Pin for SQ Fixture Confirm paths after the placement of fixtures</p>	<p>Torque Ratchet Attach the ratchet driver during the placement of fixtures</p>		

Posterior Upper Implant Surgery with SQ Fixture & Lateral Sinus Lift with SAVE SINUS KIT

Yeonsu Seoul Dental Clinic, Dr. Jaeyoon Kim



Fig. 1 Pre-op panorama. 50 years old female patient. She had pain and mobility on right upper posterior area.



Fig. 2 10 months after #17 extraction. Patient decided to have implant surgery.



Fig. 3 Bony window was prepared with round burs from SAVE SINUS KIT. And sinus membrane elevation with sinus elevators.



Fig. 4 Flap elevation, drilling and path check were done.



Fig. 5 DENTIS SQ Ø 5.0 X 8 mm implants were placed.



Fig. 6 Allogenic bone graft material, Ovis ALLO was placed inside the sinus.



Fig. 7 Bony window was repositioned covering the bone graft material.



Fig. 8 Suture was done.



Fig. 9 Orascar was attached on the surgery area.



Fig. 10 Post-op panorama.



Fig. 11 Post-op 5 months. 2nd stage surgery was done.



Fig. 12 Post-op 6 months. Final prostheses were delivered.

SAVE SINUS KIT

Combination of Crestal Approach and Lateral Approach!

2020 DWS SEOUL

DENTIS World Symposium
SEP. 18-23, 2020

GRAND
INTERCONTINENTAL
SEOUL PARNAS

GRAND BALLROOM | SEOUL, KOREA



Simple Implant Placement with Guide Wheel : Single Case

▶ Yonsei Well Dental Clinic, Dr. Dong-Hwan Hwang



Fig. 1 Pre-op panorama. 52 years old male patient was showing for implant placement on missing tooth, upper left 2nd molar.



Fig. 2 Pre-op clinical view.



Fig. 3a-c Connect the Guide Wheel Initial Drill with Ø9.0 Guide Wheel(a), Initial Drilling(b), Guide Pole(c).

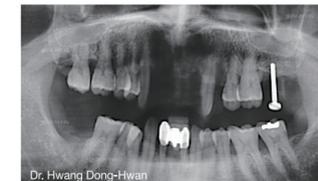


Fig. 4 Insert the Guide Pole to the hole after drilling and take an X-ray for checking the path.



Fig. 5 Drilling with OneQ surgical KIT was done.



Fig. 6 Ø5.2 X 8mm OneQ implant was placed.



Fig. 7 Suture was done.



Fig. 8 Post-op panorama



Fig. 9 Post-op 5m clinical view, 2nd stage surgery was done.



Fig. 10 A month after 2nd stage surgery, customized abutment was fabricated on master model.



Fig. 11 Custom abutment was connected to fixture.



Fig. 12 Final prosthesis was delivered.



Fig. 13 Post-op 6 months, Final prosthesis were delivered.



▶ Materials

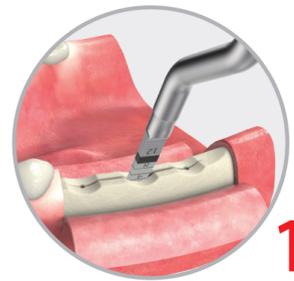


OneQ-SL

Guide Wheel

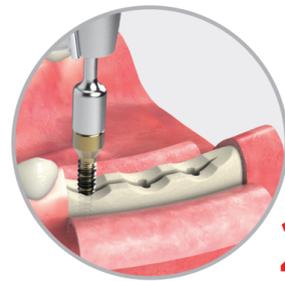
SAVE RIDGE KIT

New KIT series from SAVE
Be confident in all cases!



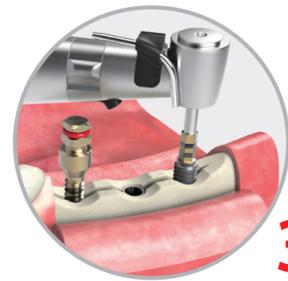
1

Chisel Bone Expander
Another sufficient expansion using the curved chisel!



2

Easy Expansion
Expand the bone's width and prepare for placement at once with the expander drill!



3

Excellent Stability
Place the implant with strong stability!

SAVE RIDGE KIT is a multi-functional KIT that can be used for ridge split techniques, the ridge expansion technique, or the comprehensive ridge split and expansion techniques.

The ridge expansion technique is a surgical approach to widen alveolar bone that has been absorbed due to extraction or has become narrow. It is retracted to develop the appropriate width and height of the alveolar bones for implants. Two major types of ridge expansion techniques are, bone transplants and increasing bone width by using the bone's viscosity. Another method is to combine both types. In this case, SAVE RIDGE KIT is a Multi KIT that is designed specifically for this.

SAVE RIDGE KIT improved the advantages of the Bone Multi KIT and con-

tains the most necessary tools including the bone trimming bur, the expander drill, the saw disk and the chisel. The bone trimming bur trims the irregular alveolar bone and allows for easy elimination of the granulation tissue near the damaged bone area. The expander drill allows for an easy expansion of narrow bone and permits a fixture placement without additional drilling with the use of the sequential expander drill.

Furthermore, the Ø14 size was added to the existing saw disks, which decreased particle splatters with a change in blade direction. There are also two types of curved chisels with 140°. It was possible to improve the uncomfortable positioning from the straight kind by applying the curved types with easy expansion.

Focus Investigations on SAVE RIDGE KIT



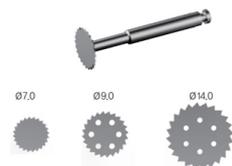
Guide Drill
It produces a marking hole of 2-3mm on the cortical bone of the narrow bone before it is expanded.



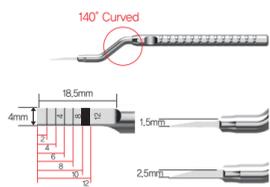
Bone Trimming Bur
Use to trim the sharp and narrow alveolar bone, or to eliminate the granulation tissue near the damaged part of the bone.



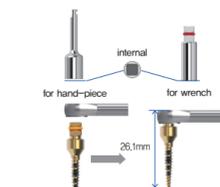
Expander Drill
Sequential expansion of the holes with the guide drill.



Saw Disk
Used to cut bone near the fixture placement area / Can safely cut with a design without wheeling.



Chisel
Use during first bone expansion on the cut parts using saw disks / Easy to approach the molars with a 140 degree curve.



Adapter
Used to expand lengths when using the expander drill.



Wrench
Used after attaching to the expander drill; can be used by attaching the adapter to the expander drill.

Implant Placement with SAVE RIDGE KIT



Fig. 1 Pre-op panorama. 62 years old female patient was showing #36 missing.



Fig. 2 Pre-op CT.



Fig. 3 Pre-op clinical views.



Fig. 4 Flap was reflected. Crestal and vertical osteotomies were made with Saw Disk.



Fig. 5 Bone Chisel was used to initial ridge split.



Fig. 6 Ridge Expansion with expander drill.



Fig. 7 Ø5.0x10mm SQ fixture was placed.



Fig. 8 Healing abutment was connected.



Fig. 9 Suture was done.



Fig. 10 Post-op panorama.

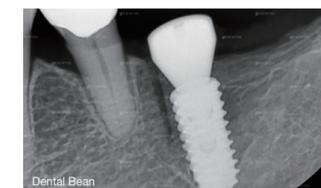
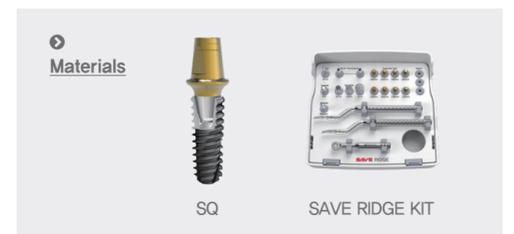
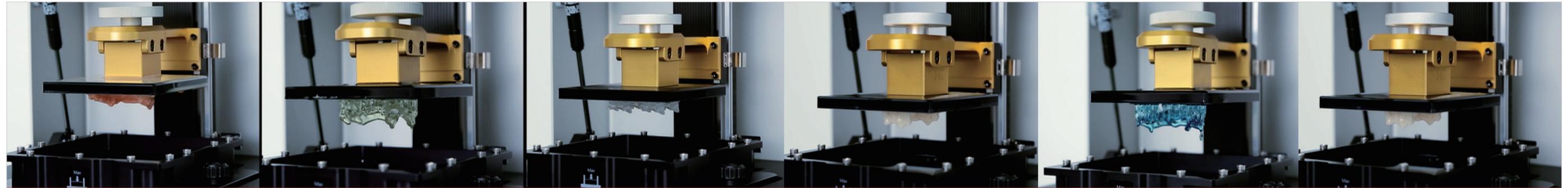


Fig. 11 Post-op P.A.



Fig. 12 Post-op CT.





3D Printer, Materials, UV LED Photopolymer! A Complete Digital Solution from Manufacturing – Sales – After-sale services!

ZENITH, Korea's No. 1 3D Printer

01 A 3D Printer Designed for Your Clinic

DENTIS is a leading company in digital dentistry that provides 3D dental printers, materials and UV LED photopolymers from their development to manufacturing, sales, and after-sale services.

ZENITH well established Korean 3D printers and a national brand. Users have expressed that they are "highly satisfied with the systematic education on the product's use, as it is directly developed and sold by DENTIS, and can receive services with immediate support from the DENTIS digital care team in case of problems."

The history of ZENITH began in 2015, when DENTIS released the ZENITH U model as the first unique technology within the dental industry. ZENITH U employs the SLA printing method to minimize errors and distortions. It comes equipped with high-quality optic systems and F-Theta lens, giving it great precision. We designed it with quality and speed in mind. The galvanometer scanning is optimized for the dental system. It boasts a wide application range, and secures a completion level on the end product with detailed, accurate printing.

In 2018, due to the increase in digital dentistry and demands for digital solutions, DENTIS developed the ZENITH D, a chairside 3D printer. ZENITH D is high quality DLP 3D printer. Its greatest advantage is that it is fast and has regular printing on all surfaces. Users have expressed great satisfaction, as there is an increase in convenience due to the heating functions (to maintain optimal printing conditions), Z-Axis Actuators with high-precision laminating, a sliding sink, and magnetic door windows.

In addition, the design satisfies both aesthetics and functionality by using heat resistant and durability materials. After its release, it received accreditation for its design from Red Dot and Good Design, and has been awarded in terms of design both nationally and internationally.

That same year, DENTIS also developed the ZENITH CURE, an LED photopolymer. Luvis Optics Research Center, a major producer of dental LED lights, collaborated with the ZENITH 3D development team. The new product maximizes the effects of LED, the key technology of photopolymers, while having optimal light conditions to cure the products.

A total of 36 LED lights are placed on the four sides and the upper and lower parts, and apply a turntable at the bottom to spin the printed materials so that they will be regular. Furthermore, a total reflecting board safely shines light in all spaces and locations. Considering that the materials have different curing points, it applies two types of LED waves, of 385nm and 405nm, respectively. This results in a stable, even cure despite the fact there may be changes in the types of materials. It quickly and accurately cures the area by taking into account the investigation distance, wavelength ranges, and total reflection conditions to have a fast curing speed of less than 10 minutes on average.

ZENITH U

Launched in 2015
Output of SLA

ZENITH D

Launched in 2018
Output of DLP

ZENITH CURE

Launched in 2018
Photopolymer

02 Whatever Material You Wish to Use, WE HAVE A SOLUTION!

DENTIS develops not only 3D printers, but also the major materials for them. The materials are unique since they are designed specifically with the dental field in mind rather than for general use. Among dental enterprises in South Korea,

DENTIS is the first company to manufacture 3D printers and their materials. While maintaining a high standard of quality, we remain competitively priced in this market. Currently, DENTIS is developing and selling materials including dental

models, surgical guides, temporary, castable, and bite trays. The company continues to invest in material research and development to expand to a wider field.

Dental Model	Surgical Guide	Temporary	Castable	Bite Tray
- Model for clear aligner orthodontics, teeth model and general model - Hard intensity, excellent fine details	- Surgical guides - Physical fit, translucence, fine detail	- Temporary crowns, bridges (C&B) - Body fit, excellent fine details, Shade A2 representation	- Cast material - Stable pyrolysis at high temperatures	- Customized impression tray - Exact representation of the border

03 Efficient and Accurate! ZENITH Case at a Glance

Edit oral scan occlusion	Produce oral scan implant models	Refer to buildup and contouring after printing oral scan data	Clear aligner orthodontics / Print retainer models	Print surgical guides
Casting pattern molds	Produce implant jigs	Produce temporary crowns, polishing and staining	Produce secant models	Use as trays after replicating old dentures

Maxillary Posterior Implant Placement Avoid Sinus with SQ GUIDE KIT

Yein Dental Clinic, Dr. Sangjin Suh



Fig. 1 Pre-op panorama. 57-year-old male patient was showing for chronic periodontitis on #16, 17. Vertical height of the remaining bone is insufficient.



Fig. 2 Pre-op clinical view.

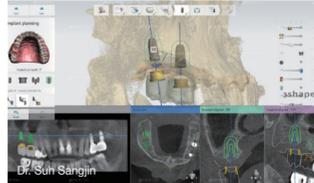


Fig. 3 Implant placement simulation was planned by 3Shape implant studio S/W. #17 was planned implant placement without grafting due to avoid sinus.



Fig. 4 Guide stent was designed by 3shape implant studio S/W.



Fig. 5 Surgical guide stent was printed by 3D Printer, ZENITH D.



Fig. 6 Try-on the guide stent.



Fig. 7 Bone flattening was done with Flattener.



Fig. 8 Drilling was done only 3 times with SQ GUIDE step drill.



Fig. 9 SQ fixtures (#16 Ø5.0X10mm, #17 Ø4.5X10.0 mm) were placed.



Fig. 10 Healing abutments were connected and suture was done.



Fig. 11 Post-op CT, #16 was placed.



Fig. 12 #17 short implant was placed to avoid sinus.

SQ GUIDE

DENTIS Digital GUIDE System for SQ IMPLANT

Reduce Bone Heating

Our patented irrigation designed drill system reduces bone heating

Increased Stability

The titanium sleeves are biocompatible and increase the accuracy of the fixture placement

Simple Fixture Placement with Only Three Drillings

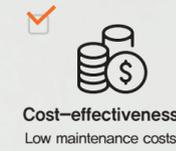
Applying multi-pass drilling makes 2-point fixation possible while increasing safety and accuracy

Stress Free!

Place implants with confidence using the SQ Guide



The pride of Korean printing!
ZENITH D



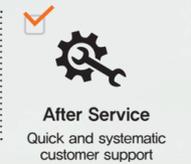
Cost-effectiveness
Low maintenance costs



Self-heating
Regular printing conditions with sink heating



Wireless
Wireless printing free from spatial limitations



After Service
Quick and systematic customer support



Temporary



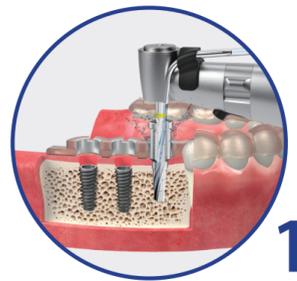
Surgical Guide



Model

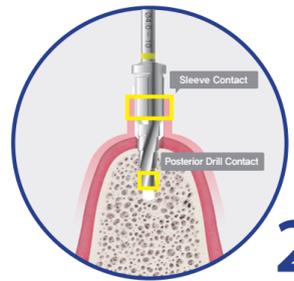
SQ GUIDE

Innovative Drills & SQ Implants
ALL NEW DIGITAL GUIDE SYSTEM



Irrigation Drill & Metal Sleeve

Biocompatible sleeve to prevent bone damage and bone heating



Multi-layer Drill

Accurate drilling without shaking with a 2-point fix for front and back drills



Open S/W

Maximize compatibility with an open software

"SQ GUIDE" is a digital guide system developed for SQ implants and has all the components needed for optimal fixture placement. For example, it is possible to complete the final drilling with the guide on.

[Irrigation Drill & Metal Sleeve] The greatest point of focus for the SQ GUIDE is that it facilitates irrigation with the drill itself. The barrel of the drill uses grooves to insert water between the sleeve and the drill to prevent bone heating. It also has great accuracy that does not go over 50µm in tolerance from both sides and 25µm between the titanium sleeve and the drill barrel. The titanium sleeves provide stable drilling and also prevents contamination that can occur from guide resins during implant placement.

[Multi-layer drills] What sets the SQ guide apart is its innovative drill design.

The multi-layer drill and side cutting edge at the bottom of the drill, reduces the drilling sequence and increases its cutting performance. This results in a lot more convenient implant placement. The SQ GUIDE maximizes fixation via all types of bony tissues (including D1, D2, D3 and D4) with minimal drilling for greater stability.

[Open S/W] Open software for placement of the implants and the guide designs were used. While the Dentiq software is designed for SQ GUIDE, it is also compatible with Implant Studio from 3Shape. This allows for users of other programs to conveniently use the SQ GUIDE. DENTIS has also launched a design service website to provide a number of customized services for new digital users, who may have concerns regarding surgeries.

Focus Investigations on SQ GUIDE

<p>Tissue Punch Used when eliminating gingiva as a circular shape for the implant placement</p>	<p>Flattener Used to make the upper alveoplasty irregular bone surface flat</p>	<p>Initial Drill Used to produce holes to ensure an accurate direction in the beginning stage</p>	
<p>Drill Extension Used to enlarge lengths when the drills are short</p>	<p>Step Drill Used to develop diameters and lengths for placement of fixtures, drilling along the paths of the drill beforehand / A multiple-layer structure design</p>	<p>Countersink Used to expand the holes of the cortical bone</p>	<p>Profiler Drill Used to remove the surrounding bones that interfere with placement of the abutment</p>
<p>No-mount Driver for Machine & Ratchet Uses a handpiece to place or remove fixtures</p>		<p>Hex Driver Used to attach cover screw and abutment screw</p>	<p>Depth Gauge Used to measure the depths of the placement hole and height of the tissue</p>
		<p>Torque Ratchet Employs ratchet drivers when placing fixtures</p>	

Narrow Maxillary Premolar Immediate Implant Placement with SQ GUIDE KIT

Yein Dental Clinic, Dr. Sangjin Suh

Conclusion			
Placement Implant Area	4	Sex / Age	Female / 62Y
C.C.	#24 fracture		
Treatment Plan	#24 root rest extraction and immediately implant placement using SQ GUIDE KIT.		

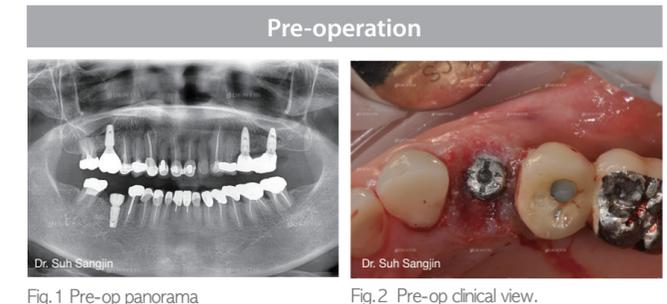


Fig.1 Pre-op panorama

Fig.2 Pre-op clinical view.

Guide Stent Fabrication Procedure [S/W Planning]

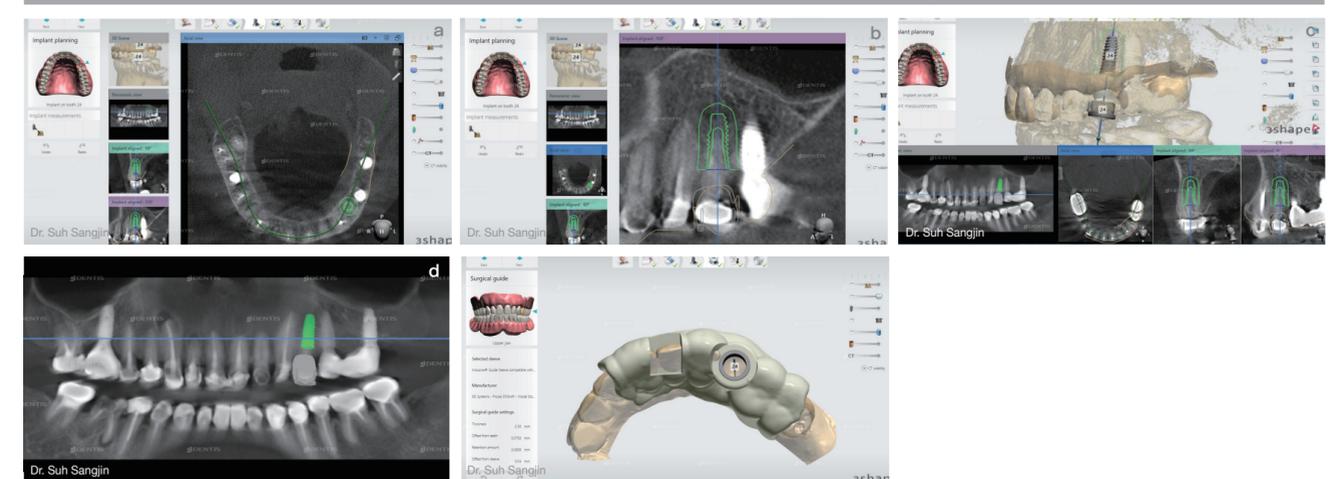


Fig.3a-d Implant placement simulation was planned by 3shape implant studio S/W. Observed narrow space between the adjacent #24 tooth and #25 implant.

Fig.4 Guide stent was designed by 3shape implant studio S/W.

Guide Stent Fabrication Procedure [S/W Planning]



Fig.5 Try-on SQ GUIDE which was printed by ZENITH D.

Fig.6 Drilling was done only 2 times with SQ GUIDE step drills (φ 3.5 Initial drill and φ 3.5 Final drill).

Fig.7 #24 (φ 4.0 X 10mm) SQ implant was placed. Fixture insertion torque value was more than 30N.

Fig.8 Bone graft and collar-tape were inserted in extracted socket and covered with tissue adhesive. Removed guide stent and connected healing abutment.

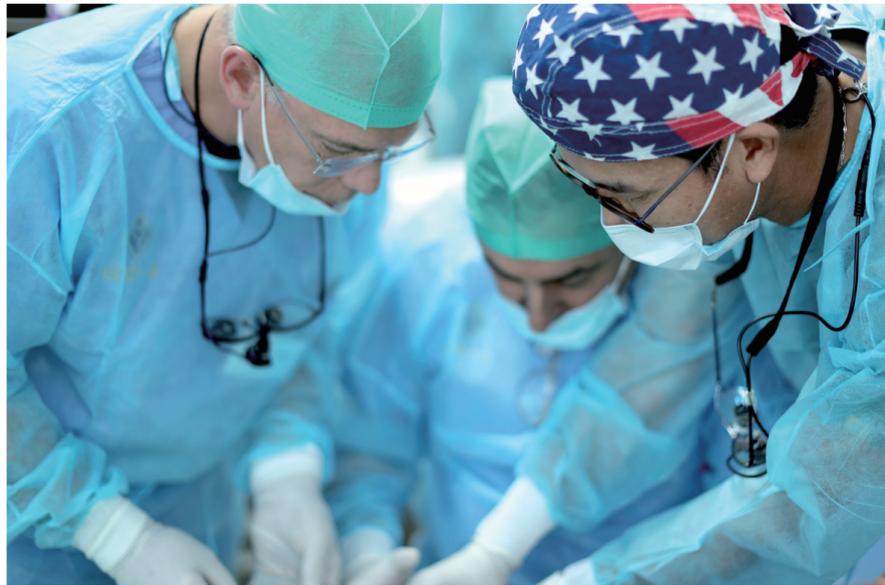
Fig.9 Post-op CT.

Conclusion

It was an immediate implantation case of left maxillary 1st premolar using SQ GUIDE system. Pre-made surgical guide stent before extraction #24 root rest. Even in 3 times drilling with SQ GUIDE KIT not only saved surgical time but also gained great stability of the implant. SQ GUIDE system is quite a convenient system for both patient and dentist.



Source ▶ SQ GUIDE Clinical Manual



**STRENGTHEN
YOUR
KNOWLEDGE,**

**EMPOWER
YOUR
PRACTICE.**

Global Dental Implant Academy (GDIA) is a dental education entity that was formed in California, USA in 2012, with a simple mission in mind: to advance the field of implant dentistry by providing quality education and training to the dedicated clinicians who yearn to become the most distinguished dental professional.

Global Dental Implant Academy (GDIA) is committed to achieving this goal through sharing of resources, scientific and clinical knowledge, and collegiality through clinicians, academics, and the dental industry, both locally and globally. The Academy provides our participating student doctors, personalized instructions, and the opportunity to broaden their clinical practices by incorporating surgical and restorative aspects of dental implantology.

With this said, Global Dental Implant Academy (GDIA) provides clinical training courses, one-on-one mentorship, hands-on workshops including live-patient implant surgical and soft tissue programs, international symposiums, and research opportunities with leading clinicians from the U.S.,

Europe, South America, and Asia.

The Academy forged a close relationship with a Korean dental implant manufacturer, DENTIS Co. Ltd., which has their products distributed to over 30 countries. This relationship is vital in that the two organizations share knowledge on cutting edge developments in the implant field, and in understanding the utilization pattern of dental implants and related products from practicing clinicians' point of view.

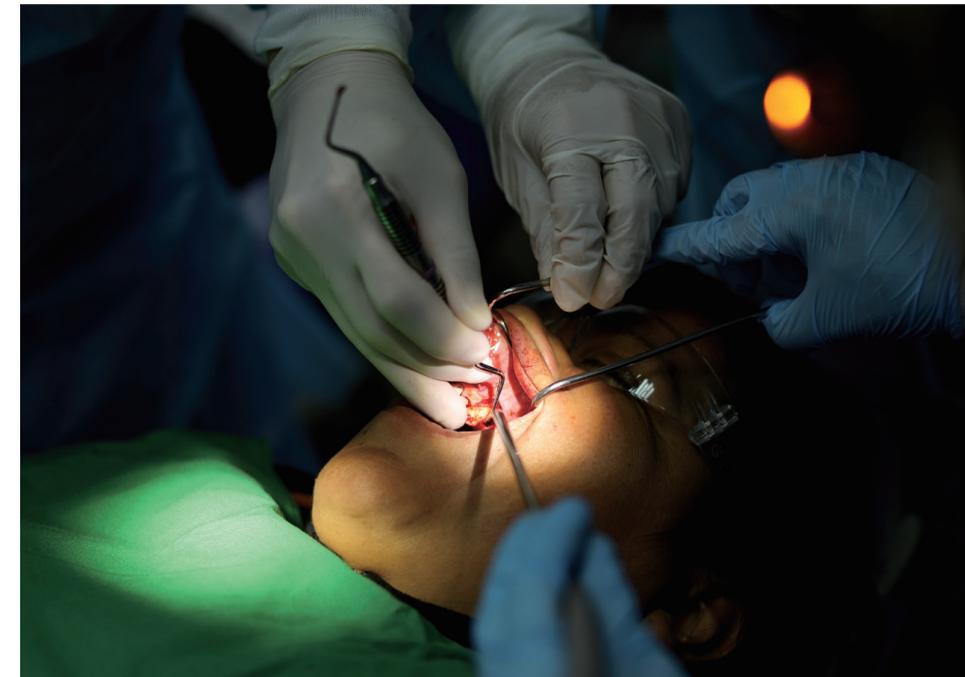
While GDIA pursues the emphasis of academic understanding to dental clinicians all around the world, DENTIS™ seeks to provide the highest quality of dental implant solutions through research, product developments, and appropriate feedback from the GDIA-affiliated clinicians.



Visit GDIA website for more information.
www.gdia.com



Live-Patient Surgical Training Program in Tijuana, Mexico



“ You have plenty of opportunities to really learn how to manage the challenging cases such as sinus lift cases and complex bone grafting. It's great to see everything in action and get to do it yourself. All the instructors are wonderful and friendly. I really enjoy the discussions after the case as we get the chance to brainstorm and ask questions. They are super approachable and I think that's great.

Dr. JJ Ubonwan Saeung
Lansing, MI

PROGRAM CURRICULUM

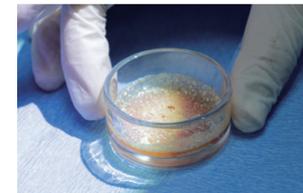


GDIA 101 | Fundamental

- Treatment planning using CBCT imaging and implant planning software
- Detailed step by step protocol for successful implant placement
- Free-handed vs. computer guided surgery
- Basic surgical principles: suturing, incisions and flap design
- Implant placement in partially edentulous arches
- 25 CEUs (ADA CERP and AGD PACE recognized)

Date:
• Jun. 26 - 29, 2020
• Aug. 21 - 24, 2020

Tuition : \$6,500



GDIA 201 | Intermediate

- Treatment planning using CBCT imaging and implant planning software
- Fundamentals of implant surgery and drilling protocols
- Basic surgical principles: suturing, incisions, flap design
- Atraumatic extraction technique and socket management
- Implant placement with simple guided bone regeneration (GBR) technique
- Implant placement in partially and fully edentulous arches
- 34 CEUs (ADA CERP and AGD PACE recognized)
- A complimentary GDIA one-year Membership

Date: **SOLD OUT**
• May 22 - 26, 2020
• Sep. 4 - 8, 2020
• Dec. 4 - 8, 2020

Tuition : \$10,000



GDIA 301 | Advanced

- Implant placement with advanced guided bone regeneration (GBR) technique
- Exposure to a number of sinus augmentation techniques: lateral window, crestal, HPISE, and LISA
- Immediate implant placement protocol
- Atraumatic extraction technique and socket management
- All-on-4,6,8 type cases
- Management of complications
- Utilization of piezoelectric bone surgery device and techniques
- 34 CEUs (ADA CERP and AGD PACE recognized)
- A complimentary GDIA one-year Membership

Date: **SOLD OUT**
• May 22 - 26, 2020
• Sep. 4 - 8, 2020
• Dec. 4 - 8, 2020

Tuition : \$13,500

Novel Techniques in Cosmetic Full Mouth Reconstruction: Root Banking (Root Submergence) Technique and Lateral and Internal Sinus Access (LISA) Technique Utilized with DENTIS S-Clean Dental Implant System

► Jin Y. Kim, DDS, MPH, MS, FACD

- Board-Certified Periodontist
- Co-Director, Global Dental Implant Academy

A 54-years old, healthy female patient was referred for full mouth rehabilitation. She is an accountant and had been working hard to raise her children. Admittedly, this patient had been neglecting her oral care. Now that her son has finished studies, she feels that she deserves to have better oral health (Figures 1 & 2).

Her chief concerns include the following:

- non-esthetic maxillary anterior teeth
- the maxillary anterior teeth with recurrent caries and failing endodontist lesions, that are not restorable
- partial edentulism in both maxilla and mandible
- lack of posterior support
- decrease in vertical dimensions of occlusion



Fig. 1 Pre-operative clinical photographs.



Fig. 2 Pre-operative intra oral radiograph series.



Fig. 3 The anterior teeth had sub gingival caries and endodontic lesions.



Fig. 4 In-situ gingival augmentation was carried out according to the Larger technique described in 1994.

A 4-unit implant bridge with implants in the lateral incisor positions, with pontics in the two central sites, were planned. The two central incisors were "root banked," as to preserve the volume of tissue and to provide adequate lip support. Soft tissue in the central incisor position was augmented by what is known as the in-situ augmentation technique. This method was reported by Langer in 1994. The incisors were reduced to bone level using high speed coarse diamond rotary bur, according to the Larger article. Where tooth structure were uneven bonded resin material was used to provide sound surfaces (Figure 4).



Fig. 5 In-situ gingival augmentation was carried out according to the Larger technique described in 1994.



Fig. 6 The anterior bridge was placed after reductions of tooth structure of the three incisors to provide in-situ augmentation.



Fig. 7&8 The gingiva grew over the retained root structures over a 4-week period.

At 4-weeks, adequate soft tissue grew over the ridge crest. Two DENTIS s-Clean internal conical connection implants were placed in the lateral incisor sites (Figure 9). The two roots in the central sites were smoothed and submerged. By having the root structures submerged, the ridge width and height is expected to be preserved predictably (Figures 10 & 12). The facial aspect of the maxillary anterior ridge was further augmented with xenograft in "sticky bone" form (Figure 11).



Fig. 9 DENTIS s-Clean implants in upper lateral incisor positions.



Fig. 10,11,12 The two implants were used for support of screw-retained 4-unit transitional restorations with oval pontics. These implants were kept out of occlusion.



Pre-operative clinical photographs



Post-operative clinical photographs

Maxillary sinus augmentation was carried out in the left upper posterior area with simultaneous implant placement. A hybrid technique of accessing conservative lateral windows together with crestal (internal) approach, known as the Lateral and Internal Sinus Access (LISA) technique was used. This technique was described by Drs. Eric Park and Jin Kim in 2017 (Figures 13, 14 & 15).

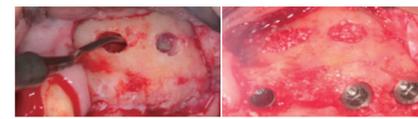


Fig. 13 Implant placement in the left maxillary posterior area utilizing the Lateral and Internal Sinus Access (LISA) technique.



Fig. 14 Pre-surgical and post surgical panoramic images of the maxillary anterior and UL region.



Fig. 15 The LISA sinus kit (available from DENTIS)



Fig. 16 The healed anterior maxilla with adequate soft and hard tissue volume.



Fig. 17 Definitive restorations placed over the submerged roots in the central incisor region with ovate pontics (Restorative dentistry by Dr. Swatti Shetty, Hacienda Heights, CA, USA)



Fig. 18 The increase in vertical height of occlusion has resulted in a pleasing cosmetic outcome with less prominent naso-labial folds.



Fig. 19 The patient was happy and satisfied with a full mouth reconstruction that resulted in a broader and more confident smile.



Fig. 20 Before and after radiographs of the maxilla.



Fig. 21 The maxillary anterior region - pre-op view and post-op view, the radiograph superposed one the clinical photograph shows submerged roots under the implant bridge pontics.



Fig. 22 Post operative clinical photographs.



Fig. 23 Post operative intra-oral radiograph series.

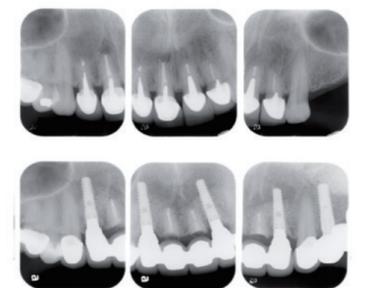


Fig. 24 Pre- and Post-operative radiographic views of the maxillary anterior segment.

► LISA Technique (Lateral & Internal Sinus Access)



► Materials

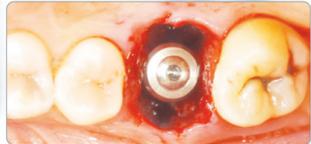




Luvis C500



Luvis



Lower CRI

SQ GUIDE

DENTIS Digital GUIDE System for SQ IMPLANT

- Reduce Bone Heating**
 Our patented irrigation designed drill system reduces bone heating
- Simple Fixture Placement with Only Three Drillings**
 Applying multi-pass drilling makes 2-point fixation possible while increasing safety and accuracy
- Increased Stability**
 The titanium sleeves are biocompatible and increase the accuracy of the fixture placement
- Stress Free!**
 Place implants with confidence using the SQ Guide



DENTIS HÖT PRODUCT

Hot Product of 2020



"GUIDE WHEEL" is a convenient product for clinicians who want accurate implant surgeries, but feel burdened by using digital products. It produces images of the structures and sizes of the upper structures to secure the safety margin, to assist in making decisions on the initial drilling point and path, and assists in locating fixtures covered in gingiva during secondary surgeries.

"GUIDE WHEEL" is easy to use with the customized drill, and allows for an easy surgery with specialized materials to ensure visibility. The irrigation within the wheel minimizes bone heating with efficient structures, which can precisely identify the paths, even from slanted areas. "GUIDE WHEEL" is directly used in the mouth, along with the digital guide stent. It can be used when it is necessary to place one or more fixtures. Furthermore, it reduces chair time since it can lead to accurate decisions by comparing nearby teeth. It is also economical, as it does not need any other complex guide system or additional equipment.

DENTIS added a long guide pole and a kit to maintain the components. There is an improvement in convenience as it is possible to check the components at a single glance and use the necessary parts. It is even more hygienic since the GUIDE WHEEL can be kept in the kit after use and sterilized. The initial drill has a groove at the bottom of the upper stop for a stable attachment. It is possible to attach the GUIDE WHEEL selected by treatment plans to the lower grooves, decide the location, and angle and drill until reaching the upper stop of the drill.



Louis Button II

"Louis Button II" is a stent for attached gingiva without a suture after implants. The button keeps the cut gingiva from opening, and helps the volume of the attached gingiva to naturally develop by attaching to the healing abutment for two seconds.

Major obstacles to the long-term success of implants include infections around the implants, involution of the gingiva, and plaque. To prevent these three malefactors, it is common knowledge that there should be attached gingiva of at least 2mm. "Louis Button II" has received high satisfaction from many clinicians, as it has shown excellent post results.

DENTIS HÖT PRODUCT

Convenient and strong wireless dust collectors!



The DENTIS wireless dust collector has received attention due to its convenient size and portability and powerful suction.

and the product quality" and "We will have promotions for other DENTIS products, so keep in touch."

The DENTIS wireless dust collector overcame the drawbacks of existing dust collectors due to their loud sound and large sizes. It is both portable and quiet while still providing strong suction. The PM 2.5 filter allows it to filter fine dust. The dust collector uses infrared (IR) sensors to automatically start the sensor when placing the hand in front of a particular spot. This prevents contagion by avoiding unnecessary touch or individual pedals. The light and convenient dust collector is wireless and can be used in any space. A flex pipe that can be attached is provided as well, and the pipe can be easily attached with magnets to allow for a more efficient use of space.

A representative of DENTIS stated that "The reason as to why the wireless dust collector is receiving so much attention is the advantages of the wireless system

Specification

Size	220(W)x230(H)x260(D)	LED Indicator	5,500K
Pipe	500, max 450mm	FAN Wind Pressure	1,280Pa
DC Adapter	19V5A, 95W	Button	Touch sensor
Sensor	Apply IR sensor	Voltage	AC100~240v, 50~60Hz
Filter	PM 2.5	Battery Capacity	4S/1P(LI-ION) 2900MA 43W
Charging Time	3 Hours	OUTPUT	DC 12V

Closer Look at the Portable Dust Collector



1 Powerful Dust Suction Power



- Powerful suction power
- Compact design and low noise

2 Complete Filtering, Even Fine Dust



- Loaded with a PM 2.5 filter for filtering even fine dust
- Simple replacement and care

3 With IR Detection Sensor



- By using an IR detection sensor, unnecessary touch is reduced to prevent cross infection

4 Liberating Wireless Device



- Portable dust collector with no spatial restrictions
- Can be used in dental labs and small group meetings

5 Attachable/Detachable Pipe



- Easily attachable/detachable pipe
- Efficient use of space



Trend Icon DENTIS Confirms its Clinical Products with DWS!
2019 DENTIS World Symposium Ends in Success

DENTIS ended the 2019 DENTIS World Symposium (DWS) in success at the Yeouido Conrad Hotel in Seoul on September 29th.

There were 10 speakers with the concept of TALK & LIVE SHOWS for a more practical approach, moving away from the lecture-type symposiums of the past. The title of the symposium was "ALL ABOUT IMPLANTS, DIGITAL AND DENTIS." There were talks with 3-4 MCs and panels to share real stories from the field.

Doctors In Sung Jeon, Ki Won Na and Jae

Yoon Kim began the first discussion on "Things that can be helpful for implants, featuring SQ Implants." They shared keen insight and clinical opinions on various implant solutions, as well as their own reviews on recent surgical procedures and trends with the implant technicians.

Doctors Wongun Jang, Pil, Lim and Yong-guan Choi gave the second talk on "Things, things – Good Things, Attractive Things, and Things to Improve." They expressed harsh criticism of DENTIS implant solutions and more

practical application know-how. This led to a raw discussion with questions delivered on-site from the audience to the panelists under the guidelines of an MC.

Doctors Taegu Jung, Sichan Park, Sangjin Seo and Hyundong Kim gave the last presentation on "Endless Game? An astonishing digital solution." They spoke about the digital sector, which is a key trend, and issues in the current implant world. The four digital clinicians, who are at the top of the field, shared their solutions, expertise, opinions, and tips.



There were also live shows along with talks at the event. Doctors In Sung Jeon and Wongun Jang, who were the MCs for the discussions, conducted live surgeries in different places simultaneously on their respective topics. The concurrent live surgeries revealed the actual surgical processes of the two doctors. During the surgeries, Doctors Jae Yoon Kim, Kiwon Na, Feel Lim and Yongguan Choi gave presentations to share live reviews and opinions. It was one of the sessions that drew the most interest from the audience.

Since there was on-site registration, there were not enough seats for the 500 visitors, which led to some of them standing while listening to the lectures. The Q&A sessions were

conducted over the chatting app KakaoTalk, taking questioners into consideration, as they may have felt nervous about speaking over the microphone and drawing attention away from other listeners. The Q&A sessions allowed the participants to hear the concerns of dental clinics.

Gi Bong Shim, the CEO of DENTIS, also shared about the company's story since launching in 2005, as well as the company's statement and resolutions.

Feedback demonstrated that the attendees were satisfied with the lecturers and variety of topics. The new approach to the lectures were found to be more engaging.

The forthright talks from the lecturers from long-term or new users (of less than one year) of DENTIS implants were memorable. Feedback showed that the lectures were practical for dental clinics that are just starting or are considering using the products. In a separate exhibition space, the participants expressed great satisfaction in on-site special price (and other unique) events to become familiar with the company's most popular products. The ones that drew the most attention and participation were the SQ implants, the latest implant and digital solution of DENTIS, as well as the SQ GUIDE products. There were also many purchases and inquiries about diverse solutions and products.

DENTIS in Charge of "Regional Emotions, Baseball Marketing" in YESDEX

DENTIS was a part of unique baseball marketing effort in YESDEX2019 in BEXCO, Busan in November. The employees put on old uniforms of the Lotte Baseball Club of Busan, Samsung of Daegu and NC of Changwon and Ulsan. The visitors could hear the "DENTIS Smile Song" and television ads with "Kimchi ~ Cheese ~ DENTIS" to liven up the atmosphere. DENTIS stated: "We have prepared an event to cheer up the dentists who will be tired from their work and remind everyone of smiles in relation to the smile songs

of the ad campaigns," and "We have received feedback that the baseball marketing allowed for everyone to move away from the rigid event hall to appeal to the local spirit and add an energetic atmosphere to the event hall."

The booth showed off new and popular products alike. DENTIS expects that the "SQ SHORT" line for posterior teeth that lack bone mass in the alveolar bone will improve the clinical application levels of the

existing SQ implant. The booth also introduced the "SAVE RIDGE KIT," GBR and SINUS KIT solutions, innovative products from "Ovis," a bone-implant brand, "Multi Use Coping" and the "GUIDE WHEEL KIT." New products for future release (such as the "Luvis" LED lights for dentists) also drew a lot of attention. There were many visitors to the event booth "Ling-tea," provided by DENTIS to the dental clinics. Ling-tea is a simple beverage that can be consumed for recovery after dental treatment instead of intravenously.



"Warm Heart" with Coal Delivery Volunteer Activities!



DENTIS held coal delivery volunteer activities of love for the needy on November 22nd, sharing warm feelings with the public.

20 DENTIS employees visited the homes of elderly

citizens living alone and beneficiaries of basic livelihood to deliver coal. Furthermore, DENTIS shared donations for corporate social responsibility activities with the Coal Briquettes for Neighbors in Korea. A DENTIS employee stated: "DENTIS attempts to fulfill



its corporate social responsibility to the community with its employees" and that "We hope that the warm feelings conveyed by DENTIS will be of some support to the members of the community, who will be facing the year-end cold waves soon."

Opening Setup Schools for Clear Aligner Orthodontics of DICAON 4D



The DENTIS Institute of Clear Aligner Orthodontics (DICAON) will launch a clear aligner orthodontics course in Seoul on February 2nd. The "DICAON 4D Clear Aligner Orthodontics Seminar" was successfully held not only in Korean cities (including Seoul, Gwangju, Busan and Daegu), but also internationally for global users (including China, Mexico and the Philippines).

DENTIS will host the Clear Aligner Orthodontics Setup School Seminar with Dr. Hyun In Cha (Baek-sang Dental Clinic, Yeoido), who is the developer of the "DICAON 4D" and the director of DICAON in 2020. The seminar is prepared so that participants

will easily and actively understand all processes of clear aligner orthodontics, starting from scanning the teeth to alignment, manufacturing and wearing clear aligners.

Director Cha will focus on all areas of digital clear aligner orthodontics with a curriculum, including the fundamental principles of clear aligner orthodontics and the setup techniques to actual applications of "DICAON 4D" and clinical examples in the Seoul seminar. Furthermore, Director Cha will not only provide understanding of the software and lectures on how to use it, but will also directly present the setup information.

NEWS



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