



International Academy of Mini Dental Implants

STEIN ERIKSEN RESORT & SPA



PARK CITY, UTAH

**FRIDAY, MAY 31, 2024 &
SATURDAY, JUNE 1, 2024**

iamdi.org

2024 LECTURERS

2024

CASE STUDIES

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Ronald Petrosky, DDS
David Hippensteel, DDS
Dennis Flanagan, DDS
Randy Staples, DDS
Stephen Wessels, DMD



Dr. Todd E. Shatkin



Dr. Diana Rodriguez



Dr. Andrea Joy Smith



Dr. Ronald P. Petrosky



Dr. Dennis Flanagan



Dr. Thomas Baggett

In Memory of David R. Powers, DDS

It is with deep sorrow that we announce the passing of Dr. David Raymond Powers, a beloved husband, father, grandfather, and esteemed member of the dental community.

Dr. Powers passed away suddenly on April 28, 2024, at the age of 61. Dr. Powers served as the Past President and Diplomate of the International Academy of Mini Dental Implants (IAMDI). Before joining Todd E. Shatkin, DDS, PLLC he was a renowned Mini Dental Implant Center of America (MDICA) specialist in Temecula, California. At Shatkin Dental Health, he was not only a Mini Dental Implant Specialist but also a dedicated lecturer and associate professor for the NYU Langone residency program. Dr. Powers was instrumental in case planning Mini Dental Implant procedures for Shatkin F.I.R.S.T. dentists worldwide. He was known for his willingness to assist doctors with their cases, often guiding them through the process while the patient was in the chair.

In his free time, Dr. Dave enjoyed golf, which brought him great joy and relaxation. Whether it was on the golf course or simply spending time with his loved ones, he approached life with enthusiasm and a sense of gratitude.

Dr. Dave leaves behind a legacy of kindness, professionalism, humor and love. He will be profoundly missed by all of us who had the privilege of knowing him.

Respectfully Submitted,

Todd E. Shatkin, DDS





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From the Desk of Dr. Diana Rodriguez, DMD President & Diplomate



Dear Esteemed Members of the International Academy of Mini Dental Implants,

As I step into the role of President for 2024, I am both honored and humbled to serve an organization as prestigious as ours. This year, as we continue to uphold the legacy of excellence in minimally invasive dentistry, it is essential to remember and honor those who have paved our way. We recently lost a distinguished leader, David R. Powers, DDS, past President & Diplomate of the IAMDI. His contributions were monumental, and his memory will inspire us to advance our mission with renewed dedication.

Mini dental implants have proven to be a revolutionary step in our field, offering effective and affordable solutions that have transformed countless lives. My vision for our future is not only to sustain but to enhance this progress by promoting the acceptance and application of mini dental implants among dental professionals and ensuring our patients benefit from the most innovative practices.

This year, I want to emphasize the importance of continuous learning and the pursuit of excellence. Maintaining membership in our Academy is crucial, as it fosters professional growth and helps in achieving esteemed credentials through ongoing education and demonstrated case experience. We have expanded the opportunities for credentialing, now offering a board-certified certificate issued by the Academy. Additionally, we have established a new advisory board responsible for administering this certificate. Together, let us strive to reach the highest standards of practice, thereby ensuring that our patients receive unparalleled dental care.

I am committed to diligently upholding our Academy's Constitution and By-laws and to work alongside you, fostering an environment of education and innovation. I extend my heartfelt thanks to all officers and members for your trust in me to lead us forward. I am excited to collaborate with each of you as we drive towards our shared goals and ensure the continued success of the International Academy of Mini Dental Implants.

LAS VEGAS, NV • CAESARS PALACE

JUNE 22 & 23, 2023





CASE STUDY

THE ONE-PIECE DENTAL IMPLANT PARADIGM

ANDREA JOY SMITH, DDS

Dr. Andrea Joy Smith is a general dentist of 30 years, practicing in Sacramento, California. Dr. Smith is currently an educator and mentor for hundreds of dentist for Dental Practice Mastery, an organization based in southern California. She is an accomplished One-Piece Dental Implantologist as a Fellow in the International Congress of Oral Implantologist. Dr. Smith is a Diplomate and President Emeritus of the International Academy of Mini Dental Implants.



Dr. Andrea Joy
Smith, DDS
President IAMDI
2021-2023



A Conversion of Removable Dentures to Fixed Restorations

Introduction

Dental Implantology has enjoyed full acceptance as a standard of care procedure for many decades now. The Branemark style two-piece dental implant has dominated the dental implant space since the beginning of the discovery that titanium fuses to bone. The one-piece dental implant which existed in the 1960's has traditionally taken a back seat and has been ridiculed by many of our colleagues in the process.

The One-Piece dental implant has officially arrived and doctors in many offices have given access to care to so many patients who have been told they are not candidates for dental implants. Small diameter one-piece implants have been FDA approved for more than twenty years. With each passing year one-piece implants have improved and are not only used to stabilize dentures but are used for single tooth, multiple teeth, and full arch restorations. This case study reviews a case that converted a patient who had worn removal dentures for more than 10 years, into upper and lower fixed roundhouse (RH) restorations.

Purpose

The purpose of this case study is to document the viability of converting a patient who has worn removable dentures for many years to a patient with fixed restorations supported by one-piece dental implants, restoring the look and feel of natural teeth.

Findings:

The subject is a 65-year-old female who presented for initial treatment 8 years ago at age 57.

Medical History:

Thyroid Disease, Back problems.

Medications: Currently taking no medications NKAD

Dental History:

Upper complete denture and lower partial denture for well over 10 years.

Chief Complaint:

"Broken, Ugly, & Uncomfortable dentures. I want fixed teeth", Dental Anxiety

Treatment Plan:

Extract remaining lower teeth.
Upper Fixed Roundhouse (URH)
Lower Fixed Roundhouse (LRH)
One-Piece Implants Support RHs

Treatment Visit #1

Consultation

Patient was referred to outside imaging center for CBCT. (Figures 1,2,3 &4)
Analyze CT & Plan Implant Placement
Upper & Lower Impressions of soft tissues.
Upper & Lower Impressions of Dentures in place to have Biotemp Resin restorations fabricated at current vertical dimension.
Schedule implant placement visit under sedation.

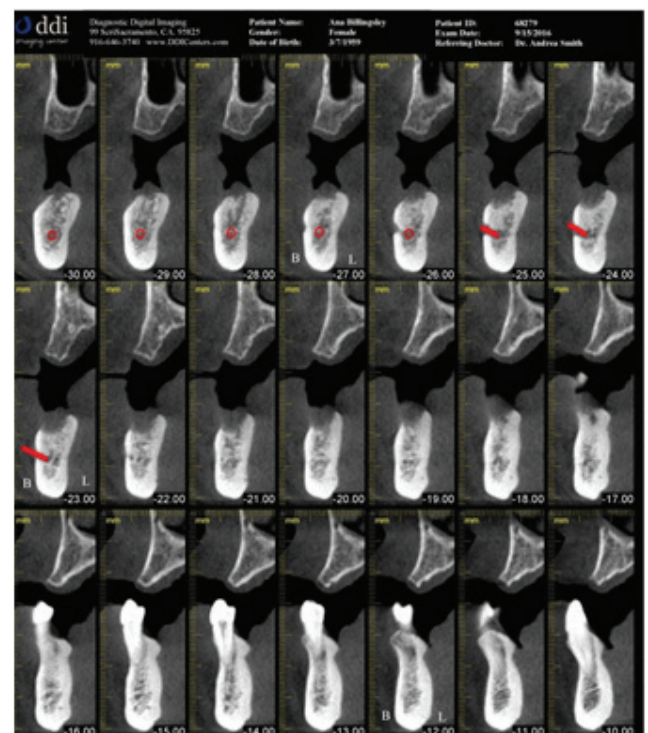


Figure 1: Posterior Maxilla & Mandible

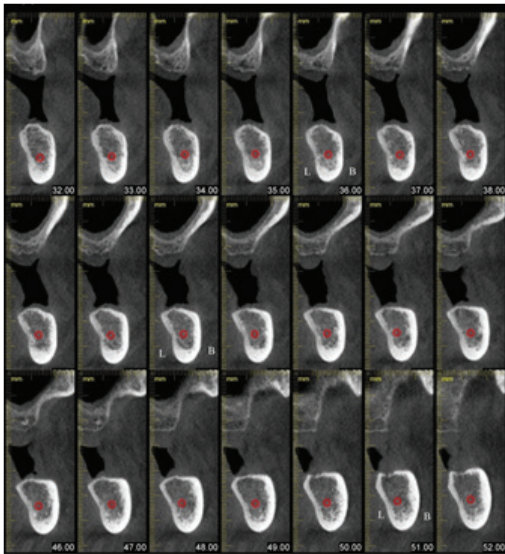


Figure 2: Anterior Maxilla & Mandible

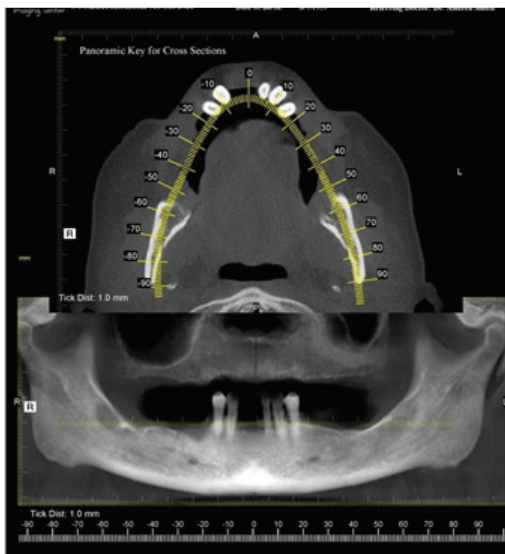


Figure 3: Panoramic Mandibular View

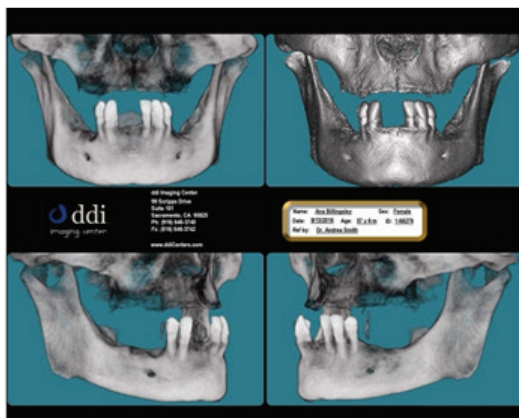


Figure 4: 3D CBCT Rendering, Maxilla & Mandible

Treatment Visit #2

Oral conscious sedation

10 mg Diazepam the night before dental visit

0.25 mg Triazolam one hour before dental visit

100 mg Hydroxyzine at time of dental visit.

0.50mg Triazolam at time of dental visit.

Extraction of lower teeth #'s 21, 22, 23, 27 & 28.

Placed upper Implants to support upper fixed appliance. Ten (10) Intra-lock MDL implants size 2.5 mm diameter in varying lengths were placed. All implants torqued at 30NCM or above (Figure 5).

Placed lower implants to support lower fixed appliance. Ten (10) Intra-lock MDL Implants were placed. All implants torqued at 30NCM or higher (Figure 5)

Place Upper and Lower Temporary Round House Restorations. (Figure 6)

Take Post-op Radiographs. (Figure 7)



Figure 5: Intra-oral Implant placement



Figure 6: Temporary restorations in place

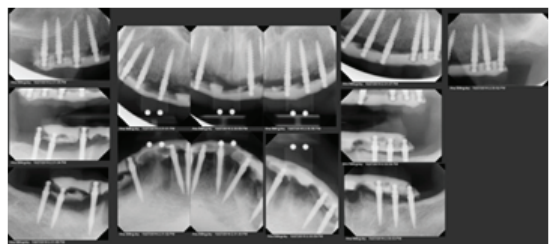


Figure 7: Post-op Implant Peri-Apical Films

Discussion:

The patient learned about the one-piece implant procedure as a result of our internet marketing campaign. She responded to the free implant consultation offer.

The first visit was an implant consultation. The patient was referred to an outside imaging center for the CBCT. The staff conducted the initial patient interview, reviewed the treatment options, and showed models that demonstrate the treatment options.

During the consultation, the CBCT images were reviewed by the doctor. It was determined that the patient was a good candidate for One-Piece Dental Implant treatment based on the excellent bone quantity and quality in both the mandible and the maxilla. The bone levels observed could more than accommodate implant placement in the anterior and posterior. (Figures 1, 2 & 3)

The financial arrangements, all consent forms and post-op instructions were handled by the front office team.

Follow-up- Visits

1. 24-hour Post-op Visit: When patients receive extensive treatment under sedation, it is impossible to adjust the bite and take care of any areas of the temporary that are not comfortable, because the patient leaves the office both numb and partially sedated. At this visit the bite is adjusted and the appliances are made comfortable. All the patients' questions are answered at this visit as well. The post-op instructions are reviewed. The post-op CBCT image is taken as well.
2. One-week post-op visit. The patient's questions and concerns are addressed and if any further adjustments to the appliance are necessary, they are completed at this visit.
3. One-month post-op visit & Two Month post-op visits. These visits are scheduled to further check in on the patient. However, if the patient wants to schedule an appointment at any time in between, they are encouraged to call the office.
4. Three-Month post-op visit. At the three month visit the temporary restorations were removed to take final impressions of the implant and establish the patient's bite. The temporaries were replaced after the records were taken.
5. Try-in visit #1. At the try-in visit, the temporary restorations were removed to try-in the lab mock-up of the case. This patient did not like the design of the teeth, so a new set of resin temporaries were ordered to be placed at the next try-in visit. The new temporary restorations are designed with the changes the patient requested during this try-in visit.
6. Try-in visit #2. The temporary restorations were removed, the new try-in try-in restorations were put in and showed to patient. The patient approved of the new design. The new resin

temporaries were placed. The lab was instructed to make the Zirconia Restorations designed as the new try-ins had been designed (figures 12 & 13)

Final Restoration Delivery. After removal of the temporary restorations the Zirconia restorations were tried in with a light body PVS material to check the fit of the restoration around the implants. Any premature contact of the implants with the restoration are relieved to achieve a passive fit of the restorations over the implants. Bite adjustments are made. A lingualized occlusion is preferred to protect the restoration in working and balancing jaw movements. Restorations were cemented with a temporary cement to let the patient wear the appliances for a few days to get acclimated before the restoration is cemented with final permanent cement.

In 2023, about 7 years after the initial treatment, one implant on the lower arch, around tooth #22, became infected. In a relatively simple treatment, the implant was removed by sectioning the implant horizontally above the square, leaving the o-ball and square abutment inside the appliance. The remainder of the implant was extracted. (See figures 10 & 11). The patient was placed on antibiotics and reports there are no additional problems. The patient is seen every six months for routine dental recall visits.

Conclusions:

The One-Piece Dental Implantology Paradigm has arrived. Increasing access to care to patients who have been wearing dentures for years, and to patients who have been denied dental implant treatment due to poor bone quantity. Care can also be provided in a less invasive manner to patients who are medically compromised and cannot undergo the multiple surgeries required for conventional dental implant placement. The versatility of the One-Piece implant permits its use in atrophic bone. And with its variety of sizes ranging from 2.0mm in diameter to 5.0 mm in diameter, there is a one-piece dental implant solution for just about any missing tooth space. The smiles before & after say it all. (Figures 9 & 10).



Figure 9: Before

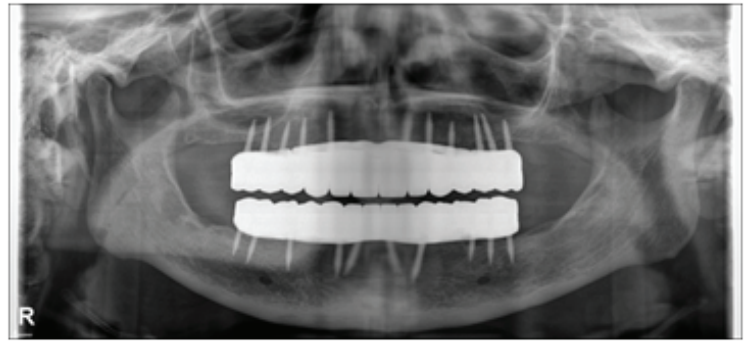


Figure 11: Pano 2016



Figure 12: Pano 2024



Figure 10: After

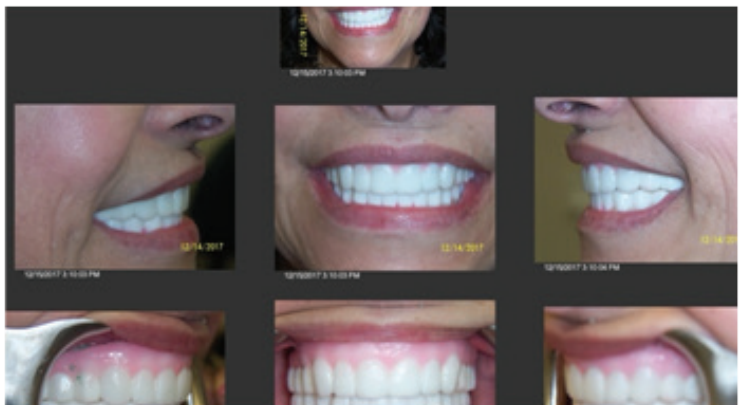


Figure 13: Try-in #2



Figure 14: Try-in #1

CASE STUDY

MINI DENTAL IMPLANT FOR REHABILITATION OF A 40-YEAR-OLD MALE WITH RAMPANT DECAY

DAVID HIPPENSTEEL, DDS

Patient Background:

Mr. X, a 40-year-old male, presented with severe dental issues resulting from a history of tobacco chewing and regular consumption of sugar-laden sodas. These habits had led to rampant decay, particularly affecting teeth in areas 3-10 (upper and lower anterior region).

Clinical Examination:

Upon clinical examination, Mr. X exhibited extensive decay and compromised teeth in the affected areas. The remaining teeth were deemed non-restorable, necessitating extraction for comprehensive rehabilitation of his dental condition.

Extraction: Due to the severity of decay and compromised tooth structure, extraction of remaining teeth in areas 3-10 was recommended.

Provisional Prosthesis: Immediate post-extraction, a provisional prosthesis was provided to ensure patient comfort and aesthetics while planning for long-term rehabilitation.

Consultation and Discussion: Mr. X was educated on the consequences of his previous habits and their impact on his dental health. A collaborative discussion was held to formulate a treatment plan that aligned with his needs and expectations.

Mini Dental Implant Placement: Considering the patient's desire for a fixed and durable solution, mini dental implants were chosen for their suitability in cases of limited bone volume and rapid integration. The placement of mini dental implants provided a stable foundation for the subsequent restoration.

Fixed Cemented Bridge: Following successful integration of the mini dental implants, a fixed cemented bridge was fabricated to restore the edentulous spaces in areas 3-10. The bridge not only addressed functional concerns but also enhanced Mr. X's smile aesthetics and confidence.

Outcome:

The rehabilitation utilizing mini dental implants and a fixed cemented bridge resulted in a significant improvement in Mr. X's oral health and quality of life. He regained the ability to chew and speak comfortably, restoring his confidence in social interactions. Moreover, the aesthetic enhancement provided by the bridge contributed to a positive transformation in his smile.



Follow-up and Maintenance:

Regular follow-up appointments were scheduled to monitor the stability of the implants and the integrity of the prosthetic restoration. Mr. X was advised on proper oral hygiene practices and encouraged to maintain a healthy lifestyle to ensure the longevity of his dental investment.

Conclusion:

The case of Mr. X exemplifies the effective use of mini dental implants in the rehabilitation of patients with compromised dentition due to factors such as tobacco use and dietary habits. Through a comprehensive treatment approach involving extraction, implant placement, and fixed prosthetic restoration, significant functional and aesthetic improvements were achieved, ultimately enhancing the patient's overall well-being.



Shatkin F.R.S.T.[®]

PREMIUM IMPLANT / ORAL SURGERY MOTOR

AEU-7000E-SFI-70V
AHP-85MB-X

With more power, features, and versatility than competing systems, the Premium Series Implant / Oral Surgery Motor is the most reliable, accurate, and comprehensive implant, surgical & endo motor on the market today. This unit is the product of 30 years of motor manufacturing experience, partnered with Aseptico's worldwide reputation for building strong, dependable dental equipment.

The Premium Motor's dynamometer calibration system ensures the greatest operational accuracy. Six programmable preset buttons allow for complete personalization, making it ideal to work with any implant system. It also makes for a powerful oral surgery motor that provides maximum torque for any surgical application, including third molar extractions.

FEATURES:

- Max torque up to 60 NCM (80 in max mode)
- Include AE-70V Multi-function foot control
- Six programmable preset buttons
- Switch between endo mode and implant mode with touch of button
- Auto Handpiece Calibration System
- Large, bright & easy-to read display
- Custom Programmed



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CASE STUDY

ATROPHIC BONE MAY BE BEST TREATED WITH MINI IMPLANTS

DENNIS FLANAGAN, DDS MSC

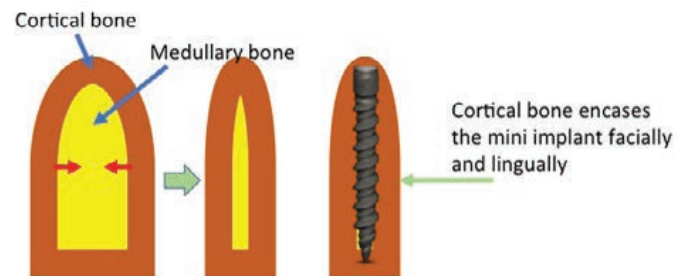
Mini implants have been used to support fixed and removable prostheses for many years (1). After a tooth is extracted the edentulous bone remodels and the facial cortex can migrate to the lingual (2). The resulting edentulous ridge will become smaller in time and as time progresses the ridge become narrower (Fig. 1). A narrow ridge, less than 5mm, may not accept a standard diameter implant. Generally, implants are successful when there is at least a 1.8mm thickness of bone that encases the implant (3). While this dimension is not firmly established it is probably correct. The bone surrounding an implant needs an adequate blood supply for remodeling and to resist the occlusal loading that is imparted by the implant (4). If there is a crack or greenstick type bone fracture with an adequate blood supply via an intact periosteum, this should enable osseous healing without causing a load failure, as long as the implant remains immobile. And the periosteum remains intact. Since the physical size displacement of mini implants is smaller, then the required 1.8mm osseous thickness may be smaller for mini implants, but this has not been studied.

After a long post extraction period an edentulous ridge can become very thin (Fig. 2). Nonetheless, facial and lingual cortices, in close proximity, can provide ad-equate osseous support and also provide adequate blood supply (Fig. 3).

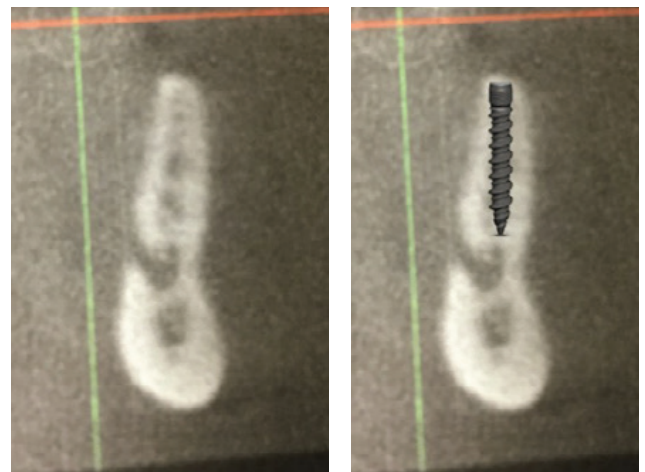
Mini implants can withstand a large amount of vertical loading. However, off axial loads can impart twice the load to the supporting bone as compared to standard diameter implants (5). Thus, dense cortical bone, in close proximity as in an atrophic ridge, can provide ad-equate support for a mini implant supported prosthesis with a long-term functional outcome.

A patient's bite load capacity may be measured pre-operatively as a parameter for patient assessment (5). A high bite load capacity patient may require additional or longer mini implants to withstand a high bite load capacity (6). A high bite load capacity may be over 150N (newtons). There are no established criteria for bite load magnitudes and bone load resistance.

Mini implants can be used to support fixed and removable dental prostheses in atrophic bone. The proximity of the facial and lingual cortices can provide increased support for resistance to occlusal loading.



During atrophy the facial and lingual cortices approach each other providing facial and lingual dense bone for support



Flanagan D, Mascolo A. The mini dental implant in fixed and removable prosthetics: a review. *J Oral Implantol*. 2011 Mar;37 Spec No:123-132.

Flanagan D. A comparison of facial and lingual cortical thicknesses in edentulous maxillary and mandibular sites measured on computerized tomograms. *J Oral Implantol*. 2008;34(5):256-258.

Spray JR, Black CG, Morris HF, Ochi S. The influence of bone thickness on facial marginal bone response: stage 1 placement through stage 2 uncovering. *Ann Periodontol*. 2000 Dec;5(1):119-128.

Flanagan D. Osseous remodeling around dental implants. *J Oral Implantol*. 2019 Jun;45(3):239-246.

Flanagan D. Bite force and dental implant treatment: a short review. *Med Devices (Auckl)*. 2017 Jun 27; 10:141-148.

Flanagan D. Mini Implants Supporting Fixed Partial Dentures in the Posterior Mandible:

CASE STUDY

THE CLEAR ALTERNATIVE CHOICE TO ALL ON 4

DR. RONALD P. PETROSKY, DDS, MAGD, DICOI, DIPLOMATE



The Clear Alternative Choice To All On 4
Simplicity - Practicality - Versatility of **The MONO One Piece Implant.**

I'll second that motion with you Uncle Albert, as I'll choose SIMPLICITY over COMPLEXITY all day long. I like it too, when you said, 'Any darn FOOL can make **something COMPLEX...it takes a GENIUS to make something SIMPLE.**' Amen to that Uncle Albert!

And so, with those Einstein Words of Wisdom from one of the wisest sages ever...The Simplification of any endeavor, implants or whatever, I find that the Philosophy of Simplicity to be 'The Way to Go' for a more successful and enjoyable experience and outcome in our life's experiences, generally speaking. With that said, the personal opinions and observations I would care to share are all about the accolades and advantages of the **One Piece Series of Dental Implants** manufactured by Noris Medical of Israel, and distributed and promoted by Shatkin First in Buffalo, NY, to which I fervently feel is the foundation to **The Clear Alternative Choice to All on 4.** The **Mono Roundhouse** is Simply another PROSTHETIC OPTION worthy of recognition.

The Mono Roundhouse, IMHO

The "Better Mousetrap", better than all the rest because of its:

- **SIMPLICITY:** can be placed **SIMPLY** in a few steps
- **PRACTICALITY:** can be used **SIMPLY** in many missing tooth scenarios
- **VERSATILITY:** can be used **SIMPLY** almost anywhere in the mouth

The Mono Implants are Placed:

- So Effortless & Often Flapless
- With Relative Ease
- Seemingly at a Moments Notice
- With Virtually No Trauma, No Drama



If there's some better implant system than that available today, a 'Better Mousetrap' as it were, I haven't found it!

Actually there is, but they are NOT yet FDA cleared for sale in the USA and yet approved and widely used in most countries around the world!

I certainly recognize, respect, and appreciate that there are many impressive, talented and skilled implant clinicians out there who have DIFFERENT approaches and philosophies of implant selection, placement & prosthetics with DIFFERENT points of view, however, I simply feel that's a more complex and invasive approach using The Two Piece Series.

It may be good, but NOT as good, NOT as simplified, NOT as practical, NOT as versatile as **The One Piece Series!**

Simplicity • Practicality • Versatility
Everyday Implant Applications
One-Piece Series

Simplicity is Our Motto

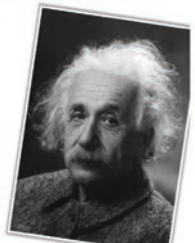


Ronald Paul Petrosky, DDS, MAGD

Einstein on Simplicity

Everything should be made as simple as possible, **but not one bit simpler**

Albert Einstein



The Mono Roundhouse, IMHO

Why COMPLICATE...When you can SIMPLIFY???

If using the Two Piece Series works well for you and patient, then go for it. All I'm saying is that there are other very viable alternatives that many doctors are apparently not aware of, and should be!

Actually, part of the problem with One Piece Implant Acceptance and Popularity in the USA, from what I've observed, particularly the Monos from Noris Medical, is that most USA doctors don't even know The One Piece Series even exists or even how to use them. Unlike those countries such as Spain, India, Israel, Italy, Switzerland, Romania, Peru, Russia, Iran, France, Turkey and many more.

How peculiar is that our FDA has not approved them? International Team of Modern Monolithic Implantology (aka-One Piece Implants).

Most, if not all, of the Top USA Implant Companies don't even offer the One Piece in their product line, as they feature exclusively the Two Piece Implants, with the exception of OcoBiomedical Implants from New Mexico.

However, their One Piece are **NOT bendable**, which is the **THE Game Changer** in my book! Not being able to BEND the abutment led to prosthetic limitations whereby ANGULATION issues were a problem and therefore never really caught on!

Today with **The MonoBendable** there is now a complete set of prosthetic fixed applications available.

Sure seems that all these implant companies and universities care about is the All on 4 Protocol, strange to me, but true! I believe that if you asked a dentist, "Would you put that All on 4 procedure in your mouth?" I believe they would say, "No Way, Jose!" The Past, The Present, The Future of Dental Implants.

I think you all would agree that we should try...

- to **UNDERSTAND** the PAST, in order
- to **APPRECIATE** the PRESENT, and
- to **IMAGINE** an amazing FUTURE.

We should consider some reflecting through the last 100 years gone by of dental implants way before my time, we see:

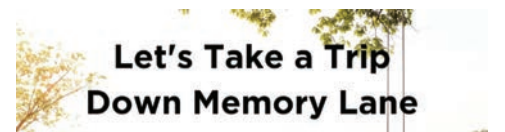
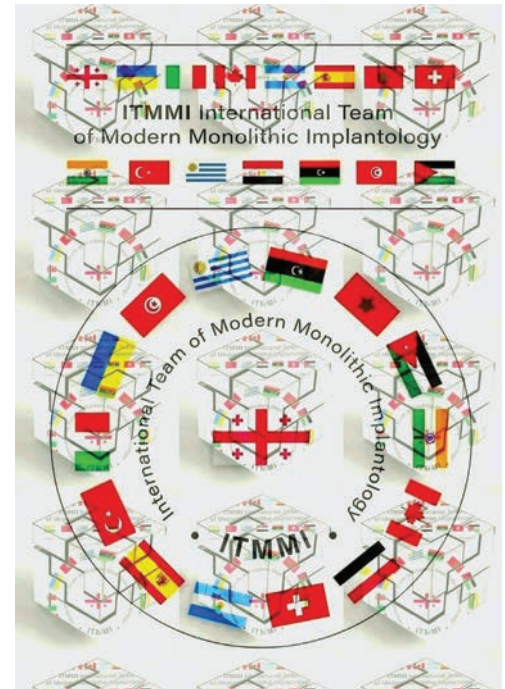
A Brief History of Dental Implants...

In 1913, Dr. EJ Greenfield placed a "24-gauge hollow latticed cylinder of iridio-platinum soldered with 24-karat gold" as an artificial root to "fit exactly the circular incision made for it in the jaw-bone of the patient."

In the 1930's, two brothers, Drs. Alvin and Moses Strock, experimented with orthopedic screw fixtures made of Vitallium (chromium-cobalt alloy).

They carefully observed how physicians successfully placed implants in the hip bone, so they implanted them in both humans and dogs to restore individual teeth.

The Vitallium screw provided anchorage and support for replacement of the missing tooth.



In the 1940's Formiggini ("Father of Modern Implantology") and Zepponi developed a post-type endosseous implant, the spiral stainless steel design of the implant allowed bone to grow into the metal.

- Dr. Perron Andres, from Spain, modified Formiggini's spiral design to include a solid shaft in the construction.
- Dr. Raphael Chercheve, from France, added to the spiral design by creating burs to ease the insertion of the implant for a best fit.
- Dr. Dahl, in Sweden, continued the progression of implant discovery with the subperiosteal (on the bone) implant.
- Gershkoff and Goldberg as well as Weinberg, in the United States from 1947-1948, carried on Dahl's work.

Gershkoff and Goldberg produced a cobalt-chromium-molybdenum implant with an extension of Dahl's design to include the external oblique ridge [7].

In the 1950's, Drs Lew, Bausch, Berman further researched and elaborated upon the subperiosteal implant design. Lew utilized a direct impression method which used fewer supports over the ridge crest.

- Dr. Bodine observed several patients in the armed forces; the framework design seemed to be more streamlined now and he found that fewer struts or girders were needed.
- Dr. Lee who introduced the use of an endosseous implant with a central post.

In the 1960's, Dr. Cherchieve crafted a double-helical spiral implant; it was made of cobalt and chromium.

- Dr. Giordano Muratori further enhanced the spiral shaft during this decade by the addition of internal threading to the shaft of the implant.
- Dr. Leonard Linkow turned the basic spiral design into a flat plate with various configurations in 1963.

In 1967, there were two variations of the blade implant that were introduced by Linkow, making it possible to place it in either the maxilla or the mandible. Linkow developed the Ventplant implant. The blade implant is now recognized as an endosseous implant.

- Dr. Sandhaus in the mid-60's developed a crystallized bone screw whose composition was mainly that of aluminum.

In the 1970s, Drs. Roberts and Roberts began the development of the Ramus Blade endosseous implant. This implant was made of surgical grade stainless steel; according to them, it was to serve as a "synthetic third molar". They also developed the ramus frame implant which received its stability by anchoring in the ramus bilaterally as well as in the symphysis area.

- Grenoble in the 1970's brought in the placement of vitreous carbon implants.
- Weiss and Judy made popular the use of intramucosal inserts during this time; the inserts helped in the retention of removable maxillary prostheses.
- Dr. Small In 1975, introduced an implant device placed through a submental incision and attached to the mandible.

This was known as the first transosteal implant called the mandibular staple implant. This would help those individuals who had an edentulous mandible that was atrophic in nature.

- In 1978, Dr. P. Brånemark presented a two-stage threaded titanium root-form implant; he developed and tested a system using pure titanium screws which he termed fixtures.

These were first placed in his patients in 1965 and were the first to be well-documented and the most well-maintained dental implants thus far. Brånemark's first patient had severe deformities of the jaw and chin, congenitally missing teeth and misaligned teeth. Four implants were inserted into the mandible. These implants integrated within a period of six months and remained in place for the next 40 years.



Fig. 5-35. Chercheve's early spiral, buried well in bone. Note that the spirals are covered by a bony shelf, which makes exfoliation extremely difficult.

He found this discovery accidentally in 1952 when he was studying blood flow in rabbit femurs by placing titanium chambers in their bone; over time the chamber became firmly affixed to the bone and could not be removed. In the 1980's, Dr. Schroder and Dr. Straumann of Switzerland experimented with metals utilized in orthopedic surgery to help fabricate dental implants. Beginning in the middle of the 1980's, the customary implant used by many dental clinicians was the endosseous root-form implant.

The major factors that determined which endosseous implant system was chosen over another included the design, the surface roughness, prosthetic considerations, ease of insertion into the bone, costs and how successful they were over a period of time.

- Dr. Tatum introduced the omni R implant in the early 1980's; it had horizontal fins made up of titanium alloy.
- Dr. Niznick introduced the Core-Vent implant in the early part of the 1980's.

It was a hollow basket implant with a threaded piece in it which helped to engage the bone; he also manufactured the Screw-Vent implant which had a hydroxyapatite coating on it. This surface coating was to allow for more immediate adaptation of the bone to the implant surface. The Core-Vent company also designed the Swede-Vent implant which used an external hexagonal interface to hold the abutment. Dr. Niznick continued to develop other systems including the Bio-Vent and the Micro-Vent.

- Dr. Driskell introduced the Stryker "root form" endosseous implant; there are two versions of this-one made with a titanium alloy and another coated with hydroxylapatite.
- Dr. Kirsch introduced the The IMZ towards the end of the 1970's, was widely used in many countries in the 1980's.

The IMZ implant had some distinctive features; it had a titanium surface spray to increase interface surface area and it also had an intra-mobile element in it to duplicate the mobility of natural teeth.

- The Calcitek Corporation in the early 1980's started making a synthetic polycrystalline ceramic hydroxylapatite called calcite.

In 1985 it produced the Integral Implant System.

- The ITI implant system introduced in 1985 by the Straumann Company has exclusive plasma-sprayed cylinders and screws which are designed to be placed in a one-stage operation.

The most recent dental implant innovations involve the use fluoride, antibiotics, growth factors and laminan.

I personally recall around 1986, where there was a surge of excitement in our dental journals of more predictably placing root form implants such as The CoreVent...my very FIRST IMPLANT placed after attending The Misch Implant Institute.

There was finally a 'cook book' scientifically proven protocol from Dr. Branemark that universities coined 'hang there hat on', to more successfully place & restore implants.

My First Implant 1986 Core Vent

Amazing educators like Drs. Carl Misch & Randolph Resnik started The Misch Implant Institute to which I took the opportunity to attend. His passion and knowledge of dental implants was very informative and inspirational to the entire profession and to me personally.

Unfortunately, Dr. Misch past away in 2017, but his legacy and vision for dental implants that led to their advancements will endure forever. I will say, that back then in the '80, besides the root form implants, they also promoted

- Blade Implants (of which I did a few) and
- Subperiosteal implants



All of which was way too invasive with high risk of complications for me! I simply choose to only place those two stage root form implants with a high rate of success, using flaps routinely. That's way BEFORE the days of CBCT scans and surgical guides, where flaps and bone calipers were the thing for measuring bone width. Seems unimaginable to have placed any implants WITHOUT a CT scan now, but we did! It was definitely much more involved and invasive than the simplification that is available today.

My Blade Implant about 30 years later The Only Constant Thing Is Change

Our profession has seen over the last 100 years many implant, companies, shapes, designs, techniques and technology that have come and go with the wind through that pioneering and empirical trial & error period whereby the 'Test of Time' & 'Test by Fire' has proven to a large extent what works and 'what don't, what stays and what goes, what survives and what dies!'

With such a historical legacy of dental implants, this has been a GOOD THING that has led to much simplification and advancements of the surgical and prosthetic dental implant protocols of today that are LIGHT YEARS ahead from not so long ago !

Through those 100 years of clinical experience and thousands of clinical studies later, with all the competition and innovation of many companies wanting to dominate the market has actually been a good evolutionary progressive thing...

- For advancing & improving the field of Implantology for the doctor and patient
- For successfully educating the public about all the benefits of the alternative implant option for replacing missing teeth as viable & predictable solution

That Was Then, This Is Now...Fast forward to this 21st Century Age of Technology in what I feel could be described as The Golden Age of Implantology there are even...

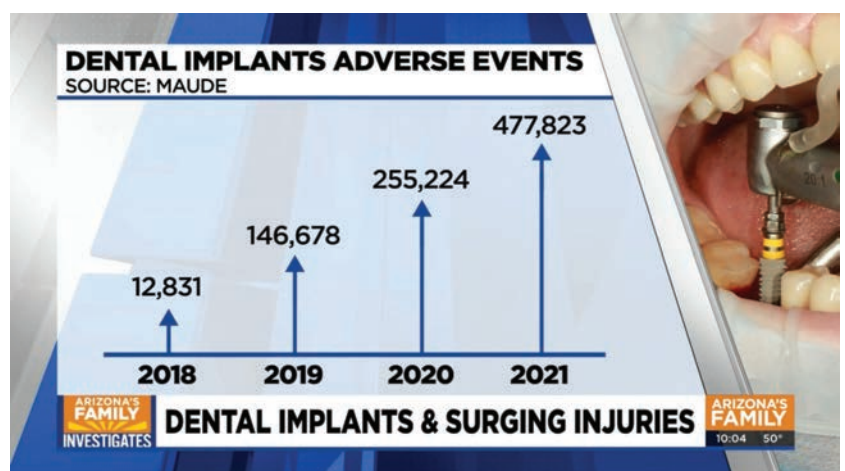
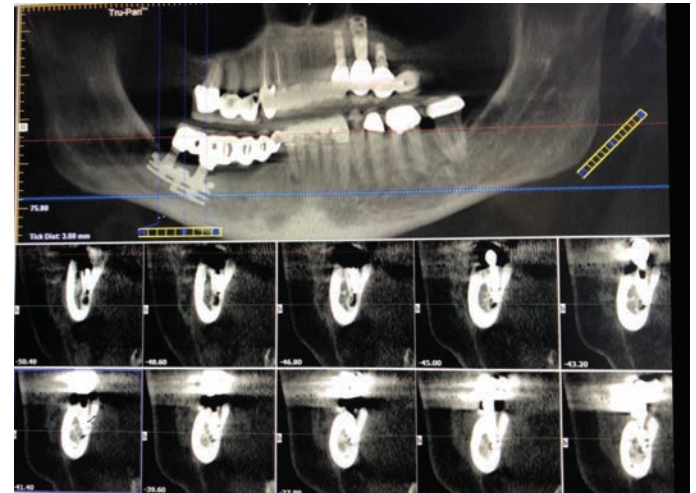
- **MORE** implant companies offering the latest and greatest implant protocols, as well as,
- **MORE** excellent implant training CE programs for dentist after graduation to become qualified in placing and restoring implants,
- **MORE** public access to information and awareness through technology and demand for dental implant solutions has never been greater and growing year after year.

From what I've seen through the year, this is definitely **The Best of Times Ever** to be an implant dentist as well as a patient...and we truly We've Come a Long Way Baby!

With that said, a **Word of Caution** is correspondingly in order in that, there have been an ALARMING UPTICK in investigative reports about Dental Implant Complications over the last few years as reported by an Arizona News TV Broadcast. They questioned the doctors qualifications as a source to this problem. Therefore, doctors placing and restoring dental implants should clearly be adequately trained, taking well respected and comprehensive.

Continued education programs to add to your personal curriculum vitae beyond dental school.

It's like in time, you want have ideally 20 Years Experiences, NOT One Year Experience 20 Times!



Also, becoming members of such dental implant organizations is a good thing, such as:

- The International Congress of Oral Implantologist
- The American Academy of Implantology
- The Academy of Osseointegration
- The International Academy of Mini Dental Implants
- The Academy of General Dentistry
- The Resnik (formerly Misch) Implant Institute

In my opinion, continued education will always renew your flame and passion for your chosen profession indefinitely as change is a never ending process, and since, the only constant thing is change.

Drs. Carl Misch & Randolph Resnik

Consider too, that we must keep up with the changing times since the standard of care is a moving target with ever changing technology and techniques. After say 20 years of time, you ultimately want to have 20 years of experience and not one year experience 20 times!

Document and add to your implant CV and credentials year after year and you'll be more confident and proficient in your implant skills.

So too, will patients be impressed with your achievements and choose you for their treatment.

The Great Debate

One Piece v Two Piece Implants aka Simplicity v Complexity

Given all the top implant companies available today and continued implant education programs out there, what is predominantly promoted is all the surgical and prosthetic applications of the Two Piece Implants and in particular All on 4(x) Full Arch Prosthesis

Common Concerns & Compromises with The All on 4

1 • BONE REDUCTION

All-on-4 requires extreme bone reduction!
> 11-15 mm of bone removal per jaw (½ inch)
22-30 mm both jaws (1 inch)

This Is Crazy! How do you do this to people and sleep at night?

2• ANGLED IMPLANTS AND ABUTMENTS

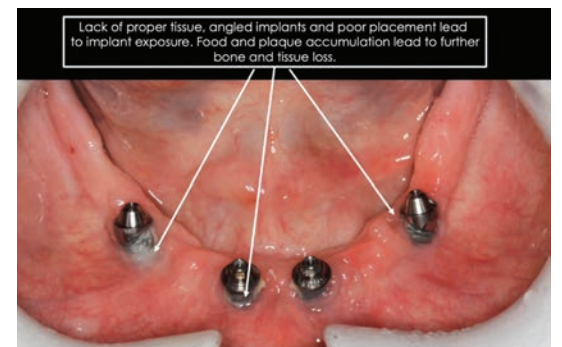
Bone and soft tissue interfaces are healthiest with smooth, gentle transitions. Angled implants and abutments have sharp/abrupt transitions causing soft tissue and inflammation from day one.

3• SOFT TISSUE ISSUES

If there is thin or missing keratinized tissue before the implants it will only worsen over time as bone loss and gum recession increase.



1 Piece VS 2 Piece Implant

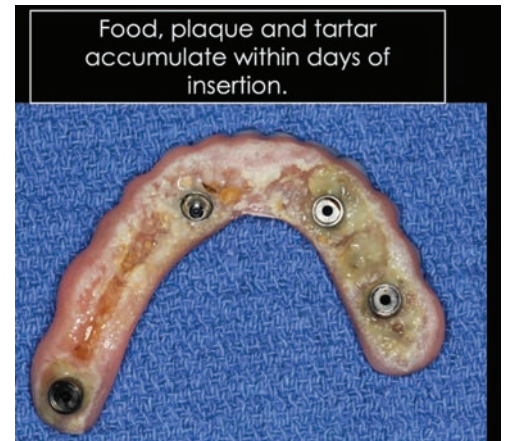


4 • CLEANSIBILITY

Angled implants and abutments prevent the patient from thoroughly cleaning under the prosthesis, leading to bone loss, tissue recession and bad breath.

5 • SPEECH ISSUES

For speech purposes, the upper All-on-4 must place pressure on the tissue to prevent lipping during speech.



6 • TOOTH BREAKAGE



7 • DENTURE BREAKAGE

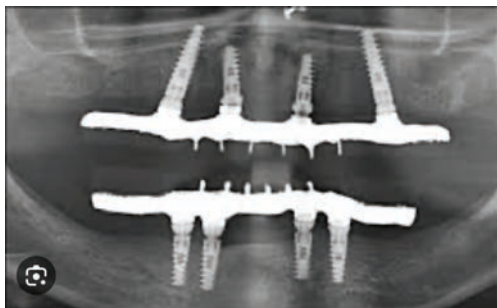


8 • EXTRACTING ANY and ALL HEALTHY TEETH

There are extractions of otherwise, healthy teeth that could have been saved and combined with other implants to make a tooth implant supported prosthesis. Removing of all teeth was criminal!



9 • SCREW LOOSENING & SCREW FRACTURING



Retrieval of Fractured Screws from Dental

[Visit](#)

10 • IMPLANT FAILURE...FROM 'ALL ON 4' TO '3 ON NONE'!



Many implant dentist today do promote The All on More or The All on X so as to place 5-8 Implants for:

- Better Biomechanics
- Better Anterior-Posterior Spread

After all, when one implant fails with All on 4, then it's Three on None!

Given such potential issues and complications using the Two Piece Implants and All on 4 protocol, I personally find much greater success utilizing the Simplicity - Practicality - Versatility of The One Piece Series with all their full range of prosthetic solutions.

More specifically, I choose **The One Piece Series** and design of the **Mono & MonoBendable** implant for most of my FIXED implant restorative procedures.

Two Piece implants may be good, but for me, One Piece Implants are so much better for a variety of reasons to be mentioned.

I speak from my personal experience and enthusiasm since I've been able to restore so many challenging missing tooth scenarios with that simplified and minimally invasive approach. They have for sure, 'Saved the Day', for many of me and many of my patients.

'Gotta' love in particular the Noris Medical One Piece Motto, which is: **'Simplicity is Our Motto'**

Reminds us all of the 'KISS' Principle namely 'Keep It Simple Stupid'!

The **SIMPLICITY** of restoring missing teeth utilizing that Mono One Piece design, with its tapered, aggressive self-tapping threads, enables me to employ Simplicity • Practicality • Versatility while placing and restoring implants in treating a FULL RANGE of missing tooth clinical scenarios, such as:

The **PRACTICALITY** of Restoring Missing Teeth such as:

- Edentulous Sites
- Immediate Placement Sites
- Anterior or Posterior Sites
- Maxillary or Mandibular Sites

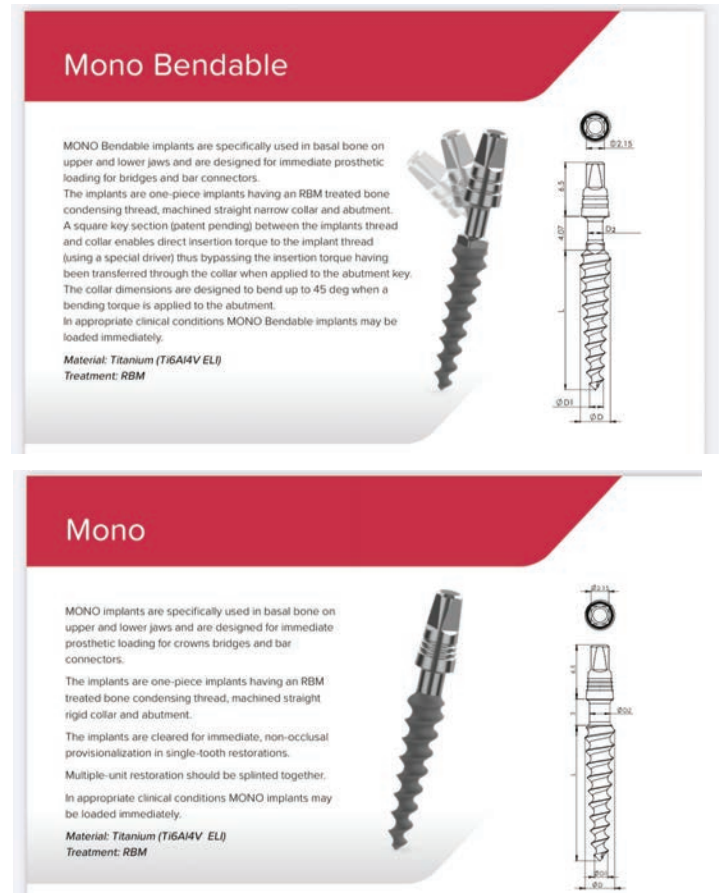
All of this broad range of everyday scenarios and solutions can be done in an **Effective, Efficient, and Efficacious** manner that satisfies the patient and doctor. Minimally Invasive Implantology at its best, IMHO.

The **VERSATILITY** of Restoring Missing Teeth we can usually plan treatment with the One Piece Implants such as

- Single Units Anterior
- Single Units Posterior
- Multiple Units Anterior
- Multiple Units Posterior
- Maxillary Roundhouse
- Mandibular Roundhouse
- Mini Roundhouse (10-12)

Photo examples of such cases have been shared to illustrate all the full potential of the One Piece Series that strangely enough, are hardly advocated in this country (USA), aside from the innovative vision of **Shatkin First** in Buffalo, NY and many of its members in **The International Academy of Mini Implants**.

With the exception of the severely atrophied maxilla and mandible which may require remote placement of Zygomatic and Pterygoid implants and/or an IAN bypass, the One Piece Series of Mini and Mono Implants truly have been in all of Implantology, a modern day game changer...at least for me it is! Absolutely love placing these implants day after day.



Generally speaking, there is always a learning curve with all procedures, and that's true with placing the Mono One Piece Implants. That said however, it's much shorter, more gratifying, and more successful than any procedure I've ever seen.

When comparing...One Piece vs Two Piece with One Piece Implants there is almost always:

- No Bone Removal Generally
- No Flap Generally
- No Stitches
- No Peri-Implants
- No Screw Loosening
- No Screw Fracturing
- Minimal Grafting
- Less Inventory (Parts & Pieces)
- No Surgical Stents Generally
- Less Cost

That translates, for the doctor and patient, less treatment time, less healing time, less complications during the actual treatment and the after long term maintenance.

Although it's true that no one Implant Design Fits All but it sure seems to me that the **Mono One Piece** Design is the **MOST VERSATILE & PRACTICAL** implant available.

Given those parameters and solutions, The Mono One Piece fulfills the needs of many patients I see on an everyday basis. If there is something better than that out there, please do share, because I have not seen it and I always love to learn about something new. After all, I'm well aware, we don't know what we don't know!

So, the message of this post in conclusion generally is Simplicity > **Complexity Why COMPLICATE...When you can SIMPLIFY?**

One Piece v Two Piece Implant

(From Precigem World by Dr. Mayar Khairnar, Dr. Darshana Khanar)

1. Consideration

- **One Piece:** The implant and the abutment are fused – they are manufactured as one piece.
- **Two Piece:** The implant and the abutment are separate. The abutment is either cemented or cold welded. If the abutment is secured with a screw onto the implant, then it can be considered to be three pieces.

2. Basic Design

- **One Piece:** Simple. No Joint. Single Piece.
- **Two Piece:** Complex. Two Parts Joint by Screw

3. Implant Placement Procedure

- **One Piece:** Single sitting surgical procedure and very often flapless (no open surgical procedures are necessary). Implant procedures are less time consuming than that required for bridgework.
- **Two Piece:** Very often more complex surgical procedures are necessary, spread over 2 or 3 sittings in a period of 3-6 months (Implant Placement, Healing Screw Placement & Abutment Placement).



4. Loading

• **One Piece:** Immediate Loading - ie patient can be given the crown(s) / bridge(s) the very next day.

• **Two Piece:** period of 3-6 months (Implant Placement, Healing Screw Placement & Abutment Placement).

5. Prosthodontic procedure

• **One Piece:** Conventional impressions of the implants can be made just as is the case with conventional bridgework. Less time consuming. Also, Digital Scanning is even better with accuracy, efficiency, cost, and comfort.

• **Two Piece:** Conventional impressions of the implants can be made just as is the case with conventional bridgework. Less time consuming.

6. Size and Designed

• **One Piece:** A wide range of sizes and designs are available suiting various bone types and measurements. The designs even help avoid bone augmentation and sinus lifts.

• **Two Piece:** Limited sizes and designs are available thereby limiting their application.

7. Cost

• **One Piece:** These work out a lot more cost effective in comparison with two/three piece implants.

• **Two Piece:** Expensive - with respect to the costs of the implants as well as the time taken for multiple procedures.

8. From the Patient's Point of View

• **One Piece:** Less complex placement procedure, less number of sittings and crown(s) and bridges can be cemented in a day or two, more or less like that of a conventional bridgework and costs are comparable with that of conventional bridgework.

• **Two Piece:** Crowns/bridges are cemented only after 3 months after the healing phase. Much more expensive than the conventional bridgework.

9. Screw Loosening

• **One Piece:** Absent. Since there is no separate abutment-screw-implant assembly.

• **Two Piece:** Very common. Being two piece, the relation between the root portion and the abutment portion can present problems. Studies have proved that two piece implants experience higher mechanical stress under oblique loading.

10. Long-Term Maintenance

• **One Piece:** Being a single piece, the strength provided by the implant is excellent and there is no separate root portion and abutment portion. Maintenance is very simple, maintenance is just the same as that of conventional bridgework.

• **Two Piece:** Maintenance of these implants are more complex, very often screws (when used) are to be tightened at periodic intervals as there will be micro-movement between the implant and the abutment

Meet the Noris Medical One-Piece Dental Implants (OPDI) Series

Noris Medical's One-piece dental implants (OPDI) have multiple advantages.

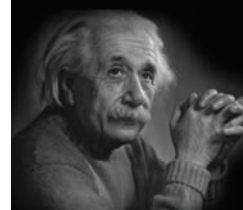
- ✓ **The main advantage is the One-Piece**
The lack of the abutment/implant gap is significant in preventing bacterial contamination and crestal bone loss.
- ✓ **One-piece implants are cost-effective**
When compared to conventional implants, as they eliminate the need for cover screws, healing abutments, subsequent separate implant attachments, separate implant abutments, or procedures that require time, effort and staff to attach or detach various prosthetic elements.
- ✓ **OPDIs eliminate the need for second-stage surgery**
mucosal healing period, and decrease patient exposure to additional unnecessary pain and discomfort.
- ✓ **OPDIs provide fast and minimally invasive replacement of missed teeth**
Single piece implants are less invasive
and are either immediately loaded in case of good bone quality, or progressively loaded in case of less than ideal bone quality.
- ✓ **The implants are usually designed with**
 - dense v-shaped or reverse buttress threads
 - calcium phosphate blasted surfaces, to achieve high primary stability when loaded immediately
 - a thick smooth collar for soft tissue support
- ✓ **OPD Implants have wide versatility**
The implants are provided with different abutment types for removable or cemented restorations and with a wide range of small and large diameters from 1.8 mm up to 5.0 mm.

Challenges with angulation could be avoided by digital planning or by the use of parallel pins after each drill so any deviation could be corrected with the subsequent drill, or by combining the slanted implant with an angled abutment. Mono Bendable provides the flexibility of an adjustable abutment element which can be oriented in any direction, and are cost-effective!

Single piece implants insertion protocol is learnable, easy to use and implement in everyday practice.

*So, Keep on searching,
Never stop questioning,
Always lots to learn.
These are the
Best of Times to be an implant dentist,
especially utilizing
The One Piece Series*

The important thing is
not to stop questioning.
Curiosity has its own
reason for existing.



Albert Einstein
German Theoretical-Physicist
(1879-1955)

QuoteHD.com

#1 Case in Point

Maxillary Roundhouse

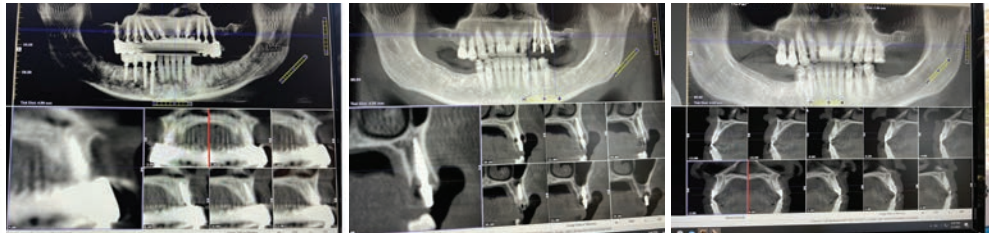
One-Piece Series

Simplicity is Our Motto



NORIS Medical

Ronald Paul Petrosky, DDS, MAGD




#2 Case in Point

Mandibular Roundhouse

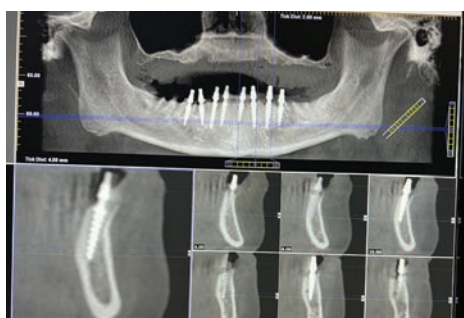
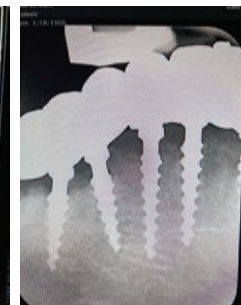
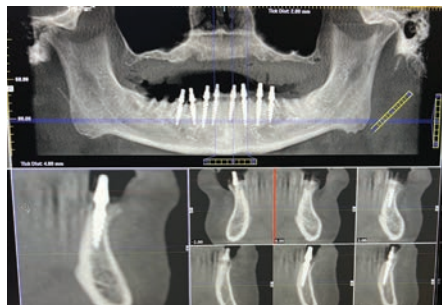
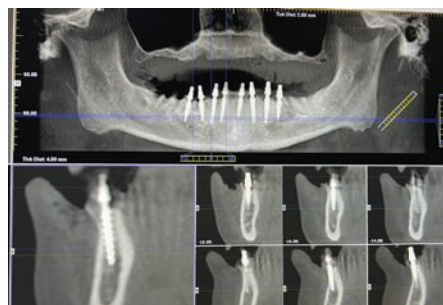
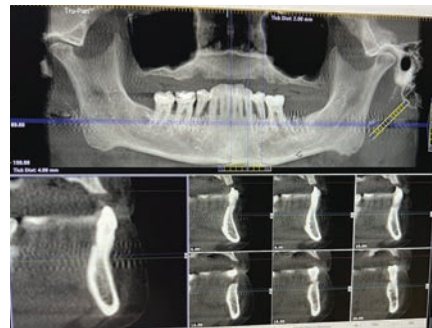
One-Piece Series

Simplicity is Our Motto

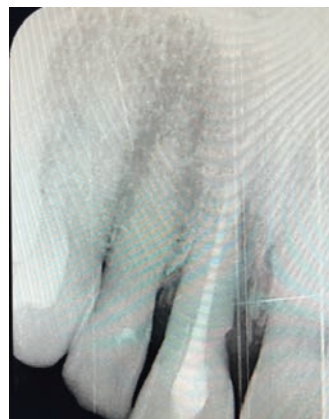
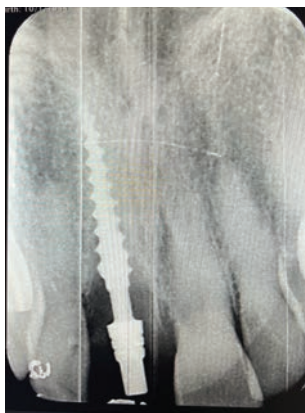
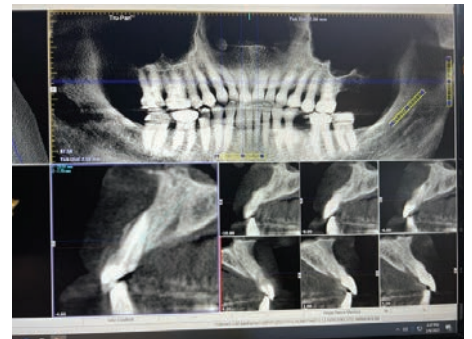
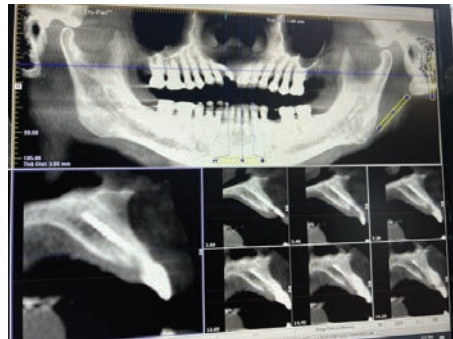


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#3 Case in Point

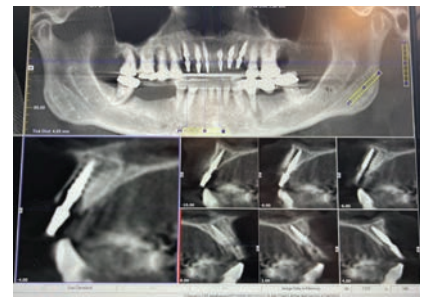
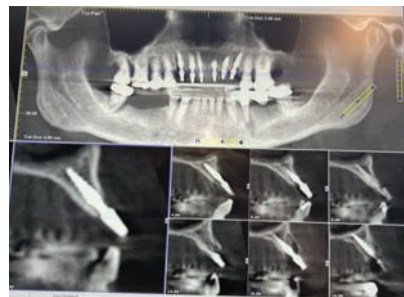
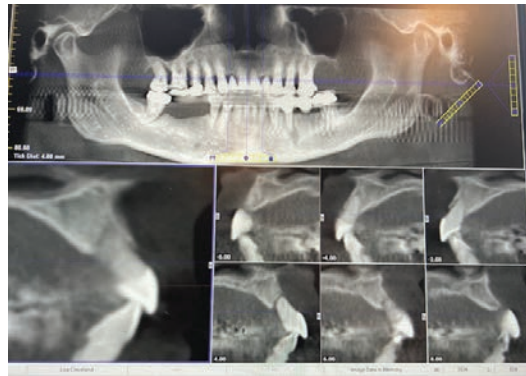


#4 Case in Point

Multiple Anterior
One-Piece Series
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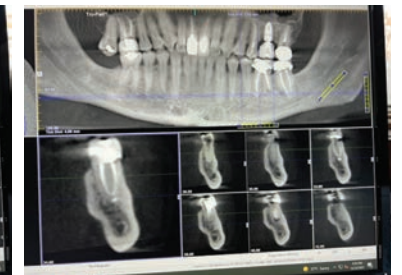
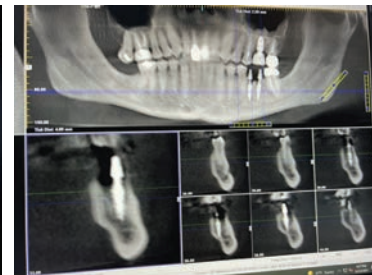
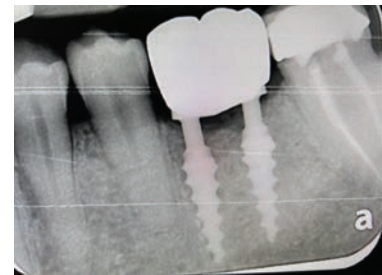
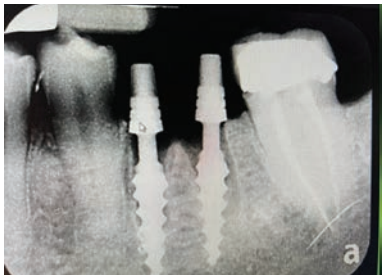
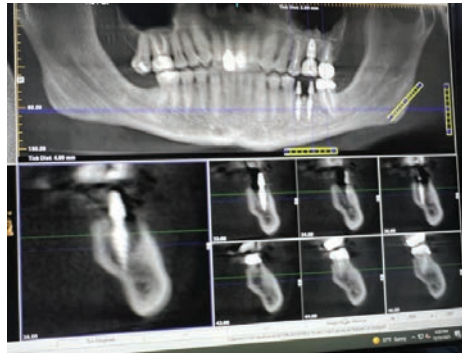


#5 Case in Point

Single Posterior
One-Piece Series
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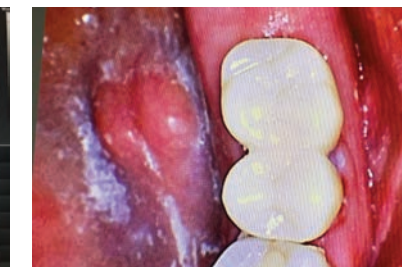
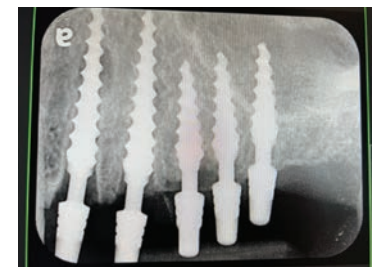
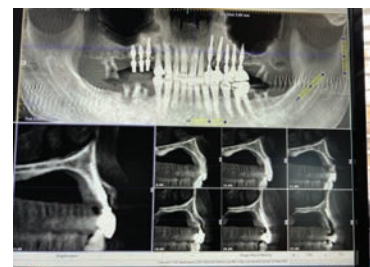
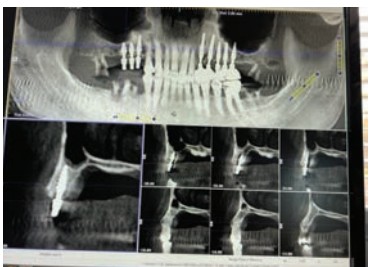
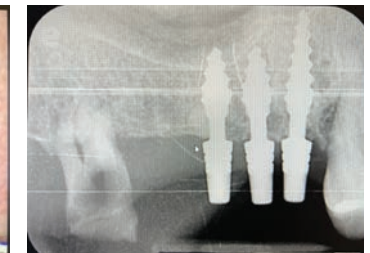
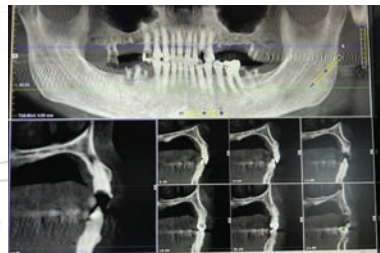


#6 Posterior

Multiple Posterior
One-Piece Series
 Simplicity is Our Motto



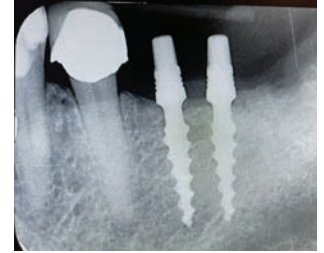
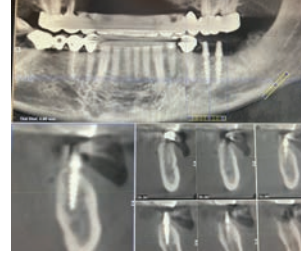
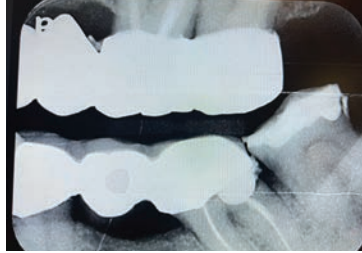
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#7 Case in Point

Tooth-implant Supported Prosthesis
One-Piece Series
 Simplicity is Our Motto

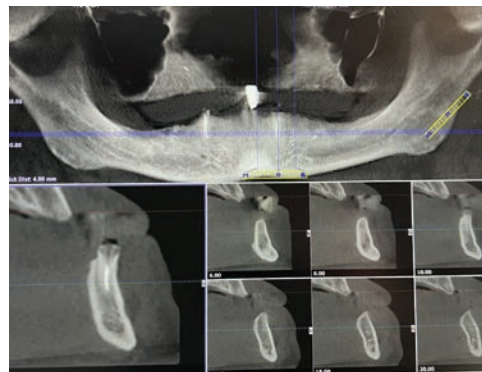
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#8 Case in Point

Maxillary & Mandibular Roundhouse
One-Piece Series
 Simplicity is Our Motto

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#9 Case in Point

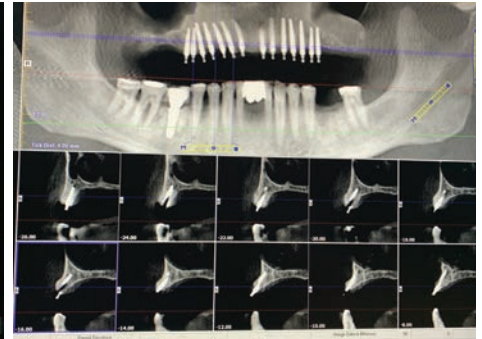
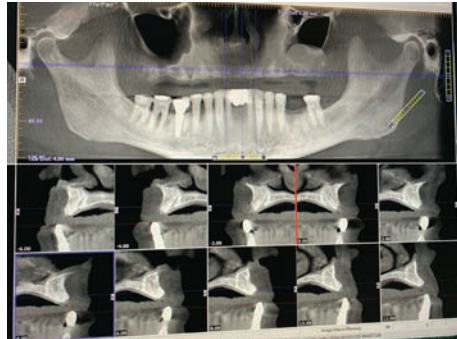
MINI ROUNDHOUSE on COMPROMISED MAXILLA

One-Piece Series
Simplicity is Our Motto



NORIS Medical

Ronald Paul Petrosky, DDS, MAGD



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penguin^{MDI}



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CASE STUDY

SOLVING A COMPLICATED RESTORATIVE CASE USING CROWNS, BRIDGES & MINI DENTAL IMPLANTS

STEPHEN J. WESSELS, DMD, PA

Will presented in my office March 2019 for a mini implant consultation. He is a 17 year old high school student athlete who appeared very shy and reluctant to smile. His mother and grandmother accompanied him at the consult. After getting a thorough medical history and taking a panoramic x-ray along with CBCT 3D x-rays, a dental exam was performed. We all set down in the operatory and discussed their concerns.

Will had amelogenesis imperfecta (A.I.) a condition that includes multiple congenitally missing teeth, in Will's case he was missing #'s 1, 2, 3, 7, 8, 10, 14, 15, 17, 18, 24, 25, 31 & 32; #'s 4, 5, 6 were present but were positioned distally by one tooth width so for this article #'s 4, 5, and 6 will be referred to as #'s 3, 4 & 5. Other symptoms of A.I. include smaller sized teeth, pitted, chalky, decalcified enamel. Decay was present on all of Will's existing teeth with #9 being unsalvageable. The main things Will disliked about his smile were missing teeth, smaller than normal sized teeth, darker teeth, and wearing upper and lower flippers to replace #6, 7, 8, 10 & 24, 25; The flippers were fabricated by his orthodontist. He was very self-conscious about his smile, and like a lot of people he learned to communicate without showing his teeth. He also shared with us how he had been teased and made fun of about his smile since was a small child. His mother expressed excitement in the fact that Will was old enough for them to consider permanent (implant) options

Will's general dentist recommended that he consider extracting all his teeth and having all-on-4 appliances. He went to an oral surgeon for a consultation before seeing me.

I treatment planned crowning existing teeth #'s 3, 4, 5, 11, 12, 13 with a full-arch pre-fabricated temporary bridge from #3-13. Zirconia crowns were selected for strength and durability. On the lower arch crowns were recommended for teeth #'s 19, 20, 21, 28, 29, & 30. In replacing the missing teeth a six-unit bridge #'s 22, 23-26 & 27 was decided upon based upon the fact that there was extensive bone loss on #'s 24 & 25 so mini implants were not an option on the lower. On the maxillary I recommended having a five-unit mini implant retained bridge #'s 6-10 utilizing sites # 6, 7, 9 (immediate) and 10 for the mini implants. Site #8 has insufficient bone for an implant. This VDO was to be



increased a total of 5mm (3mm maxillary and 2mm mandibular). B1 shade was selected (pre-op A3). The advantages of saving Will's existing teeth (except #9) with crowns, bridges and mini dental implants to replace his missing teeth on the uppers were explained to everyone at the consult. Mini dental implants are significantly less expensive than traditional surgically placed larger implants, usually no bone grafting is required, very little pain or discomfort, no surgery needed, a lot less healing time needed (a few weeks compared to up to a year with bone grafting and traditional implants) and a lot less dental appointments. Will, his mother and grandmother were excited at the prospect of being able to restore his smile in a more affordable, timely and conservative manner.

After some discussion, the treatment plan presented was agreed upon. We took initial polyvinyl impressions and a bite registration (Imprint) to fabricate a maxillary temporary bridge #'s 3-13. Intra-oral pictures were taken and Will was scheduled for his first restorative appointment with us two weeks later.

At Will's first restorative appointment teeth #'s 3, 4, 5, 11, 12 & 13 were prepped for crowns. All six teeth required core-build ups due to decay. Margins were intentionally placed slightly sub-gingival. The temporary bridge was lined with Luxatemp. Final impressions and a bite registration indicating midline and plane were taken. The temporary bridge was polished and cemented with Telio cement. Very little occlusal preparation was needed since we were increasing the VDO by 3mm.

A side note worth mentioning; just having the temporary bridge was very encouraging and exciting for Will. A brighter smile with normal sized teeth gave Will the confidence he needed to go to his junior prom and smile for all the photos!

For Will's second restorative appointment after removing the temporary bridge #'s 3-13, we cemented his solid Zirconia crowns #'s 3, 4, 5, 11, 12 & 13 using Relyx



cement. Next, two 2.5 x 15mm MDL Intralock mini implants were placed in #'s 6 & 7 sites. Site #8 has insufficient bone so nothing was placed there, tooth #9 was extract-ed and an immediate 2.5 x 15mm MDL Intralock mini implant was placed in solid palatal bone. A slim Osteogen collagen plug was packed in the socket around the mini implant with a 4-0 gut suture approximating the tissue. Site #10 had a 2.0 x 15mm MDL Intralock mini dental implant. The implants were all solid on percussion and torqued above 30 NCM. PA x-rays confirmed good positioning. The next step was to section the temporary bridge between #'s 5/6 and 10/11; shims and housings on #'s 6, 7 and 10 minis were placed with a healing cap on #9 mini. Next the temporary #6-10 was lined with Luxatemp picking up the housings and healing cap, polished and cemented Will's temporary out of occlusion. Will was on a regimen of Amoxicillin 500mg for 7 days, along with Motrin 800mg q 8h prn pain. Eight weeks were allowed for healing. We saw Will the next day for a post-op visit and he was doing very well with minimal discomfort.

Eight weeks went by quickly. The temporary bridge #'s 6-10 was removed using a Schumaker crown/bridge remover. Postop PA x-rays were taken, gum tissue and mini implants were examined and appeared healthy and normal. No discomfort noted. Final polyvinyl impressions were taken for the permanent bridge #'s 6-10, along with a lower Silgenot impression and an Imprint bite registration noting plane and midline. The temporary was re-seated. Three weeks later the temporary bridge # 6-10 was removed and the permanent bridge cemented permanently using Shatkin resin cement. Intra-oral pictures were taken. Will was very pleased with his progress at this stage.

With the advancement of mini-dental implant technology specifically using the Intralock mini-dental implants, and from the training and guidance from Dr. Todd Shatkin at the mini-dental implant training center in Amherst, NY, I was able to successfully navigate an unusual restorative situation with a fairly quick and economical solution. The Intralock mini dental implants are advantageous for several key reasons: they have an Ossean surface coating which aids in better integration by attracting osteocytes at the nano-level, they are self-threading, and the abutment implant are one-piece so no screws or extra parts are needed to be ordered.

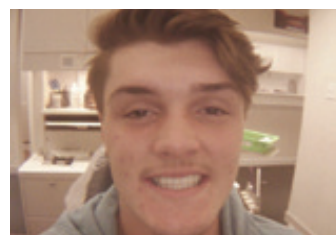
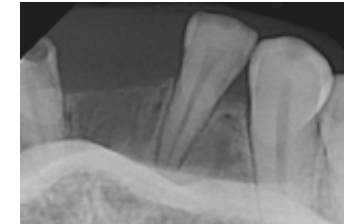
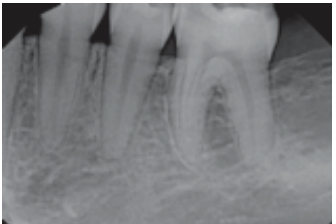
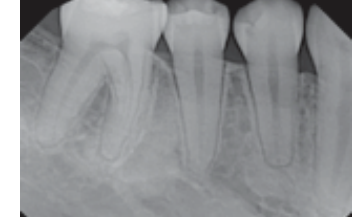
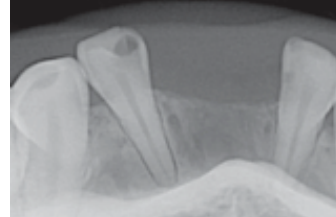
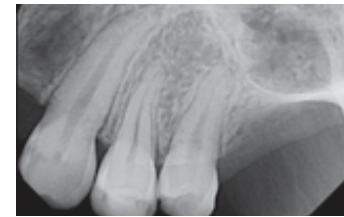
A few weeks later we saw Will to restore his lower teeth. An immediate lower temporary bridge #'s 19-30 had been fabricated previously. Crown preps for solid Zirconia crowns were done on #'s 19, 20, 21, 28, 29 & 30. Core buildups were placed on all six teeth due to

decay. The VDO was to be increased by 2mm. Teeth #'s 22, 23, 26 & 27 were also prepped for a six unit bridge 22-27. Final polyvinyl impressions were taken, a bite registration and an opposing model. The temporary was lined with Luxatemp, trimmed, polished and cemented with Telio cement.

We saw Will for his final restorative procedure a few weeks later. Permanent Zirconia crowns were cemented on teeth #'s 19, 20, 21, 28, 29, 30 using Rely-x cement, then the lower anterior six unit bridge #'s 22-27 was cemented also using Rely-x cement. Occlusion was verified. Post-op intra oral pictures were taken and high fives and hugs were going around! Everyone was a little overcome with emotion as we admired

Will's new smile! Several tears were shed thinking about how far Will had come in a few short months.

In conclusion, Will presented to me for a consultation March 2019. He had a very challenging restorative situation with Amelogenesis Imperfecta - lots of missing teeth, small, chalky, pitted and decayed existing teeth. He had very little bone to work within the area of missing teeth, major cosmetic issues, VDO issues, not to mention the emotional component of a young man who was picked on and teased about his teeth/smile since he was a small child. To solve all these issues, crowns were placed on 3, 4, 5, 11, 12, 13, 19, 20, 21, 28, 29 & 30. A six unit bridge from 22-27 was placed, permanently replacing 24 and 25 missing teeth. Implants were not possible on 24, 25 area due to an extreme amount of bone loss. A mini-implant supported bridge was cemented over # 6, 7, 9 & 10 areas replacing five missing teeth on the upper. Vertical dimension of occlusion was increased by a total of 5mm (3mm maxillary, 2mm mandibular). The shade selected was B1. After everything was done, Will now had normal-sized teeth and a beautiful bright smile! Increased self-confidence was noted every time we saw him using crowns, bridges, and mini dental implants we were able to restore/rebuild Will's smile beyond what was hoped or expected - and his confidence! Priceless.





CASE STUDY

MAXILLARY & MANDIBULAR FIXED/ RETRIEVABLE PROSTHESES

RANDY STAPLES, DDS



A 31 year old male presented to our office for consultation requesting a full mouth makeover. Due to his work schedule, he requested that his work be done with long appointments having a minimum of 8 to 12 weeks intervals and stated that he could not start his work for six months. He also requested that I devise a treatment plan that did not include removable dentures as a final product.

He stated that he was having some “severe pain with an upper left molar and two teeth on his lower right side.” He requested that I get him out of pain and he would make the arrangements to return to the office in six months to begin his treatment.

With these patient requests regarding his treatment schedule in mind, we proceeded with a clinical exam, review of his medical profile, impressions for study models and a Panorax-ray. Treatment plans were detailed and discussed that included different ways to achieve his full mouth reconstruction.

The patient chose the extraction of all remaining teeth with the fabrication of maxillary and mandibular mini implant retained fixed/retrievable full arch bridges.

The three teeth causing his immediate pain were then removed with forceps and a local anesthetic. All information required was then sent to Shatkin FIRST Lab along with instructions to fabricate maxillary and mandibular full arch temporaries.

At his request, the patient was then dismissed with an appointment to return to our office in six months. He received a water flosser, chlorhexidine rinse, and detailed suggestions for his oral hygiene maintenance until his next dental appointment.

When the patient returned to our office, we proceeded with the removal of all remaining teeth, the placement of mini implants and the seating of the temporary bridges fabricated by Shatkin FIRST Lab. The temporary bridges were retained with Shatkin FIRST plastic healing caps.

The patient wore these temporary bridges for four months before returning to our office to complete the placement of additional implants and taking of the impressions for his final restorations. These final implant placements were planned and guided with use of a Genoray Papaya 3D Combination Cone Beam X-Ray Imaging System.

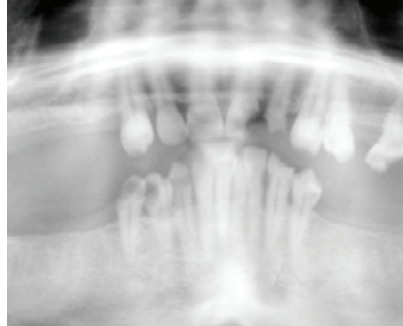
One month later we completed his treatment with the seating of his fixed prostheses.

MAXILLARY & MANDIBULAR FIXED/ RETRIEVABLE PROSTHESES

RANDY STAPLES, DDS

Initial Panoramic X-Ray
Initial Intraoral
Extractions & Placement Minis in Maxilla
Extractions & Placement Minis in Mandible
Temporary Bridges
Final Placement Minis Maxilla
Final Placement Minis Mandible
Seated Bridge Maxilla
Seated Bridge Mandible
CT Minis Placement
Finished Case

1



2



3



4



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6



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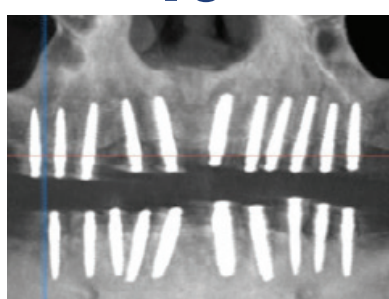
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