



International Academy of Mini Dental Implants

LAS VEGAS, NV • CAESARS PALACE

JUNE 22 & 23, 2023



2023

CASE STUDIES

Andrea Joy Smith, DDS

Ronald Petrosky, DDS

Harvey Chin, DDS

James Tharp, DDS

Ahono Gildersleeve, DDS

Alan Robinson, DDS - Posthumously

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**SHATKIN MINI DENTAL IMPLANTS
SELL THE SOLUTION, NOT THE PRODUCT!**



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From the Desk of Dr. Diana Rodriguez, DMD President



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

I am truly honored to address you today as the incoming President of our esteemed Academy. I am deeply appreciative of the opportunity to serve in this distinguished role and to carry on the legacy of my predecessors in promoting minimally invasive dentistry through the advancement of mini dental implants.

As a dentist with many years of practice, I have personally witnessed the transformative impact that mini dental implants bring to our patients' lives. The effectiveness and affordability of these minimally invasive solutions have revolutionized implant dentistry and broadened the scope of oral healthcare. My vision is to further this progress by encouraging the widespread acceptance and adoption of mini dental implants within the dental community and ensuring that patients have access to the latest developments we have to offer.

As your President, I am devoted to upholding the Constitution and By-laws of our Academy and fulfilling my responsibilities with the utmost diligence and professionalism. I am committed to working closely with my fellow members in fostering education, innovation, and the high standards we have achieved with mini dental implants. Together, we will continue to inspire and enable dentists worldwide to provide the best possible dental care for their patients.

I would like to extend my sincere gratitude to the officers and members for placing your trust in me with this crucial responsibility. I eagerly anticipate working alongside each of you in pursuing our collective goals and ensuring the ongoing success of the International Academy of Mini Dental Implants.



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Message From the Editor Todd Shatkin, DDS



Dear Fellow Academy Members, Colleagues and Friends,

It was an honor to be part of the International Academy of Mini Dental Implants. I would like to personally thank Dr. Robert Casledine for blazing the trail with past issues and for his professional leadership as President Emeritus.

This is an exciting time in Dentistry! With all of your help, Mini Dental Implants have revolutionized Dentistry, making an implant procedure less invasive, less painful with less healing time, less visits to the dentist, and more affordable than conventional implants. We can replace missing teeth in as little as one visit and stabilize dentures in as little as an hour. WOW!!!

Dr. Gordon Christensen, a diplomat and founding member of our Academy, stated on numerous occasions that every General Dentist should be offering mini dental implants in his or her practice. My Father, the late Samuel Shatkin, Sr. DDS, MD (also a founding member of the Academy), told me 20 years ago that mini dental implants gave him a reason to keep working into his 70's. I was very fortunate to have practiced with him by my side for over 20 years. He helped dentists from all over the world gain a better appreciation for Mini Dental Implants. He prepared me to do what I do today, providing Doctors with the knowledge and skills needed to grow their practices while providing an affordable, fast solution to loose dentures and missing teeth.

In conclusion, I want to thank Dr. Andrea Joy Smith who has led us as President the past two years. She has represented the position as President in a honorable manner and we thank her for her leadership!

I invite you to send me your interesting cases in a way (word document with photos) that we can share your experiences with your IAMDI family. Let's grow together and grow our membership.

Outgoing President's Letter



Dear Fellow IAMDI Members,

For the past two years, it has been an absolute pleasure to serve as your President.

My stated mission, as President, was to advance the mini dental implant paradigm. This mission is realized by each one of us daily, as we continue to provide this valuable service to our patients. There is no better way to advance this paradigm.

Colleagues and friends, I would like to personally thank you for your continued participation in the Academy. The Academy is stronger today because of each one of you. The unmatched support given and received by the Academy Members is the cornerstone of our organization.

Finally, growing our membership, is the key to advancing the mini dental implant paradigm. I encourage each of our members to spread the word to our dental colleagues and invite them to attend our Academy meetings.

Thank you all for your continued support. It has been my honor to serve the academy. And now it is time to pass the Presidential Gavel to Dr. Diana Rodriguez, DDS, our respected colleague and friend.

Respectfully & Sincerely,

Dr. Andrea Joy Smith

GUEST SPEAKER



DENNIS FLANAGAN, DDS MSc

Dr. Dennis Flanagan is the managing partner of a two location private general dental group practice with 35 employees. He is a diplomat of the American Board of General Dentistry, International Congress of Oral Implantologists and American Board of Oral Implantology/Implant Dentistry.

Dr. Flanagan is an Attending Dentist for the US Olympic Committee and the Windham Community Memorial Hospital where he was Chief of Dentistry for more than 8 years.

Dr. Flanagan has published over 100 articles in dentistry and holds six US patents on medical and dental devices. He has made many presentations at national and international dental conferences. Dr. Flanagan is an Honored Fellow of the American Academy of Implant Dentistry, Fellow of the Academy of Osseointegration and American Board of Forensic Dentistry. He is on the editorial board of several dental journals. He is a former editorial consultant to the Academy of Osseointegration, and former editor for Oakstone Medical publishing. He is an examining board member of the American Board of General Dentistry and American Board of Oral Implantology/Implant Dentistry. He is a senior associate editor for the Journal of Oral Implantology. He has been a paid consultant to Proctor and Gamble, Blue Cross, and National Medical Insurance Consultants. He is a Georgetown University School of Dentistry (DDS) graduate, has studied oral implantology at Harvard University Dental School (certificate) and at the Goethe Medical University, Frankfurt Germany (MSc). He is an associate professor in dental medicine at Lugano University of Switzerland Malta.

GUEST SPEAKER



GORDON CHRISTENSEN, DDS

Founder and Chief Executive Officer of Practical Clinical Courses (PCC), Chief Executive Officer of Clinicians Report Foundation (CR), and a Practicing Prosthodontist in Provo, Utah.

Gordon and Dr. Rella Christensen are co-founders of the non-profit CLINICIANS REPORT FOUNDATION (previously named CRA). Currently, Dr. Rella Christensen is the Director of the TRAC Research Division of the CR Foundation. Since 1976, they have conducted research in all areas of dentistry and published the findings to the profession in the well-known CRA Newsletter now called CLINICIANS REPORT.

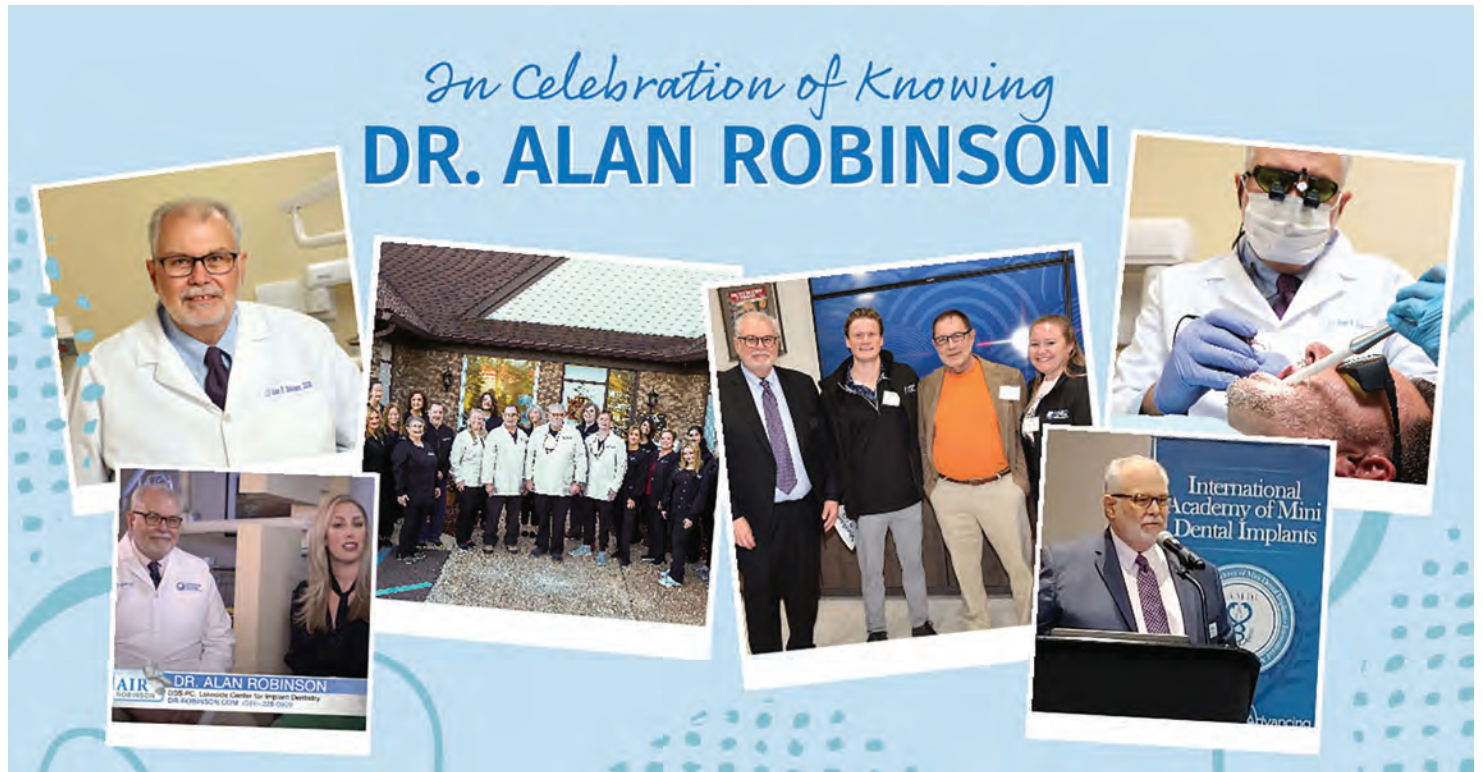
Gordon's degrees include: DDS, University of Southern California; MSD, University of Washington; PhD, University of Denver; and two honorary doctorates.

Early in his career, Gordon helped initiate the University of Kentucky and University of Colorado dental schools and taught at the University of Washington.

Currently, he is an Adjunct Professor at the University of Utah, School of Dentistry. Gordon has presented thousands of hours of continuing education globally, made hundreds of educational videos used throughout the world, and published widely.

Gordon and Rella's sons are dentists. William is a Prosthodontist, and Michael is a General Dentist. Their daughter, Carlene, is an Administrator in a biomedical company.

In Memoriam: ALAN F. ROBINSON, DDS, MAGD, DICOI, DIAMDI, FAGD



The term “Renaissance Man” can be an over-used description when eulogizing someone but it’s clearly applicable in our view for Dr. Alan Robinson. The Doctor had an abiding curiosity that fed his continuing hunger to learn and understand the art and craft that is dental surgery. He successfully applied that curiosity and his scientific training in a lifelong pursuit of consistently improving and innovating his work and of those around him for better patient outcomes.

The Doctor was never satisfied with a singular perspective and delighted in exchanging ideas. He was also a master of collaboration whether that was with other practitioners or his team at Lakeside. Interactions with people fed his insatiable desire to learn how and why things work. It drove Dr. Robinson to take an idea and then push it to an entirely new level whether for a device like a mini dental implant or a process like making precision calculations for the placement of those same devices.

He was someone who took great interest in things around him stowing away bits and pieces of information for the future use. He consistently drew upon this trait with a terrific ability to mobilize his thinking and experiences for solving whatever new challenge he encountered. The Doctor was also someone you’d refer to as an active listener, a skill that was evident to almost everyone who spoke with him. Where he masterfully applied this ability to focus entirely on the person speaking was during his interactions with patients. It enabled him to connect with and fully grasp a patient’s perspective. Ultimately that connectivity he established with people during consultations along his affable and relatable nature made Lakeside an odds-on favorite to be chosen over larger, nationally franchised competitors.

Being a highly personable and approachable individual were traits that didn’t go unnoticed by his peers. Dr. Robinson was a popular speaker and powerful advocate for minimally invasive dental implants working with the Shatkin F.I.R.S.T Institute. This and other professional dentistry organizations frequently enlisted his talents as an instructor and speaker at national and international dental surgery symposiums. He would fondly remind us that he’d personally trained most of the Michigan’s practicing implantologists.

Running a dental practice is a complicated and challenging vocation that Dr. Robinson seemed born to do. Beyond his multi-tasking abilities, patience and solid work ethic, the Doctor possessed the physical dexterity, and intellectual strength to balance inspiring his devoted team of Lakeside colleagues with being a superlative dental surgeon. For a guy who did all that in balance with traveling, enjoying the outdoors and just being “in the game,” Dr. Robinson was a genuine renaissance man for the ages.

CASE STUDY #1

ANOTHER VIEW: SERVICE AFTER THE SALE

ALAN ROBINSON, DDS

As Implant Practices grow, particularly Mini Implant practices, a very successful strategy has been to limit practice services to implant placement and restoration only and have the implant patient seek continuing non implant care including regular Implant maintenance care elsewhere. The simplicity and profitability of that strategy has been proven by a good number of practitioners. There are several negatives to that strategy that arise however, can have significant consequences, and must be considered.

The marketing that is required to develop an all implant practice inevitably yields a great deal of non directly implant related dental treatment. In my practice this seems to run at approximately 30% of the treatment needs of those new patients presenting for “implants” because of the marketing program. There are also situations where the new patients have significant dental needs and relatively large treatment plans, but can’t (or won’t) do implant treatment at that time. For many of those treatment plans, the implant treatment could be an option at a later date. Serving these patients represents not only the income to the practice from the conventional dentistry needs, but also then in-house implant treatment that can arise later.

Upon completion of an implant course of treatment, first rate continuing care is a must. Fixed full mouth cemented roundhouse restorations, for example, require regular prophylaxis for optimal results and health. These restorations are not yet commonplace enough that all Hygienists or Dentists are expert in that periodic routine care and evaluation. Same goes for Mini Implant retained single and multiple fixed crown and bridge restorations. In fact, because of their unfamiliarity, they are likely to “poor mouth” or deride the quality and appropriateness of the treatment. This is true even when the treatment is 100% successful and the patient is completely satisfied. Having your patients back to provide expert and what is really specialty follow up care is excellence in care and deserves a premium fee. That being said, do not expect many Insurance carriers to pay that premium. In fact, the ADA eliminated the Implant Maintenance Code D6080 from the CDT billing codes in the 2021 CDT Code Listing. One must wonder if the people making this decision understand anything about the nature of this care and the business of Dentistry. Implant providers do always have the option of structuring a separate

In Memoriam



Alan F. Robinson, DDS,
MAGD, DICOI, DIAMDI



Implant practice such that they are not required to be bound by reimbursement policies of Insurance Companies that prohibit fair payment for services. A superior service warrants a premium fee. Thanks.

Having a continuing relationship with a patient often brings additional income and referrals to the practice providing maintenance services in part because of that continued relationship, contact and care. Often an Implant retained denture or partial denture patient will ask about “upgrading” to a fixed treatment option. Also many that have lost and replaced teeth have other teeth which must later be extracted and replaced. Who better to advise than their trusted Office providing their continuing care?

We include o-ring replacement at no additional cost to our patients that present for regular Implant Maintenance visit (prophylaxis and examination) adding value to our enhanced maintenance fees.

A possible blueprint is to maintain an affiliated but separate Dental Practice within your Office. We see the continual economic “beat down” by constant reductions and coverages by insurers, despite ever increasing costly governmental and industry requirements for proper treatment as well as ever rising labor, site and supply costs. Further, providing excellence in all care is costly and deserves a premium fee. Even in your General Dentistry practice, you should consider structuring so that you set treatment fees, not an Insurance Actuary in an office thousands of miles away. It can be done, and many have done so with stunning success and profitability. Consultants will tell you that most practices that discontinue participation status see an increase in revenue, not a decrease. These practices trade less profitable business for more profitable business.

So consider your practices’ path forward as it grows rapidly once you are meeting your patients Dental, Implant, Continuing care and Reconstructive needs. Your investment in education, equipment and excellence in care stands out in your community as does your experience. That combination deserves superior compensation for the Doctor and Staff.

CASE STUDY #2

THE ABBREVIATED ARCH: A TREATMENT STRATEGY FOR LIMITED BONE

ALAN ROBINSON, DDS

When a patient presents a fixed restoration to restore missing posterior dentition or missing full arch, often full anatomical restoration is not possible due to inadequate posterior bone height and or quality due to enlarged maxillary sinus spaces, generalized or localized bone loss due to trauma, injudicious extraction technique or a atomic deformity. Even in this instance, in the majority of cases, fixed crown and bridge, implant retained restoration with small diameter, mini implants is possible, even routine, back to the first or second bicuspid area in the maxilla as well as the mandible, anterior to the mental foramen. Restoring back to the first molar can prove to be impossible at worst, and risky at best in terms of long term implant success and or other complications in these cases. I would propose a strategy to fully restore these cases using the areas suitable for highly successful placement to still get molar and bicuspid occlusion by eliminating one bicuspid per quadrant, exactly the same occlusal pattern we would see in a 4 bicuspid extraction orthodontics case in natural dentition.

In the maxilla the implants are placed anterior to the Mesial wall of the of the maxillary sinus. Distal most implant(s) can also be mesially inclined (the abutment is distalized) to follow the incline of the anterior wall of the sinus which adds strength due to the buttressing effect of the cortical bone of sinus and increases the A/P spread, the measurement of the distance between the anterior most implant and the posterior most implant. Increasing the A/P spread increases the theoretic maximum distal cantilever possible, which is 50% of the A/P spread. That is purely an engineering calculation. From a practical standpoint however, keeping that cantilever as small as possible makes your restoration stronger, more reliable and much less likely to fail. For the mandible, the implants are placed anterior the mental foramen, the distal most implants are angled mesially (which distalizes the abutment). This pattern mimics positioning in the conventional implant “all on four” technique. Using this strategy, I have found that my usual cantilever is about half a molar width, which is managed by controlling tooth size and anatomy. The strategy and reasons for why it needs to be employed are explained to the patient in the planning stage so they know what to expect and why their restoration differs from usual anatomy with

In Memoriam



Alan F. Robinson, DDS,
MAGD, DICOI, DIAMDI



one less tooth per quadrant. We use a global, all in one fee for our “roundhouse” cases and am occasionally asked if it’s cheaper because there are less teeth than a usually designed case. Our answer is no, but we are also not charging additional for the increased difficulty either. In restoring a single quadrant, for example, charges are per tooth, as usual.

A comment about cantilever and the 50% of AP spread calculation. My bias is that cantilever anything is an inherently potentially weak design. When recognized and properly designed for by keeping the actual cantilever to the absolute minimum and being certain there is more than adequate interocclusal space for an abundance of material, despite what the calculation would allow, you can be very confident in the reliability of your restoration.

Mini Implants have allowed for many innovations that allow Mini Implantologists to offer solutions never before possible. We can add one more to that growing list!

*“If at first you
don’t succeed,
try, try and
perhaps
try again!”*

CASE STUDY

THE DIGITAL ADVANTAGE: FULL ARCH CASE STUDY FEATURING DIGITAL DENTAL TECHNOLOGY DR. ANDREA JOY SMITH, DDS

SUBJECT: 58-YEAR-OLD FEMALE

Chief Complaint: I want better-looking healthy teeth. I have focused for many years on others. My husband recently passed away and now it's time to get my teeth fixed.

O: Generalized poor, mutilated dentition. advanced periodontal disease, heavy tartar build-up

A: All teeth are non-restorable

P: Extraction of all remaining teeth, Full arch one-piece immediate implant placement, Final restorative goal: Upper/Lower Fixed Zirconia Cemented Round House Appliances

This case study will present the method of using digital dental technology from case planning to the fabrication of the provisional restorations and the ultimate delivery of the final restorations. This case will demonstrate the ease of communication between the dental laboratory and the dental office when using digital dental technology.

DIGITAL CASE PLAN & IMPLEMENTATION:

Consultation

The patient interview and **pre-op CBCT*** are completed at the consultation visit. The CBCT is evaluated for bone quantity and bone quality. During this visit, medical history, patient's social history and motivation for seeking treatment is obtained. This is also a time for the doctor and staff to establish rapport with the patient. The presentation of the cost of treatment is also done as part of the consultation. If the patient decides to go forward with treatment, a records visit and a series of subsequent treatment and post op visits are scheduled. See the full list and description of visits below. (*Digital Technology)



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



Records Visit

- Digital Full Mouth Radiographs*
- Digital Intra-oral Scan*
- Digital Photography*
- Comprehensive Examination
- Baseline Blood Pressure
- Sedation Consultation & Consent
- Digital Implant Consent*
- Digital Restoration Consent*
- Digital Extraction Consent*
- Medical Clearance (if necessary)

Day of Treatment

- Extraction of Remaining Teeth
- Placement of the Implants
- Placement of Provisional Restorations

24 Hour Care Call

This call is made to patient to check to see how patient fared after treatment and sedation. The patient offered a same day appointment. During this visit, a post op CT, and fairly conservative services that improve the comfort of the patient, including but not limited to bite adjustments and review of all post-op instructions.

One-Week Post-Op

- Occlusal/Bite Adjustments
- Post-op CT*** if not already taken
- Review Post-Op Instructions for Implants, Extractions & Provisional Restoration Care Instructions
- Review Soft Food Diet

One-Month Post-Op

- "Sound" the Implants (mouth mirror)
- Assess Soft Tissue Healing
- Address Any Patient Concerns
- Review All Post-Op Instructions

- Two-Month post-op
- "Sound" the Implants
- Assess Soft Tissue Healing
- Imaging as necessary***

Two-Month Post-Op

“Sound” the Implants
Assess Soft Tissue Healing
Imaging as necessary*

Three-Month Post-Op

Pre-scan Provisional Restorations* to establish the bite
Intra-Oral Scan of Implants*

Remove Provisional Restorations
Replace Provisionals
Obtain Patient Input into the Design of the Final Restorations

Lab Communication & Design

The intra-oral digital scan communicates vital information to the lab. Even if the provisional restorations are not perfect, the lab has the vertical dimension and occlusion. With this vital digital information, the necessary restoration design changes can be made to improve the esthetics and function digitally. This digital technology step allows you to skip the try-in visit since the provisional restoration are a good representation of the patient’s occlusion and bite.

Final Restoration Delivery, Part 1

Test Delivery “Cemented” with Bite Registration
Adjust Occlusion
Photos
Esthetics & Phonetics

Final Restoration Delivery, Part 2

Cement with the Resin Cement of Your Choice
Perform Final Occlusal Adjustments
Digital Images with Restorations in Place*

2-Week Post-Op Bite Check

Occlusal Adjustment
Address Patient Concerns
Schedule 3-month Post-Delivery Follow-up

Pre-Op Digital Images: Radiology, Photography & CBCT

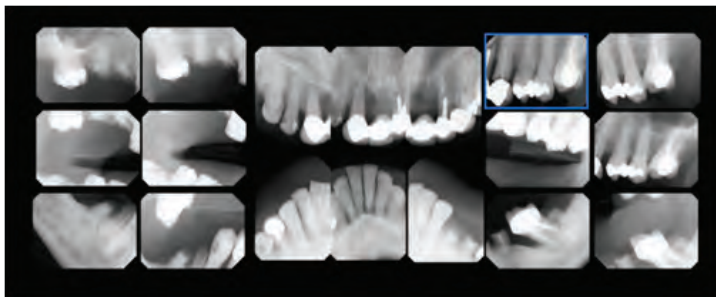


Figure 1: Pre-Op Digital FMX



Figure 2: Pre-Op Digital Photo

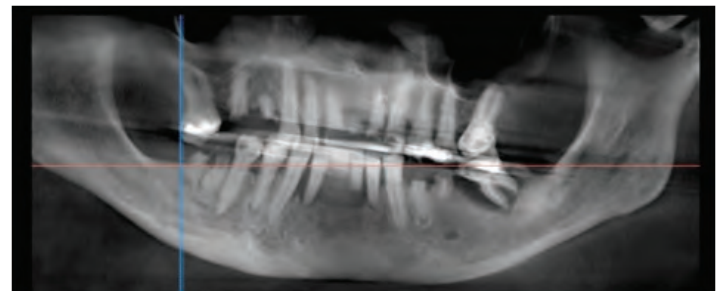


Figure 3: Panoramic Rendering from Digital CBCT

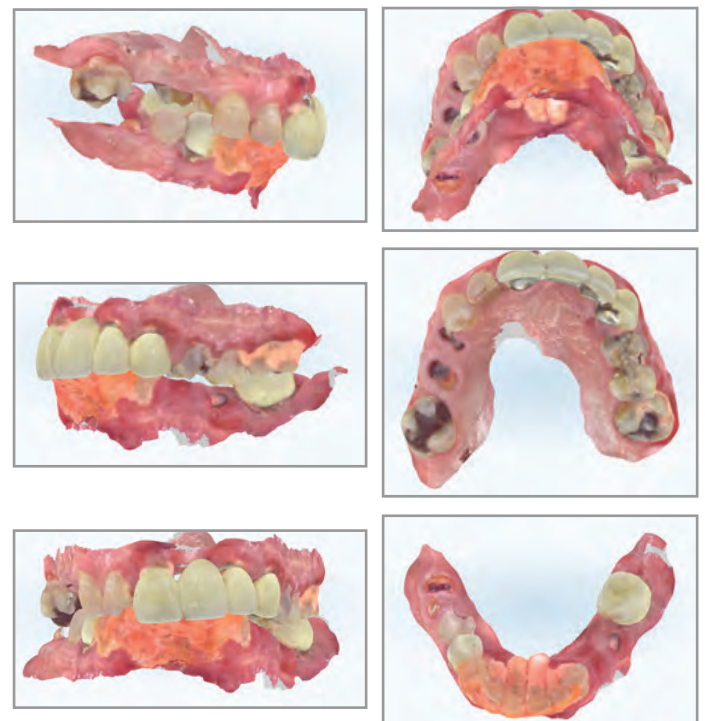


Figure 4: Pre-Op Scans: Used for Fabrication of Provisional Restorations

Figure 5: Post-Op Scans of Provisionals & Implants



Figure 5A: Pre-op Scan of Provisions to Capture Vertical



Figure 5B: Digital Scan of Implants, Vertical Dimension Maintained

Discussion:

Digital record taking is fast becoming the norm in dentistry. Many clinicians are investing in technology to make things easier for the patient and to improve workflow. The use of digital technology saves time, saves materials and provides an advanced communication dialog between the dental laboratory and the clinical dental team.

The digital workflow begins at the consultation visit. The digital CBCT, and digital photography provides images that allow the dentist to make an immediate assessment of the patient's bone quality, bone quantity, and cosmetic concerns.

During the records visit, the patient is scanned for the fabrication of provisional restorations using the iTero Digital Scanner. This scan will be sent digitally as an iRecord to the dental laboratory for the fabrication of the provisional restorations that are to be placed on the day of surgery.

The scan captures the patient's occlusal scheme, and most importantly, the vertical dimension that registers the patient's bite. All details of the occlusion are captured to give the lab a digital basis for fabricating the provisional restorations.

The Provisionals will be placed on the day of surgery after the extraction of the remaining teeth and the placement of the implants.

The series of visits following the initial placement of the implants and Provisionals, are short clinical visits to monitor the comfort of the patient and to assess healing. Bite adjustments, smoothing temporary restorations and filling in gaps after tissue shrinkage to make the patient more comfortable during the healing period.

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The series of visits following the initial placement of the implants and Provisionals, are short clinical visits to monitor the comfort of the patient and to assess healing. Bite adjustments, smoothing temporary restorations and filling in gaps after tissue shrinkage to make the patient more comfortable during the healing period.

The most valuable digital advantage starts at the three (3) month post-op visit. This visit is when the scan of the Provisionals and the implants save the most time and provides enhanced communication to the dental lab. The pre-scan of the Provisionals that the patient has relatively comfortably worn for several months, records the vertical dimension and occlusion which are the most difficult records to accurately obtain. If obtained with analog methods, the necessary try-in visit adds time to the treatment process and necessitates the removal and replacement of temporary restorations that have been worn and possibly damaged during the provisional restoration stage. When using digital method, the digital record of the vertical dimension and occlusion, eliminates a visit (or two) and the potential to damage fragile provisional restorations during removal.



Figure 6: Pre-op Photo

Post-Op Photo

Conclusion: The digital workflow is the path to more timely treatment, enhanced laboratory communication and improved service to the patient. Often patients with a mutilated dentition cannot tolerate analog impressions for fear of sensitivity to cold and the potential unwanted premature extraction of a loose tooth. The above facts make a strong argument that digital dental technology is an advancement in treatment that is well worth the investment.

CASE STUDY MINIMALLY INVASIVE TREATMENT PLANNING BASED ON PATIENT'S WANTS

**HARVEY H. CHIN, DDS,
MAGD, FADSA, FICOI,
FAAID, DIAMDI**

I am Dr Harvey Chin and I have been in practice for 40+ years and have learned that my treatment planning is different now than my first year out of school. In my early years out of school, my knowledge, skill and experience set was limited, so my treatment planning was based on what I felt comfortable doing, not necessarily on what the patient wanted. After 40+ years, I have more knowledge, skills, and experience, I know feel more comfortable treatment planning my cases based on what the patients wants, instead of my telling the patients what he or she needs. There are limitations of course to what the patient wants, expects and what we can do. With that in mind, I have a few cases to share.

CASE #1: T.Z., 60 YEAR OLD FEMALE

Medical History: PTSD, depression, meds for stomach, depression, sleep.

CC: Wants to smile, get out of pain (UR/UL), eat, phased treatment to fit into budget.

Exam Shows: Teeth decayed, broken, missing, advanced bone loss

Treatment Plan: U/L FO6 wanted by patient

Photo 1: Pano: Pt wants UR/UL posteriors extracted first to get out of pain.



Photo 2: Pano: 1,2,5,13-16 extracted, patient out of pain now UR/UL, but now discovers LL pain to 18-21



Photo 3: Pano: five months later. 6-11, 18-21 extracted. Delivered FUD, 18-21 flipper

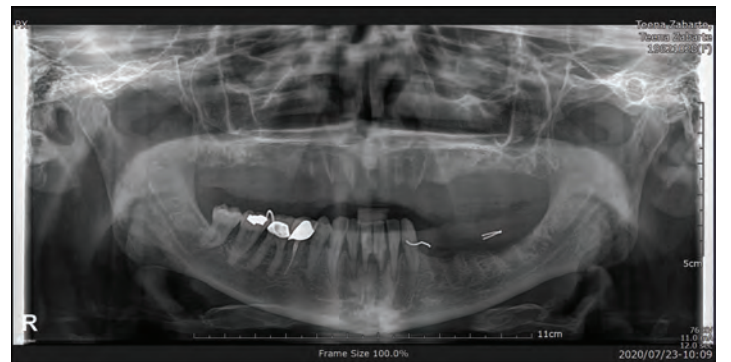


Photo 4: 11 months later. 23 fell out, so lower wanted as priority treatment as cosmetic concern important now.

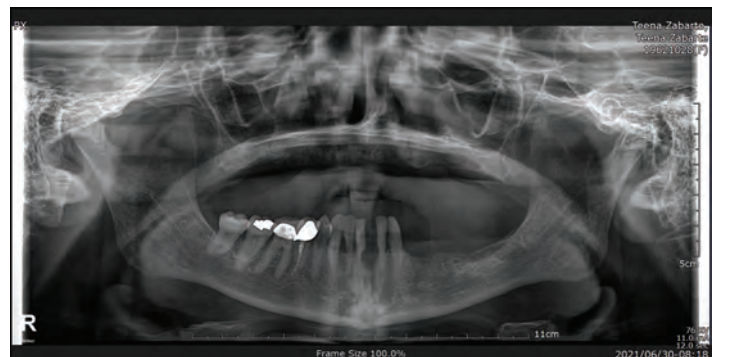


Photo 5: 5 months later. Extracted remaining lower teeth. Freehand placement of MDLs and delivery of FLDS to better retain FLD as patients hate denture retained by adhesive.

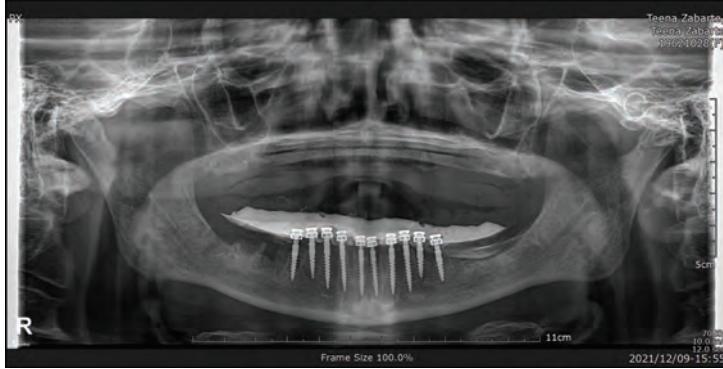


Photo 6: 5 month post op. lost 21: MDL

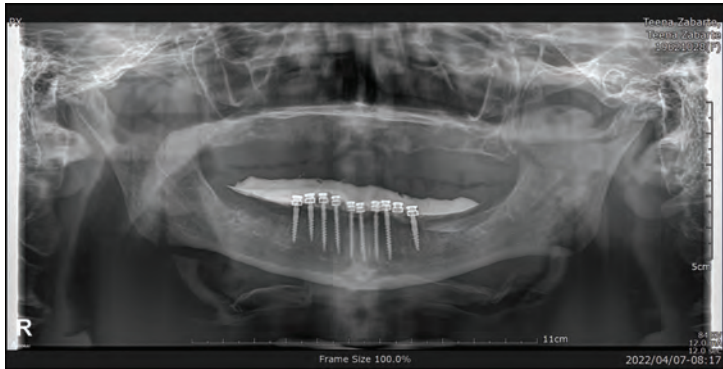


Photo 7: 1 month later. replaced 21: MDL. Pt wants upper implants to retain upper teeth

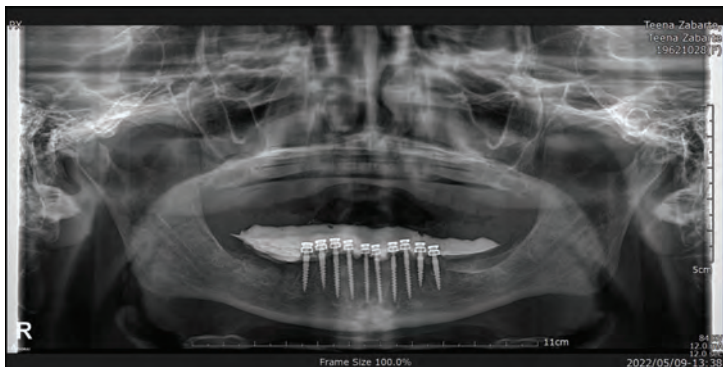


Photo 8: 2 months later. CT stent guided MDL (10) placement with denture as provisional prosthesis.

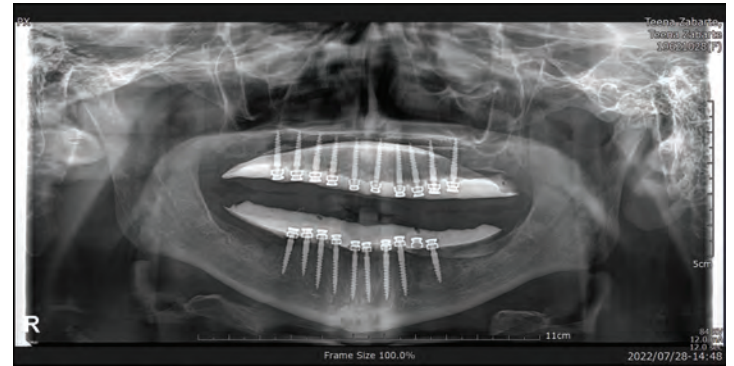
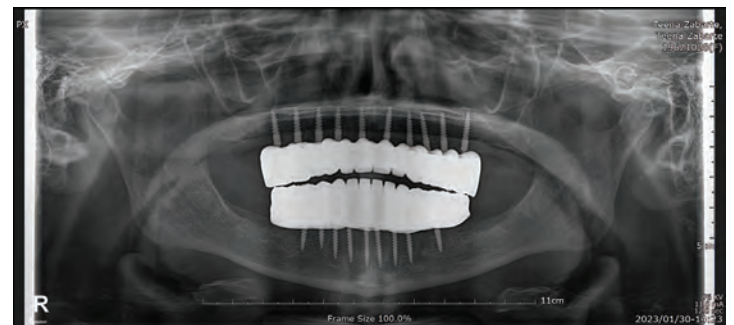


Photo 9: 4 months later. LFO6 delivered with 9 MDL to retain oball housings



Photo 10: 2 months later. UFO6 delivered with 10 mDLs in place, but 8 housings attached, so I can make it tighter by adding 2 additional housings or looser by removing orings as need.



Summary: Pt happy is can smile, eat with no pain, be herself again! Treatment was planned according to patients wants, in phases according her priorities, timing, finances and comfort. Upper was treated with CT guided stent for MDL placement after a period of healing with denture as provisional prosthesis and FO6 as final prosthetic. Lower was treated with Extraction and freehand immediate placement of MDLs to better retain FLD provisional, and FO6 as final prosthetic. Patients buy what they want, not what they need! With mini dental implants in our tool box, we can help and so can you!

CASE #2: D.S.: 70 YEAR OLD MALE

Medical History: non-remarkable

CC: Wants to smile, eat with out pain, uppers is priority, treatment in phases (to better fit time, budget, comfort). UR /UL priority.

Exam Shows: Teeth missing 1-4, 13-16, 19,29-30,31, advanced bone loss, 6-11 bridge mod - adv bone loss. Pain 5 and 12

Treatment Plan: Implant/crns UL, then UR, then UA as wanted by patient.

Photo 1: Pano Pre-Op: 12 pain, so wants UL treatment first

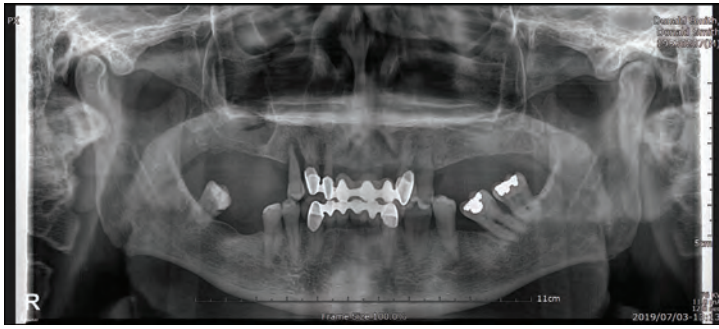


Photo 2: 5, 12: extracted, immediate placement of mDLs 12-14. 14 distal is milo. healing caps and temp 12-14

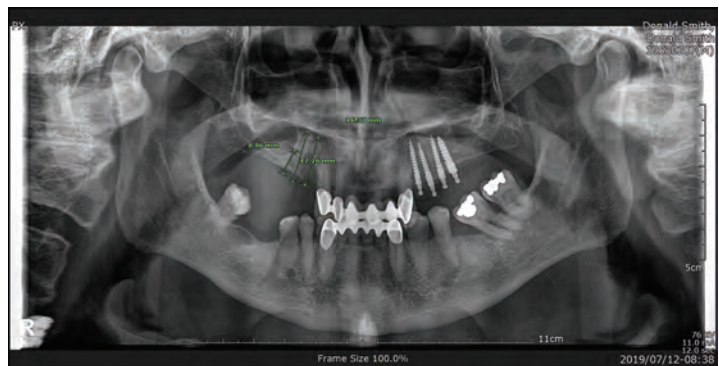


Photo 3: 4 month post op. Pt wants UR tx, so planning for 3-5

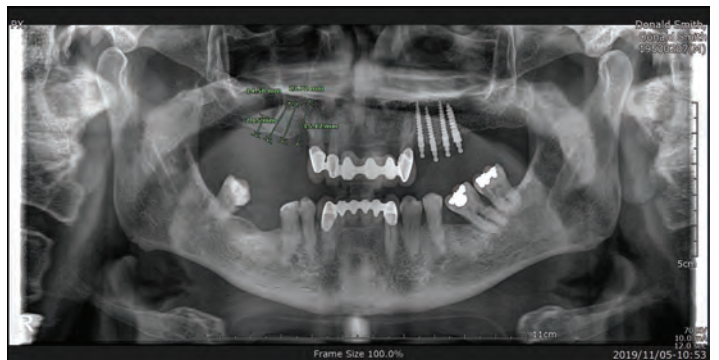


Photo 4: 3-5 : (3) Milos placed /3 crns splinted . Pt now happy with smile.

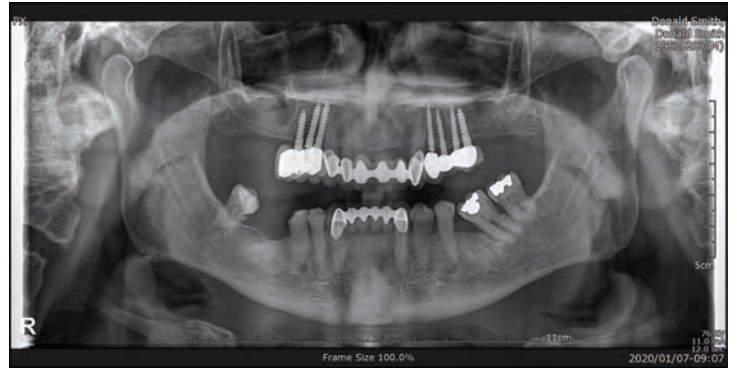


Photo 5: 1 year post op, 6-11 sensitive, feels weak to biting so wants implant/crns planned

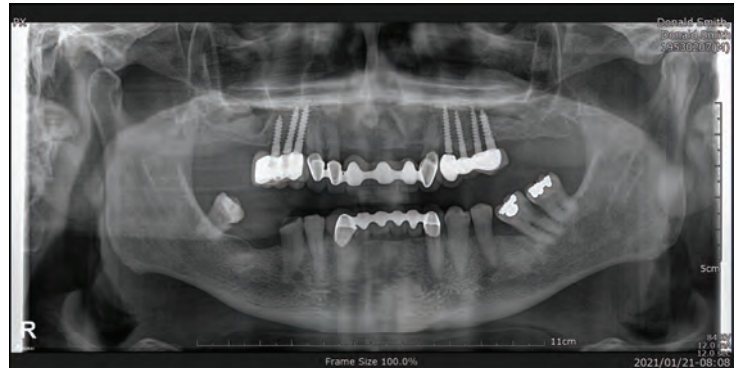


Photo 6: 1 year post op, 6-11 more sensitive, so more urgent and wants tx now

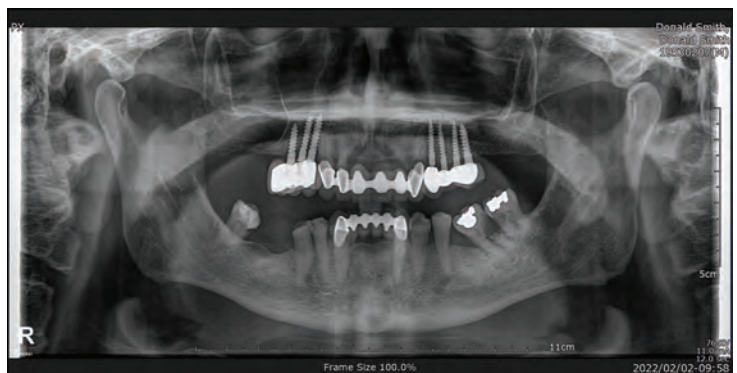


Photo 7: 2 months later 6-11 extracted flipper delivered as provisional

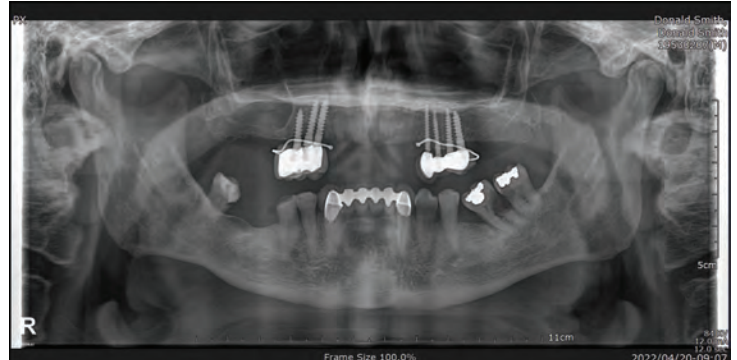


Photo 8: 4 month healing.

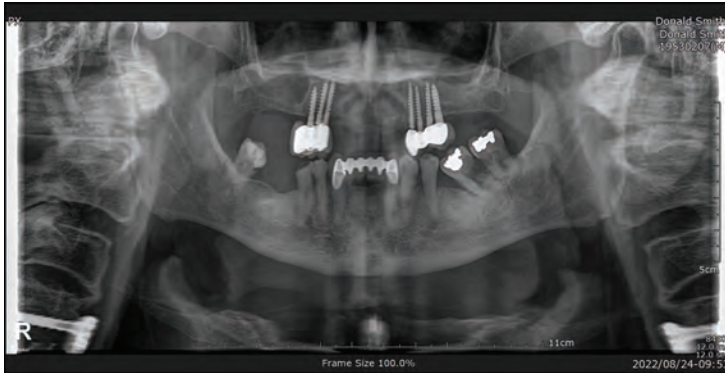


Photo 9: 2 months later 6-11 MDL delivered with CT guided stent/ temp with healing caps and temporary bridge material

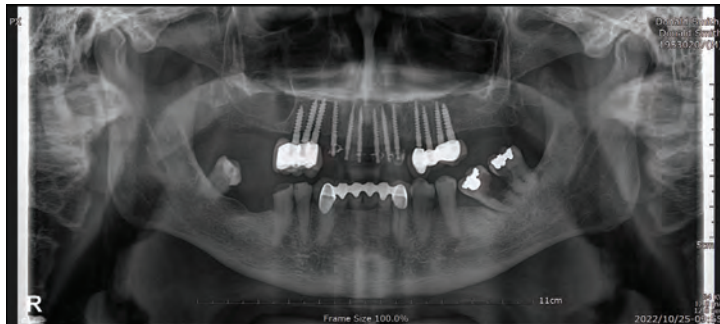


Photo 10: Final 6-11 bridge delivered 2 months later...
Need to get pano

Summary:

3-14 treated with minimally invasive mini dental implants and crns. Pt happy now as can eat, smile, no pain, treatment done in phases as wanted by pt. Pt coming in next week for LL tx, as now having symptoms, so now wanted as priority treatment. Will treatment plan for 17,18 ext, 19 implant/crn. Most of our patients are 50-90 years of age. Again, we can help our patients with minimally invasive mini dental implants, as can you?

My journey in implant dentistry is over 40+ years now, starting at study clubs at UOP, UCSF, LLU learning Blade Implants, Ramus Frame Implant and Sub-periosteal Implants and Bicon Shorty Implants, Gerry Niznick's Corevent cylinder implants, Hilt Tatum's tapered implants, MCG's Maxi Course on traditional root form implants, and now Dr Todd Shatkins Mini dental implants and Mono implants. I am sure the next new technology Minimally invasive implants are coming. So we must change and adjust to these new minimally invasive implant technologies to better help us, to better help our patients!

Thank you...Dr Shatkin

CASE STUDY DEALING WITH SEVERE SKELETAL CLASS III OCCLUSION & HOW TO FIX IT WITH MINI DENTAL IMPLANTS

**DR. E. AHONO
GILDERSLEEVE, D.D.S.**

A 65 year old white male presented to our office with pain on his remaining mandibular anterior teeth and complaining that he cannot chew. Patient has a maxillary denture that is 30 + years old and is in poor condition.

Clinical observation revealed mobile and carious #23-#27 requiring extractions.

In regards to the patient's occlusion, the patient had a severe dental Class III and skeletal Class III position (Figure 1), with the mandible considerably further forward in relation to the maxillary arch. Pre Operative photos (Figure 2) demonstrate that not only did patient have severe negative overjet, but that he also was severely overclosed. This was to the point that when the patient bit together, only the pink buccal flange of the denture could be seen (Figure 3), and that the maxillary denture teeth covered by the mandibular anterior natural dentition.

Furthermore, the denture teeth on the maxillary denture were porcelain. Over the years, the porcelain denture teeth had forced the mandibular anterior teeth more facial, thus increasing the Class III pattern, as well as causing bone loss on the mandibular arch from the force.

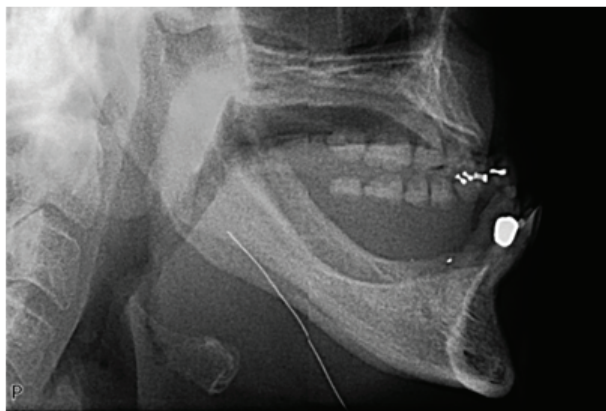


Figure 1



**Dr. E. Ahono
Gildersleeve, DDS**

*Mini Dental Implant Centers
of America
Greater Pittsburgh Area
Butler, Pennsylvania*



Figure 2



Figure 3

Treatment Plan & Process of Treatment:

We treatment planned this patient extractions of the remaining mandibular teeth, 7 mini dental implants, and a temporary implant denture, with plans for a hybrid (metal reinforced) denture when the patient would fully heal.

For the maxillary arch, we planned for 8 mini dental implants with a temporary implant denture, and once again, a hybrid (metal reinforced) denture upon healing.

Additionally, bone grafting with Osteogen and L-PRF would be used as adjuncts.

This dental treatment was performed in two phases. In Phase I, we addressed the mandibular arch only, and Phase 2 addressed the maxillary arch. All dental treatment was performed under conscious (non IV) sedation.

Restoratively, the goal of this case was to take this patient from an extremely over-closed, severe Class III bite, with poor masticatory function, and to take him to a restored vertical, Edge to Edge, or perhaps Class I occlusion, to restore both function and aesthetics.

Mandibular Arch:

The mandibular arch proved to have a knife edge ridge, with insufficient posterior bone for implants. Therefore, a partial alveoloplasty was performed from #21-#28 prior to implant placement after completing a FTMP flap. Mini dental implants were placed from #21-#28 only, as it was not feasible to go more posteriorly due to the extremely thin buccolingual bone and shallow bone height.

It is important to note that when placing these implants, the implants had to be placed with two things in mind. First, the more obvious consideration; the implant needed to be placed in the best bone available, considering that it was a thin ridge in general. Secondarily, but just as important, the implants had to be placed with restorative in mind. If the implants were placed too buccally (like his initial teeth had been positioned, both buccally positioned and tilted buccally, it would be nearly impossible to bring this patient to Edge to Edge occlusion, let alone Class I occlusion. As always, parallelism of the implants was of importance.

2.0 x 18 mm MDI's were placed from #23-#27 and 2.0 x 15 mm MDI's were placed at #21,22, & #28. The ridge did not allow for any implants of greater diameter. Osteogen bone grafting and L-PRF were used on the entire arch before closing with sutures. (Figure 4) A soft relin (Blue-bite) was used for denture pick up.



Figure 4

Maxillary Arch:

The maxillary arch began with a FTMP flap and a gingivectomy of 5-7 mm. As was the case with the mandibular arch, the maxillary arch requires alveoloplasty prior to implant placement due to severe maxillary ridge atrophy, a true knife edge ridge (Figure 5) A maxillary frenectomy was also completed due to low hanging frenum.

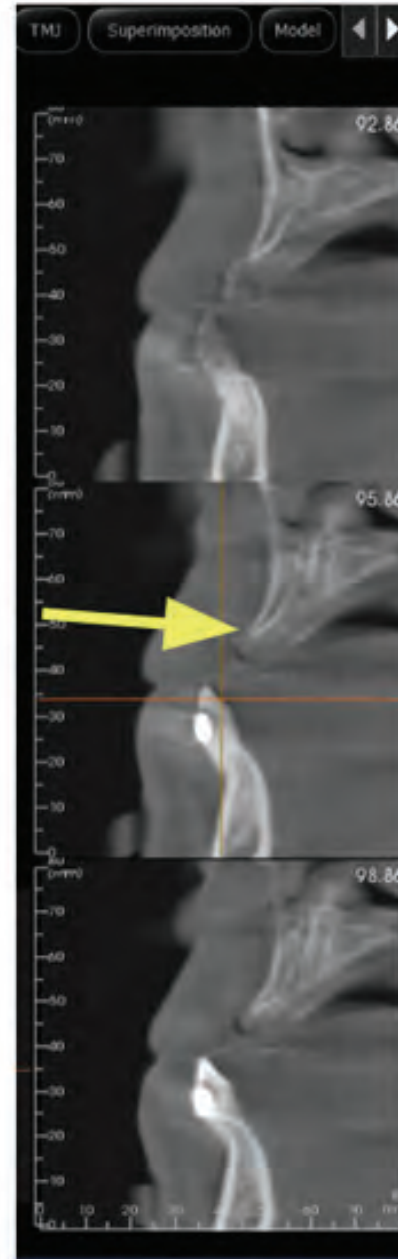


Figure 5

Eight 2.0 x 15 mm MDI's were placed from #5-#12. Following denture pick up with a soft relin, we were able to bring patient to edge to edge with the new prosthesis (Figure 6).



Figure 6

Post Op visits reveal that patient has achieved a new Class I relationship with his new implant dentures, with no complaints. (Figure 7)



Figure 7

#8 MDI was bent for the sake of parallelism in this case. (Figure 8)



Figure 8

Additionally, #12 apex of the implant appears in the maxillary sinus. (Figure 9) CBCT reveals that about 10-15% of the apex of this implant is in the sinus. Per the International Journal of Implant Dentistry's systematic Review, "the overall survival rate of implants into the sinus cavity was 95.6%." This implant achieved initial torque of 30 nCm when it was placed, and we will monitor it going forward.

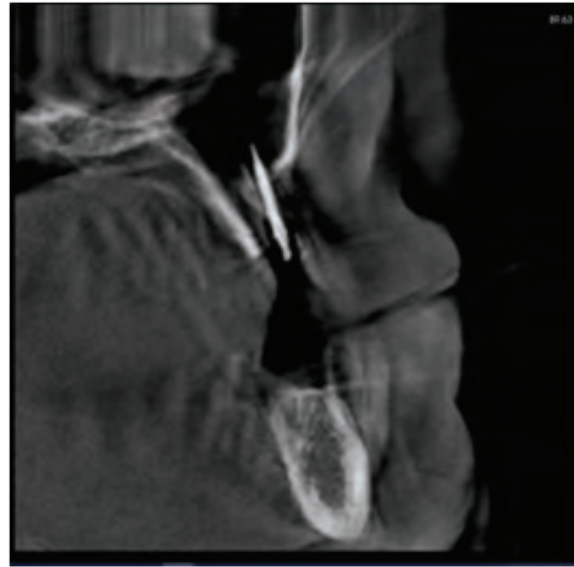


Figure 9

Chronology of Treatment and Why

The mandibular arch was treated prior to the maxillary arch intentionally. When performing this treatment, we wanted to make sure we stabilized the lower arch and placed the implants more upright compared to the teeth that the patient had before. This was for the sake of restoring the arch. The lower arch then becomes a guide for where the maxillary implants are placed and where we restore to with the prostheses.

Case Conclusion:

The initial goal of this case was to restore function and bring occlusion edge to edge on a severely overclosed patient. The case came with many challenges; ranging from extremely thin bone (especially in the maxillary arch), the patient being skeletal Class III and being over-closed.

The patient is currently in his healing (immediate) implant dentures. His final restorations will be hybrid implant dentures on the maxillary and mandibular arch.

This case and patient are a perfect example of how mini dental implants can be used for a complex skeletal case to give back function and give this patient his smile back!

CASE STUDY

PENGUIN MDI BY SHATKIN

F.I.R.S.T.: A FIRST-LOOK

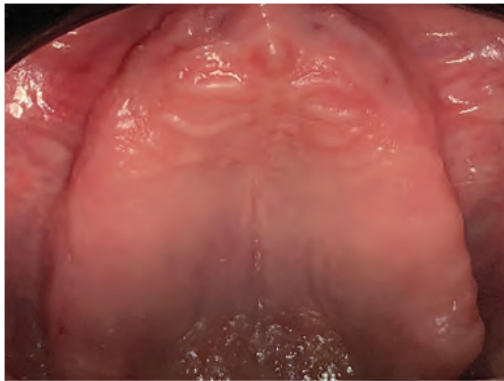
CASE REPORT

JAMES THARP, DDS;

NOJUSAUSRA, B.A.

The Penguin RFA has been a proven product for monitoring implant osseointegration 1-4. With the Penguin MDI, this new tool allows us to monitor osteointegration status of o-ball and square implants. Until now, the Penguin RFA was one of two instruments that could monitor implant osseointegration.

This is a case report of an upper and lower denture stabilization with existing dentures on a healed ridge. The case was planned from a Genoray-generated CBCT on Triana software. The Hounsfield units measurement of the bone on the CBCT and assessment during the osteotomy both indicated that the patient has type 2 bone on the lower ridge and type 3 on the upper.

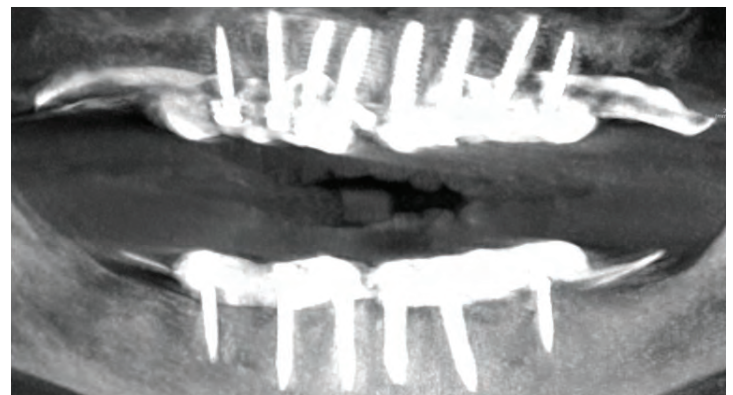


Images 2a-b: Upper and lower arch prior to implant placement.



It was decided in the planning stage that this case should have more than the minimum number of implants per arch for a full denture stabilization. Normal full denture stabilization would be 4 implants on the lower arch and 6 on the upper. The patient exhibited several signs of hyper-occlusion: large masseters, exaggerated sigmoid notch on the lower border of mandible, and prior history of dentistry failing from occlusal problems. Therefore, 6 implants were placed on the lower ridge and 8 implants on the upper.

The implants placed on the lower ridge are 2.0 mm by 11.5 or 15 mm, and the implants placed on the upper ridge are 2.5 mm varying in length from 11.5 mm to 15 mm. The Shatkin Sinus Lift Kit was used to pre-thread and evaluate the density of the bone on the upper arch. A 1.6-2.0 bone expander was used to full-length at each of the osteotomy sites on the upper arch. The bone in the area around #3 was not as dense as the rest of the arch. This is likely why that implant did not integrate.



Images 2: CBCT image post-implant placement.

Until now, there was no way to measure mini-implant stability other than the subjective tapping of implants or the amount of torque that was recorded upon placement of the implant. Tapping an implant is subjective but usually very accurate. The more staccato the sound of the tap, the more likely the implant is to be stable. Torque measurements of implant stability vary widely

from a low of about 20 Ncm to a high of about 70 Ncm. However, a higher torque value upon placement does not always correlate with implant success. You can also test implants by measuring the negative torque value of an integrated implant. The danger in this is that you may de-integrate the implant.

The Penguin MDI may provide an objective method of measuring MDI stability. The Penguin MDI comes with a magnet that is screwed onto the o-ball and square head and allows the Penguin to monitor implant stability with Resonance Frequency Analysis (RFA). The Penguin sends a radio frequency magnetic signal to the attached magnet on the implant and measures the amount of micro movement caused by the magnet. This is reported back in a scale from 1 to 99 as an Implant Stability Quotient (ISQ) value. This reflects the tightness of the implant to the bone. The higher the ISQ value, the more stable the implant.



Images 3a-b: Placement of the Penguin MDI magnet using the magnet holder and screwdriver.



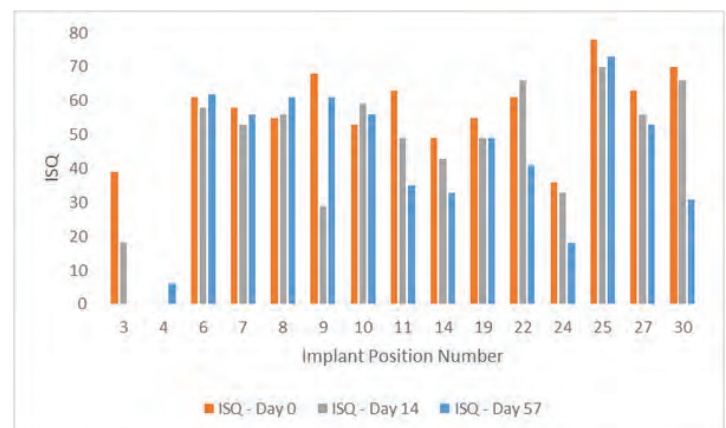
Results

Placement torque values were recorded and ISQ values were determined at days 0, 14, and 57 after implant placement. The implant in position #3 was removed at day 19 and was replaced with an implant (2.5 x 11.5 mm) at position #4. In the case of implant #3, it was found that a very low ISQ value (<15) correlates with likely loss of implant. These preliminary data demonstrate that the Penguin MDI may be a reliable indicator of MDI osseointegration.

Table 1: Patient torque and ISQ values after placement of MDIs

Implant #	MDI Torque (Ncm)	ISQ - Day 0	ISQ - Day 14	ISQ - Day 57
3	30	39	18	-
4	25	-	-	6
6	30	61	58	62
7	60	58	53	56
8	30	55	56	61
9	30	68	29	61
10	35	53	59	56
11	30	63	49	35
14	30	49	43	33
19	30	55	49	49
22	60	61	66	41
24	60	36	33	18
25	60	78	70	73
27	60	63	56	53
30	30	70	66	31

Chart 1: ISQ levels of patient days after MDI placement for an existing upper and lower full denture. Implant #3 was lost 19 days after initial placement and implant #4 was placed on day 19





Final Thoughts

Finally, we wanted to provide several recommendations to the manufacturers of the Penguin MDI and those using the device:

It can be difficult to screw on the magnet onto the implant head due to impediment from the patient's lips. We found it best to use an OptraGate cheek retractor when measuring several implants at a time. In addition, it would be helpful if the screw of the magnet was not at a right angle from the magnet itself, but rather angled up towards the magnet holder.

When measuring ISQ levels with the Penguin MDI, make sure to wiggle the magnet to ensure it is not loose. A loose magnet on an MDI can give an inaccurate ISQ reading.

After 2 months of usage, we had one of the Penguin MDI screwdriver heads strip, making it more difficult to screw the magnet onto the o-ball and square. We suggest making the screwdriver of a tougher metal to prevent it from wearing out.

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- ⁴ López-Jarana P, Díaz-Castro CM, Falcão A, Ríos-Carrasco B, Fernandez-Palacín A, Ríos-Santos JV, Herrero-Climent M. Is it Possible to Monitor Implant Stability on a Prosthetic Abutment? An In Vitro Resonance Frequency Analysis. Int J Environ Res Public Health. 2020 Jun 8; 17(11): 4073. doi:10.3390/ijerph17114073

penguin^{MDI}



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- Increase Stability
Certainty
- Manage
Integration Risk



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CASE STUDY

THE CLEAR ALTERNATIVE CHOICE TO ALL ON 4

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



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

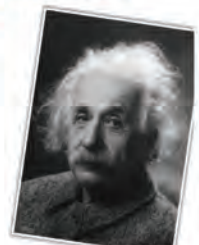


Ronald Paul Petrosky, DDS, MAGD

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:

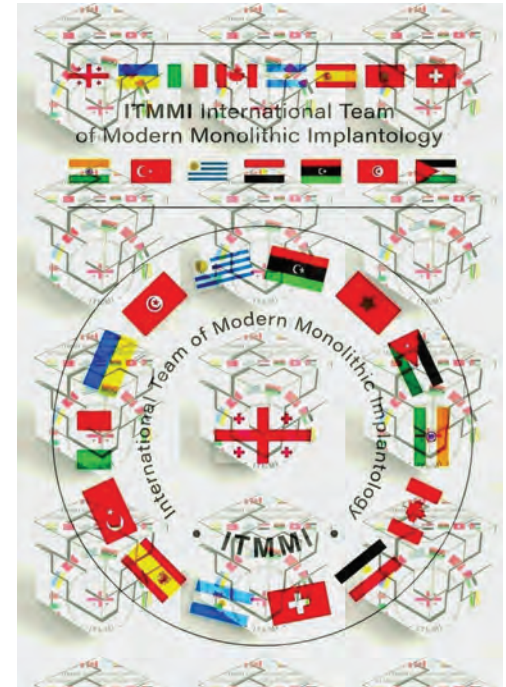
A Brief History of Dental Implants...

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...

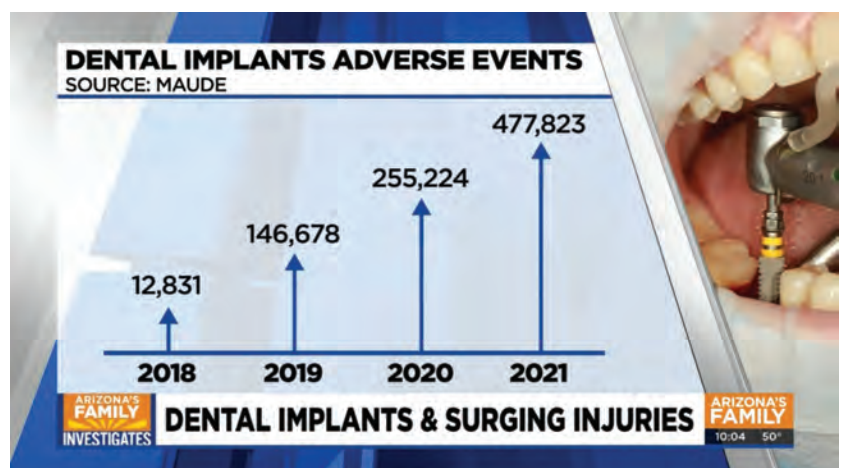
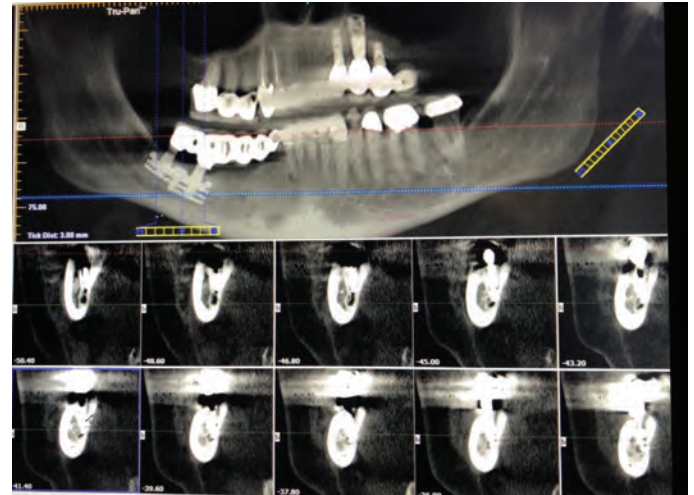
- **MORE** implant companies offering the latest and greatest implant protocols, as well as,
- **MORE** excellent implant training CE programs for dentist after graduation to become qualified in placing and restoring implants,
- **MORE** public access to information and awareness through technology and 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

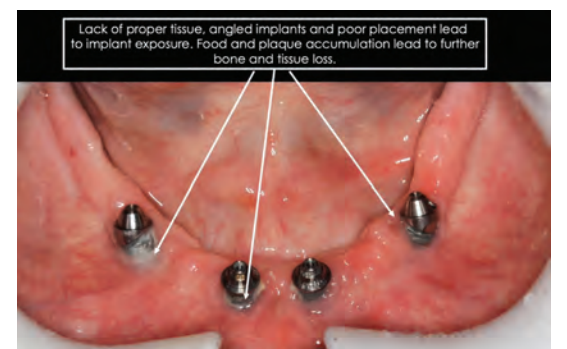
Bone and soft tissue interfaces are healthiest with smooth, gentle transitions. Angled implants and abutments have sharp/abrupt transitions causing soft tissue and inflammation from day one.

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

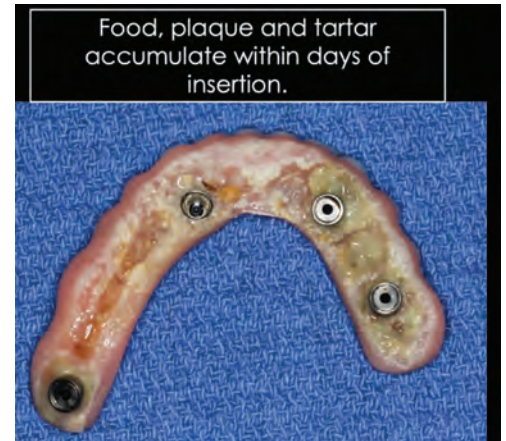


4 • CLEANSIBILITY

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

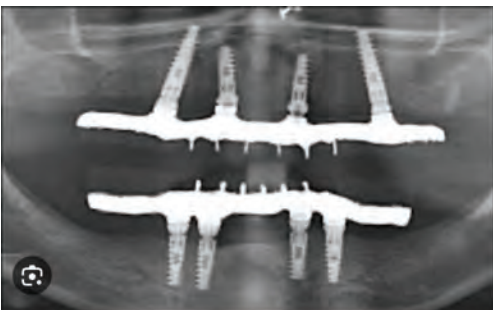


8 • EXTRACTING ANY and ALL HEALTHY TEETH

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

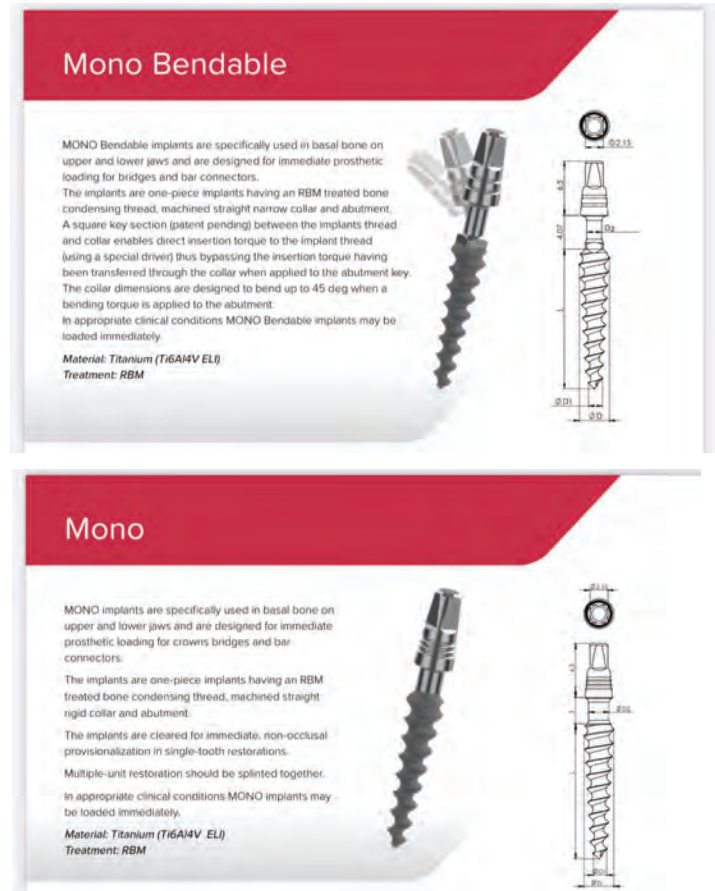
All of this broad range of everyday scenarios and solutions can be done in an **Effective, Efficient, and Efficacious** manner that satisfies the patient and doctor. Minimally Invasive Implantology at its best, IMHO.

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
- ✓ **OPDI 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

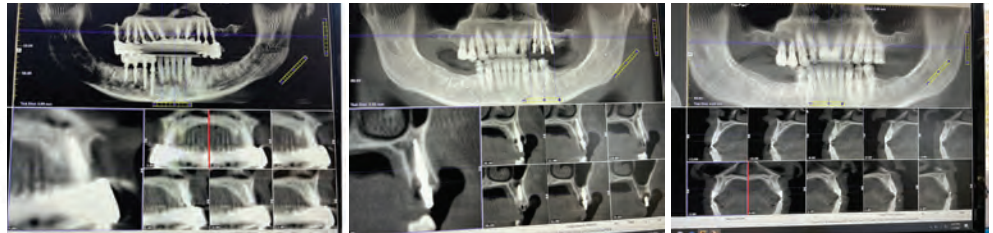
Maxillary Roundhouse

One-Piece Series

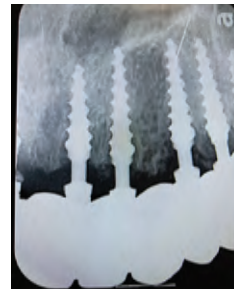
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#2 Case in Point

Mandibular Roundhouse

One-Piece Series

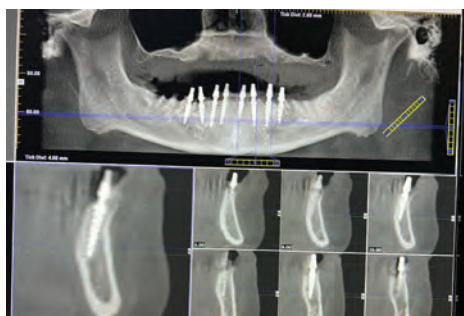
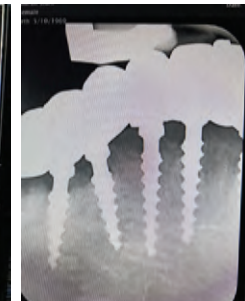
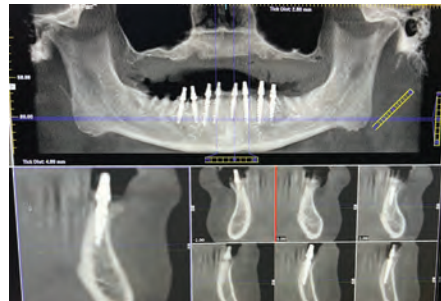
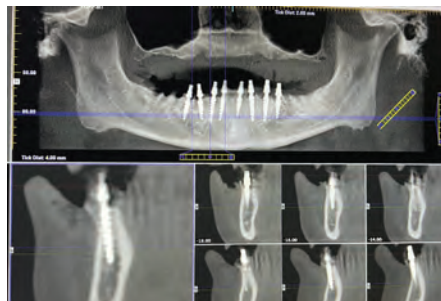
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#3 Case in Point

Single Anterior

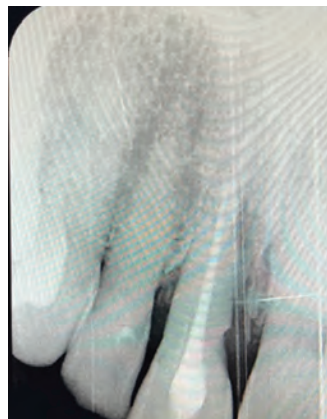
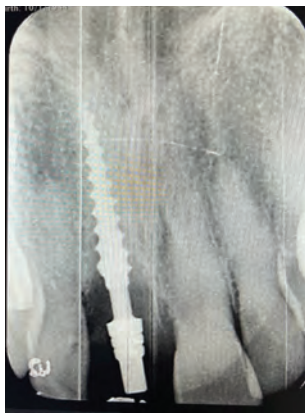
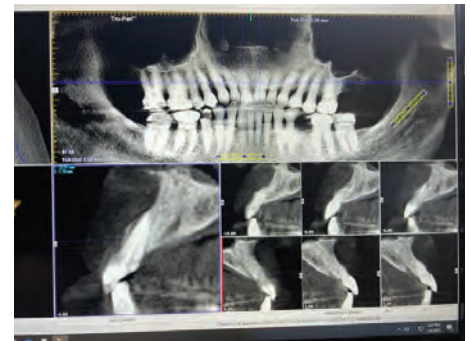
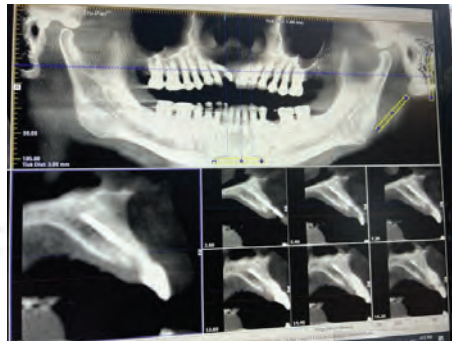
One-Piece Series

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#4 Case in Point

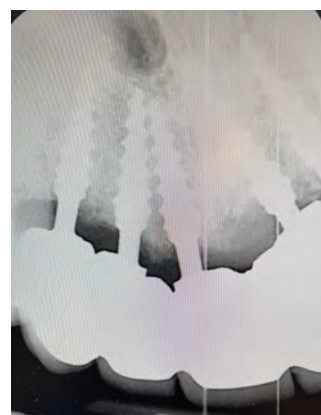
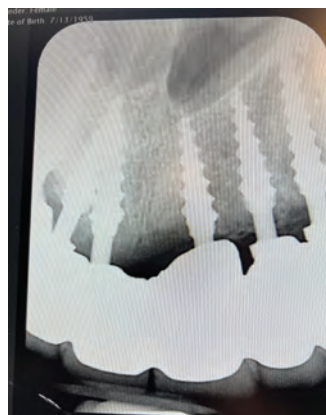
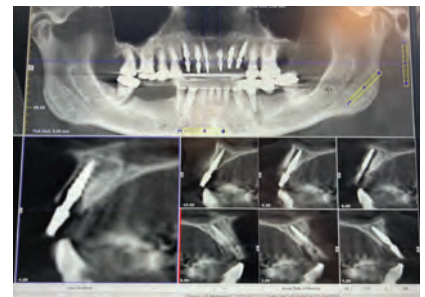
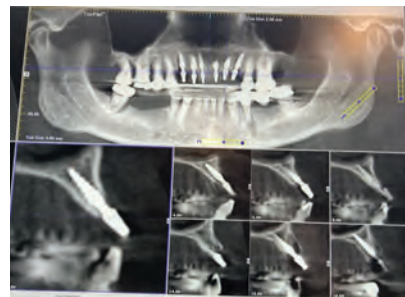
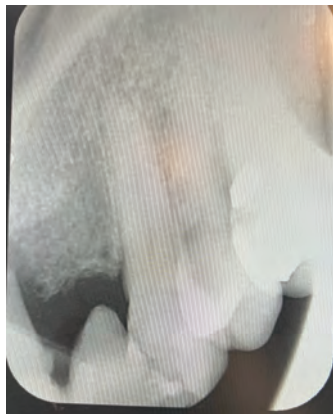
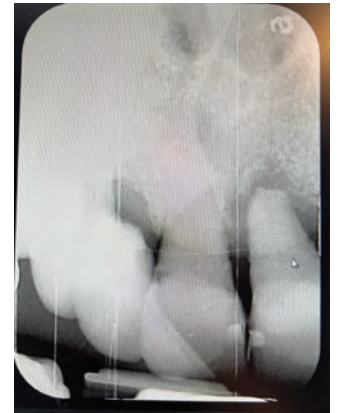
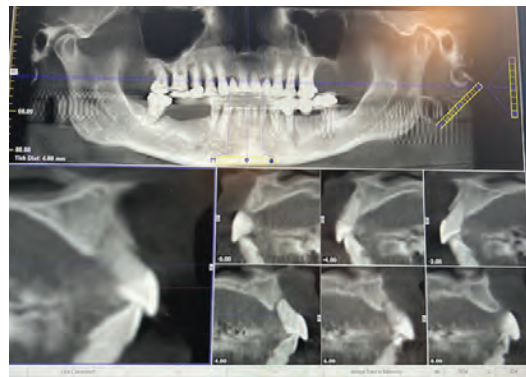
Multiple Anterior

One-Piece Series

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#5 Case in Point

Single Posterior

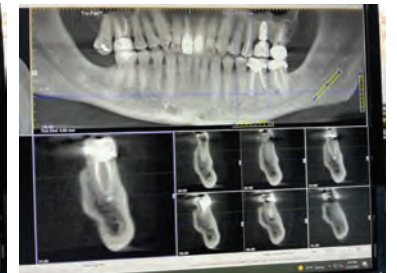
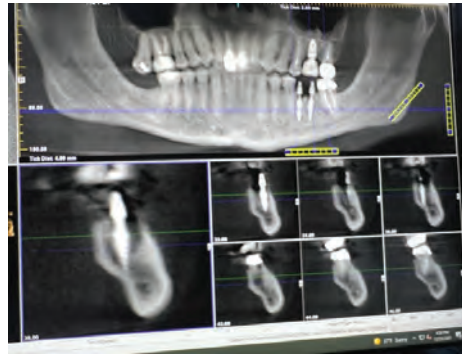
One-Piece Series

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#6 Posterior

Multiple Posterior

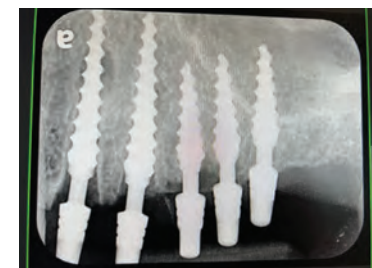
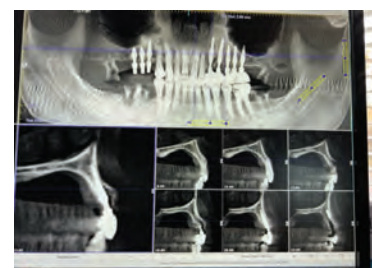
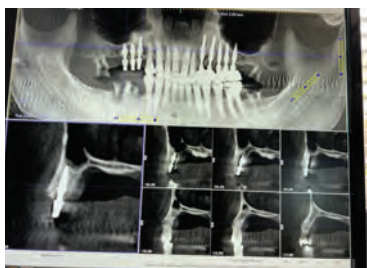
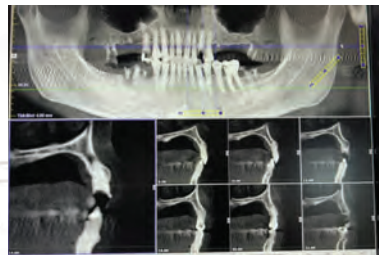
One-Piece Series

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#7 Case in Point

Tooth-implant Supported Prosthesis

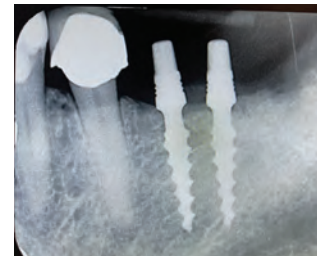
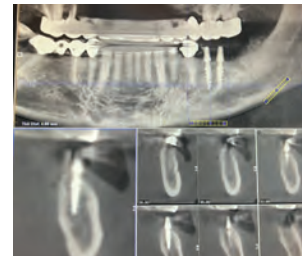
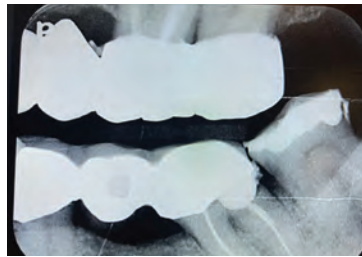
One-Piece Series

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#8 Case in Point

Maxillary & Mandibular Roundhouse

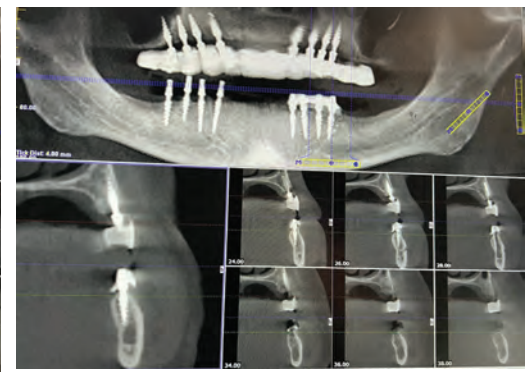
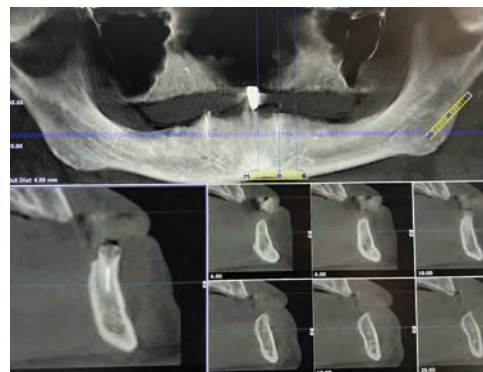
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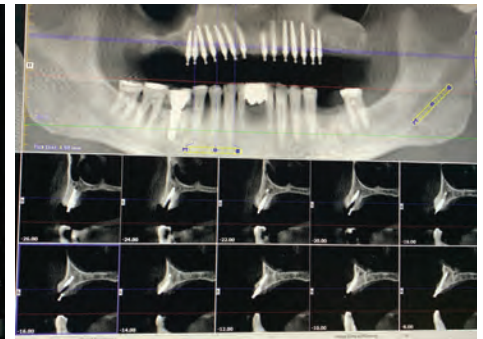
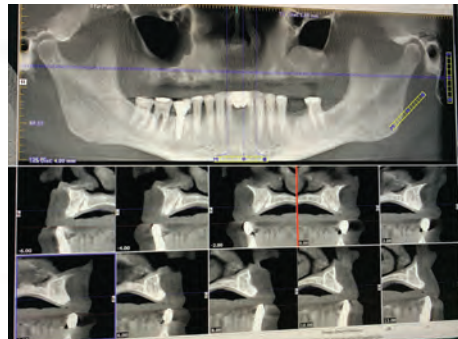
#9 Case in Point

MINI ROUNDHOUSE on COMPROMISED MAXILLA

One-Piece Series
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Contact:
Email: drpetrosky@comcast.com
Cell: 609-338-7170
Office: 609-296-1007

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2495 Kensington Avenue
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