In view of the plethora of publications, courses and advertising materials on this subject, it would seem that miniscrews are widely used. Once some candid questions have been asked and answered, however, it becomes apparent that the reality is quite different. It seems evident that there are valid reasons that miniscrews are not yet in daily use in many practices.

Dental implants are frequently used as a replacement for missing teeth in order to restore the patient’s tooth function and appearance.

Previous research demonstrates that the placement of a dental implant disrupts the host tissue in the area of the implant, so practitioners often focus their treatment planning to carefully maintain the patient’s bone and gum tissue surrounding the implant.

A recent study published in the Journal of Periodontology found that the majority of bone remodeling occurred in the time between the implant placement and final prosthesis placement.

Subsequently, little mean bone change was observed in the five years following the implant placement, independent of type of restoration or implant length.

The study, conducted at the University of Texas Health Science Center at San Antonio, evaluated 596 dental implants placed in 192 patients older than 18. Patients were screened for adequate oral hygiene and bone volume. Exclu-
ICOI heads to Vancouver

By R. Craig Johnson, ICOI Executive Director

Vancouver, Canada... Site for ICOI World Congress XXVI, 12th Annual IPS Symposium and 12th Congress of Asia Pacific Section.

If early interest or registration are any indication, this will be the ICOI’s best World Congress to date!

This modest prediction from the author is supported by the following:

• Vancouver is one of the most desirable cities in the world.
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• The site for the congress, the brand new West WING of the Vancouver Convention Centre, and its views of the harbor and mountains will delight delegates and exhibitors alike.
• This congress will unite our annual implant prostodontic section meeting and will serve as our AsiaPacific section congress (a large contingent from the Far East is expected to attend this World Congress).
• Our fastest-growing component society, the Association of Dental Implant Auxiliaries (ADIA), will hold a three-day program in conjunction with the doctors’ session.
• The social program has been expanded to include a dinner cruise, in addition to our welcome reception, awards ceremony and gala dinner. A wide array of tours is being promoted for accompanying persons.

And now the details: The World Congress will be held August 22-26 at the Vancouver Convention Centre. The host hotels are the Pan Pacific and the Fairmont Waterfront – both just steps from the center. Cruise ships berth beside the Pan Pacific almost daily. Consider that cruise to Alaska pre- or post-congress.

Dr. Scott Ganz, with the help of Dr. Hom-Lay Wang and Dr. Kenneth Judy, has designed an excellent scientific program for this congress, which will span on Aug. 20 at 1:50 p.m. and will run through Aug. 22. The program is entitled, “Defining New Paradigms in Implant Dentistry: Interdisciplinary Concepts for Success.”

Perhaps the letter to delegates best describes the mission of this congress:

Dear Colleagues:

The future of implant dentistry is constantly evolving through the efforts of visionaries who continue to push the boundaries of science. The Vancouver World Congress has been designed to educate, entertain and energize through thought-provoking presentations delivered by world-class speakers representing many disciplines and many countries. The program has been divided into four distinct sections: Esthetic Paradigms, Prosthetic Paradigms, Occlusion Paradigms and Surgical Paradigms. The interdisciplinary nature of implant dentistry will be explored, examined and presented to enlighten attendees about current concepts of successful reconstruction. This exciting program has been designed for clinicians of all levels. From the novice to the expert, the surgeon to the restorative dentist, the information will be important, timely and relevant regardless of your experience. The World Congress also combines the ICOI, its IPS Implant Prostodontic Section and its AsiaPacific Section while providing a wonderful opportunity to bring the entire staff to the ADIA Auxiliary Program.

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On behalf of the entire program committee, Drs. Hom-Lay Wang, Scott D. Ganz and Ken Judy

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STUDY

And then the facts:

This study provides additional support for the use of dental implants to replace missing teeth. “As a periodontist, I am committed to saving my patients’ natural dentition whenever possible. However, the results of this study help further indicate a dental implant is an effective and dependable tooth replacement option.”

NOTE: A copy of the JOP article “A Prospective Multi-Center 5-Year Radiographic Evaluation of Crestal Bone Levels Over Time in 596 Dental Implants Placed in 192 Patients” is available to the public. Non-AAP members can view a study abstract online and the full text of the study may be accessed online for $20 at http://www.joponline.org/. (Source: American Academy of Periodontology)

BPA BUSINESS

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TORONTO, CANADA, JUNE 8 — Modulus Media, a Toronto-based technology development and marketing company, announced the June 26 launch of DentalCollab — a Web-based software available at www.DentalCollab.com — which finally unites a centralized, treatment management system with an online social networking system to create the ideal “Treatment Workspace” for the field of dentistry.

For those new to this terminology, the “cloud” in cloud computing is a metaphor for the Internet. As an expression, cloud computing entails offering Web-based software services via the Internet where the data and software are stored on servers managed by the service provider. Thus, cloud computing users do not need to spend untold dollars on hardware, software, upgrades or ancillary support services, but need only to pay for the services they use.

Some of the more trusted and familiar cloud computing services are online banking, e-mail accounts such as Gmail™ or Yahoo! Mail®, social portals such as Facebook and MySpace and Internet-based photo albums on sites such as Webshots or Flikr®.

Similarly, DentalCollab is a cloud computing service that allows the dental community to not only facilitate all aspects of treatment management, but also to collaborate with specialists, consult with patients, coordinate with referrals, mentor or be mentored by peers, and share cases with labs and suppliers.

Through its creation of a shared Treatment Workspace, DentalCollab allows practitioners completely secure patient information management and includes seamless treatment planning, while also facilitating networking with experts anywhere on the planet who have a computer with Internet access.

The Treatment Workspace is an easily navigated mini-Web page where all those involved in a patient’s care can coordinate their efforts as well as share and manage vital information. Additionally, the practice can schedule appointments, follow-ups and reminders, consult with patients and manage multiple schedules for even the busiest practice.

“Our comprehensive software allows you to easily interface many of your other programs such as charting systems, digital X-rays and patient-financing services, thus consolidating your information,” said DentalCollab founder Shane Powell.

DentalCollab uses the same hardware and software security provisions that online banking providers use — end-to-end encrypted data infrastructure; back-ups/data redundancy; 24/7 system monitoring; permissions/roles-based user management; and 256-bit bank-grade security certificates with a $100,000 warranty.

Finally, dentists have a place to do everything they need, and want, to provide the utmost in treatment planning and meet the modern needs of their techno-savvy patients by going beyond the traditional method of contact via telephone and snail mail.

Using DentalCollab means dentists can avoid costly software upgrades, hardware upkeep and the time wasted seeking out technical support or repairs. “The DentalCollab software functions like a basic Web page, so it feels as if it is running on your own computer. This translates into a very short and fast learning curve,” Powell explained.

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With this series, the authors intend to encourage those practitioners who are hesitant to use miniscrews to use them routinely, by providing a compendium of experiences and new findings in this field.

Basis and history of anchorage: the selection of screws

Anchorage in general

Moving a body requires anchorage in the form of a counter support. The force required for the movement acts on both body and abutment. In his Third Law (1687), Newton specified that every action has an equal and opposite reaction. In dentofacial orthopaedics, this means that the force acts on all teeth involved in the case of the dental support of tooth movement. Thus, both bodies ultimately move. The extent of movement and countermovement does, however, depend on the anchorage strength of the individual teeth, i.e., on the number and length of the roots, the root surface and the structure of the surrounding bone.

Anchorage quality can be divided into three categories:
1. minimum anchorage;
2. medium anchorage; and
3. maximum anchorage.

These three categories can be described using the example of a conventional canine retraction after removal of a first premolar (Figs. 1a–c).

In the case of minimal anchorage, the support is provided by the individual teeth. Figure 1a shows that a single premolar is not sufficient as an abutment to distalise a canine. The premolar is clearly mesialised in reaction to the application of force. Figure 1b shows how two, equally strong, anchorage segments are formed. Action and reaction are comparable in this case; the result is reciprocal tooth movement. In the case of maximum anchorage (Fig. 1c), the posterior group of teeth is secured and held stationary by using a miniscrew.

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**Implant Tribune | May/June 2009**

**Clinical**

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**Fig. 2: Overview of the range of cortical anchorage options.**

**Fig. 4a, b: One-sided gap closure in the left lower jaw. Miniscrews prevented the expected reactive side effect of subsequent shifting of the middle line.**

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**IT page 1**

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**IT page 8**

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AD

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AD
The canine can be retracted by the complete force vector, as the reactive force is completely absorbed by the anchorage block formed. Apart from anchorage quality, the basis, i.e., the type of anchorage location, plays a role:

1. dental or desmodontal support:
   - use of additional intra-oral devices (nance, palatinal arch, lingual arch, lip bumper);
   - modification of fixed appliance (buccal root torque, blocking); and
   - incorporation of the teeth of the opposite jaw (Class II or III elastic bands).

2. extra-oral support:
   - headgear; and
   - face mask.

3. enossal support:
   - implants, miniscrews, etc.

This article only deals with anchorage in bony structures. The terms skeletal or cortical anchorage are used interchangeably in this case.

History and overview of skeletal anchorage

Bony anchorage has its roots in Gainsforth’s unsuccessful attempt to insert screws into the jawbone as load anchors in 1945. Many later experiments were unsuccessful and the method had become obsolete by the late 1970s. From 1980 onward, various research groups (such as Creekmore, Roberts and Turley) took up the subject once more. Creekmore published the first clinically successful patient treatment case.

There are now numerous options for cortical anchorage (Fig. 2), including (artificial or pathologically) ankylosed teeth on the basis of miniplates normally used in cranio-maxillofacial surgery and the use of prosthetic implants. Wehrbein and Glatzmaier were the first to present an implant system specifically designed for orthodontics (Orthosystem, Straumann®). These orthodontic jaw implants, which also included Mid-plant (HDC), are mainly inserted into the palate. This method has been found to be both safe and successful.

In recent years, the requirements for cortical anchorage techniques have been defined in the literature. However, upon closer inspection, only orthodontic mini-implants met these requirements favourably, in terms of:

- biocompatibility;
- small size;
- simplicity of insertion and use;
- primary stability;
Mini-implants

Any form of skeletal anchorage, including miniscrews, is by definition an implant: “An implant is an artificial material implanted into the body, which is to remain there either permanently or for an extended period.”

More than 30 different terms for orthodontic screws are used in the international literature. The most common of these are mini-implant and miniscrew, while the terms minipin or pin are preferred when speaking to patients. At present, there are more than 45 manufacturers of miniscrew systems (Fig. 5). The number of screws per system ranges from two to 154 types. In order to assist practitioners in selecting such devices according to their practice’s needs, the most important decision-making criteria for choosing implant systems are discussed below.

Material

All miniscrews are made from pure titanium or from an alloy of titanium with aluminium or vanadium. The biocompatibility of such materials, the metal surface of which is in direct contact with the bone, has been firmly established.11–14

Osseo-integration

Brånemark was the first to define the concept of osseo-integration, which he described as “a direct functional and structural link between living bone tissue and the surface of a force-absorbing implant.”15–17 Several authors, such as Costa and Maino, view anchoring a miniscrew not as osseo-integration, but as a skeletal resistance block.18,19 In the opinion of Cope and Bumann, miniscrews are anchored by mechanical stabilisation and not by osseo-integration.20,21

Diameter of the miniscrew

The diameter of the miniscrews on the market varies between 1.2 and 2.3 mm. Diameter specifications of a screw normally refer to its outer diameter, i.e., the size of the shaft, including the thread.

For secure and primarily mechanical anchorage, a certain amount of bone is required around the screw. To date there have been no studies on the amount of bone actually required; the information available suggests 0.5 to 2 mm. At an interradicular level, the amount of space available prescribes the maximum diameter of the screw. Poggio et al., Schnelle et al., and Costa et al. provide some suggestions as to the vertical space required, i.e., the space between the enamel/cement interface and the mucogingival line. These investigations clearly indicate that the diameter of a miniscrew should not exceed 1.6 mm. It should be noted that the stability of a miniscrew in the bone depends on its diameter and not on its length.26–27

Length of the miniscrew

The length of the miniscrews on the market varies between 5 and 14 mm. Length specifications of a miniscrew usually refer to the shaft, i.e., the threaded section. Like the diameter, the length of the screw selected depends on the amount of bone available. Depending on the region, the total thickness of the bone is between 4 and 16 mm.28 The length of a screw is of secondary importance to the diameter when it comes to secure anchorage, as mentioned above. Various studies have shown it is the thickness of the cortical section that plays a more important role.29–31 As far as the distribution of force over the body of the screw is

Fig. 6: The stress resistance (fracture level in N cm) depends on the diameter of the miniscrew (according to Kyung, modification by the authors).

Figs. 7a–d: For practical reasons, it is advisable to use systems that offer only one, universally applicable head variant. This single head should allow for the attachment of all types of coupling elements (threads, elastic chains, round wires, square wires).

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concerned, FEM analyses have shown that the load is applied only in the region of the cortical bone.\textsuperscript{32–33}

When selecting the length of the screw, the depth of the gingiva must also be taken into account, with an average layer depth of 1.25 mm. Thus, the ratio between the length of the head (the part of the screw outside the bone) and the length of the threaded section (the part of the screw inside the bone) should be at least 1:1. Poggio, et al.\textsuperscript{22} recommend lengths of 6 to 8 mm. Costa\textsuperscript{23} suggests miniscrews with a length between 6 and 10 mm.

Based on these studies, it would appear it is not necessary to use longer screws. This has been confirmed by numerous clinical studies. Easy identification of length and diameter through colour-coding of the screws can be accomplished by means of anodisation, using for example, OrthoEasy (FORESTA DENT). A positive side effect of this is that the oxide layer formed results in firmer anchorage of the implant in the bone.\textsuperscript{34}

**Screw head**

Some suppliers have a special head variant for each potential application in their range, such as:

- hook tops;
- ball-shaped heads;
- eylets;
- simple slots;
- cross-shaped slots; and
- universal heads (Figs. 8).

The screw head should be very small and compact, to ensure that the patient experiences minimal discomfort. However, it must be large enough for the coupling elements to be securely fastened to it (Figs. 9).

**Transgingival portion**

The transgingival portion, also known as the gingival neck, is the most vulnerable part of an implant or a miniscrew. Perforation of the gingiva provides a potential access point for micro-organisms, posing the risk of peri-mucositis or peri-implantitis.

This is one of the main causes of the premature loss of miniscrews.\textsuperscript{35–36} During the immediate post-operative phase, the mucosa should be as close as possible to the screw, to seal the area.\textsuperscript{37} The most advantageous shape of a transgingival collum is that of a cone, as this shape naturally results in safe sealing without a pressure zone. This makes it more difficult for micro-organisms to penetrate, thus preventing infections. The cone shape also seals the perforation wound, as a cork would seal a bottle, thus reducing bleeding.

**Conclusions**

The correct method of anchorage with regard to shape and quality is crucial for successful treatment. Maximum anchorage is not necessary in all cases, and thus, neither is the use of a miniscrew necessarily essential. From an historical point of view, the cortical anchorage system is, in common with other orthodontic techniques, not new at all. The idea was conceived more than 75 years ago. Of all forms of skeletal anchorage, the mini-implant is the most universally used and is the most suitable for routine use. However, before practitioners can select the most appropriate miniscrew for use in their practice from the large range on offer, they will need to review the literature thoroughly.

Editorial note: A complete list of references is available from the publisher. The next edition of Implant Tribune will feature Part II: Basic information on the insertion of miniscrews.
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Training the superior team

By Roger P. Levin, DDS

You’ve probably heard this before: Training is very important. While most clinicians will “talk the talk” about the need for training, they don’t always “walk the walk” when it comes to actually implementing it. That’s a big mistake.

Levin Group has seen over and over again that an untrained staff is dangerous to an implant practice’s bottom line. At a minimum, a lack of training will result in an unmotivated staff. More frequently, inadequate training results in dissatisfied patients, lower production, higher stress and a whole host of undesirable conditions.

An unmotivated staff doesn’t look for ways to improve the practice or team members’ own knowledge base. Consequently, a bored team will not contribute very much toward practice productivity. Even if they aren’t unmotivated, their lack of knowledge can be just as problematic. What happens if team members give patients an outdated answer to a particular question about implants? What if team members can’t reinforce the information patients receive from the doctor?

More than ever, training is critical to the future of implant practices. Whether it’s the uncertain economy or implant technology, things are changing constantly. For implant practitioners, the only way to keep team members up to speed and contributing to practice productivity is to continually upgrade their skills.

Train, train, train!

To improve your team through training, you should identify specific continuing education career paths for each staff member. Be sure that the training is appropriate in each instance. Different employees have different needs and these should be identified and a career path determined. It makes no sense to drag front desk personnel to in-depth clinical seminars where they will be bored. Conversely, many dental assistants are not as interested in insurance coding or other issues that do not pertain to them directly.

Don’t sour team members on education that doesn’t suit each person’s particular skills and responsibilities. Identify specific career path investments for the team and set up a three-year skills enhancement plan.

The need for training is two-fold. First, staff members who are more knowledgeable will obviously be able to perform more effectively. Then, as team members become better educated in their specific areas of expertise, they can take more tasks and responsibilities off the clinician’s hands. That is necessary for the clinician — or more specifically, for the clinician’s sanity!

Deciding your training objectives

What should training accomplish? Do you want your implant treatment coordinator to have greater clinical knowledge to better communicate with referring offices? Do you want the front desk to better understand the benefits of implants so that they can be reinforced with patients? Do you want your staff to be better cross-trained? These questions and others dictate the direction you want your practice to go and how to educate your team accordingly.

Many solid and reliable team members are often undereducated regarding their job responsibilities. This leads to tremendous stress, frustration and, often, staff turnover. It is important to understand that an underperforming staff member can often be turned into a superstar employee. All it takes is effective training.

Although clinicians are leaders and should be willing to train their team, they simply do not have time. Consequently, it is far less expensive and time consuming to send team members to specific courses or seminars to encourage growth.

Effective training:

• Improves patient care and satisfaction.
• Motivates the team.
• Results in higher levels of team retention.
• Enhances knowledge and skills.
• Increases productivity and production.

Training’s return on investment is huge!

For every dollar spent on training, practices can expect to earn three times that amount back — at a minimum. In fact, this investment pays back on an annual basis, much like an insurance annuity. You recoup the investment not only in the first year, but year after year, which allows the practice to continue to place more implants while decreasing stress throughout outstanding staff performance.

And here’s the best part — a well-trained team can easily train new members who join the team over the life of the practice. Even as team members come and go, practices accomplish four vital things:

• The office won’t be thrown into disarray when someone leaves.
• New members will get up to speed faster.
• Practice culture and systems remain intact.
• Patients and referring clinicians remain loyal to your practice.

Conclusion

Every implant clinician can turn a good team into a great one. In fact, even a great team can always get better! You can make this happen. Continuing education, skills and knowledge enhancement are key factors for implant practices to grow in today’s economy.

Implant Tribune readers are entitled to receive a 50 percent courtesy on a Levin Group Practice Potential Analysis™, an in-office evaluation of your practice systems conducted by a Levin practice development specialist. To schedule the next available appointment, call (888) 973-0000 and mention Implant Tribune or e-mail customerservice@levingroup.com with “Implant Tribune” in the subject line. Readers can also visit www.levingroupimplant.com for more information.

About the author

Dr. Roger P. Levin is founder and chief executive officer of Levin Group, Inc., the leading implant practice management firm. Levin Group provides Total Implant Success™, the premier comprehensive consulting solution for lifetime success to implant clinicians in the United States and around the world. For more than two decades, Dr. Levin and Levin Group have been dedicated to improving the lives of implant clinicians.

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SimPlant Academy®, the educational wing of Materialise Dental, is offering computer-guided implant dentistry hands-on training sessions for beginners and more advanced users on July 24, July 31 and Aug. 28. Courses take place at the Materialise Dental office in Glen Burnie, Md. There is also the opportunity to sign up for one of the training sessions at the SimPlant® Academy World Conference in Monterey, Calif., June 25–27.

From scan to plan to guide, to the ultimate Immediate Smile®, the SimPlant Academy training courses show dental professionals step-by-step how to plan and place implants with ease and confidence thanks to SimPlant and Surgi-Guide® drill guides. SimPlant® Compat-Ability means predictable and accurate dental implant treatment, resulting in a more efficient and stress-free practice.

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For more information and/or registration, call (888) 327-8202, ext. 117, or send an e-mail to matt.tedrow@materialise.be.

For more information, check out the company’s Web site at www.materialisedental.com.

(Source: Materialise Dental)
“Online learning is not the next big thing, it is the now big thing.”

Donna J Abernathy
Training and Development Editor

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Materialise announced the appointment of John Thomas as general manager for the United States and Canada. Thomas brings more than 20 years of experience in global marketing, sales and business management in the high-tech medical device field.

Most recently, Thomas worked for MEDRAD, Inc., a division of Bayer Medical AG where he was executive director of global marketing.

Thomas led MEDRAD’s MRI business unit’s marketing team that received the “2006 Field Marketers of the Year Award” from the North American field sales organization.

Prior to that, Thomas was a group sales and marketing director for Codman Neuro Sciences, a J & J Company.

He was responsible for creating and managing the first distributor organization, composed of 72 sales reps and 13 manufacturing agents, to support a $60 million surgical instrument business.

Thomas received his BS, in biological sciences from the University of Connecticut and then went on to receive his MBA, with an emphasis in marketing, from Rider University.

When asked about his new position, Thomas said: “I’m thrilled to be a part of such a great, technologically advanced organization. I’m both excited and anxious to take on this challenge of heading a division of a global organization with so much market potential. As a team, we will continue to develop the 3-D digital dentistry landscape.”

John Thomas is the new general manager for Materialise Dental for the United States and Canada.
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3-D provides what doctors need

By Daniel McEwen, DDS

In the modern world of today’s dentistry, doctors need the ability to accurately diagnose and treatment plan with complete confidence and knowledge they have not missed anything.

From the first dental radiograph in 1896, dentists have been asked to accomplish this task using 2-D X-rays and 3-D models of the patient’s mouth. We have been largely successful in diagnosis in many ways, but we must admit that, on occasion, a patient has been improperly diagnosed or completely not diagnosed.

With the introduction of medical-grade computed tomography in 1972, the dentist had the first opportunity to visualize multiplanar views (slices) of the patient’s anatomy. With the gradual improvement of software, we were able to look slice-by-slice in the axial, coronal and sagittal views.

Although these views are 2-D, it gave us the opportunity to look virtually anywhere in the head and in almost any direction. As software became more sophisticated and computing power more robust, we were able to handle the large data sets generated by more sophisticated CT machines, and eventually 3-D volume rendering was possible.

The drawback for the dentist was the lack of access to the CT technology and the downside for the patient was both high costs and the high levels of radiation the studies generated.

Since 1999, with the introduction of cone-beam computed tomography specifically for dentistry, the specialist as well as the general dentist is now able to afford the technology and offer the patient the very best in diagnosis and treatment planning. The rapid advances in software and image acquisition during the last five years have given the dentist even more choices.

PreXion Cone Beam offers low radiation doses acquisition with the benefits of all three two-dimensional views as well as spectacular 3-D renderings with its proprietary hardware and software packages.

Cone are the days of guessing and misdiagnosis in almost every clinical case. One can visualize any area in the mouth, TMJ, sinus and anywhere in any direction or slice thickness. The PreXion software allows for the removal of a single tooth or root for an extreme close-up examination of the dental problem.

It has been said by many that it is overkill to take a CBCT scan on every patient or that because one owns “a hammer” (CBCT scanner) that everything looks like a nail. As clinicians, we owe it to our patients to provide the very best we can.

The term “standard of care” scares or annoys doctors, and I am not suggesting we make the CBCT scan the standard; however, we should look at the technology for what it can do for both the patient and the clinician.

The amount of information is staggering and many shy away from it because they do not want to be responsible for everything they see. I choose to look at if from a different angle. Why not embrace the technology and renew your skills as a dental radiologist? Get out the old text books and improve your knowledge of dental anatomy. Become a better diagnostician and improve your treatment outcome not by shying away from more information, but by embracing it and making it your standard of care.

High-resolution, small field-of-view scanners like PreXion give you accurate information and change the way you treat your patients.

I cannot tell you how many of my patients ask me why their old dentist did not have a 3-D scanner. Is it fear? Is it cost? Is it too new? I don’t know the answer, but I will tell you my patients get excited about their treatment and learn more from seeing their own problems right in front of their eyes.

If you are performing any kind of invasive procedures from endodontics, oral surgery, implants, periodontics or orthodontics, I firmly believe you owe it to yourself and your patients to incorporate 3-D imaging into your practice.

PreXion, Inc. (www.PreXion.com), a leader in dental and industrial CT systems, recently announced a new high-resolution panoramic feature for its PreXion 5-D CBCT scanner and the PreXion 5-D Viewer, the company’s advanced visualization platform.

PreXion’s state-of-the-art dental CBCT scanner delivers high-resolution volume acquisition. It offers superior image quality through the use of PreXion’s innovative hardware-based imaging solutions. The 5-D Viewer application includes powerful diagnostic 3-D planning tools, unrivaled for their functionality and ease-of-use.

PreXion now adds panoramic imaging to its scanner.

“We are very excited to be the first company offering this high-resolution CT-based panoramic imaging capability, which very significantly improves clarity over standard panoramic equipment. It also greatly reduces X-ray exposure and examination time because the panoramic image and 3-D CT volume are generated simultaneously in one scan,” said Robert Meier, PreXion’s president and COO.

PreXion also announced its customer support team will upgrade the hardware and software of existing customers, free of charge, through their maintenance agreement. Therefore, even current customers can benefit from this significant upgrade.

(Source: PreXion, Inc.)
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Why did Crescent Products feel it was important to develop a patient comfort product line?

When this product line was developed, we wanted to address a problem that both doctors and patients were experiencing during a treatment. For the patient, there was an issue of discomfort because of lack of proper support. For the doctors, it was difficult to get the patient properly positioned in the chair. Our thousands of happy customers tell us we have addressed and solved both of those problems.

Tell us a little more about why these products work in solving those needs.

We developed a very comfortable, memory-foam product line specific to the areas where a patient needs support the most. Our headrest fits into the naturally void area behind the patient’s neck, allowing his or her head to be supported while resting at an angle for easier treatment. The lumbar support takes pressure off the lower back, while the knee support removes additional pressure from the back and hip area. Our full chair pads also contain memory foam, conforming nicely to every patient and relieving pressure points throughout the whole body. This is especially important in any practice where long procedures are performed. With the addition of these products to a practice, the patient’s experience is a much more pleasant one, and what practice doesn’t want a happy patient?

How long have you been producing these products?

We developed this line more than 10 years ago, long before ergonomics and spa dentistry were the hot topics that they are today. We are proud to say that our products are in practices all over the world, from here in North America to Australia, Asia and throughout Europe.

What challenges did you face in introducing this new product line to the dental market?

While we were extremely successful in showing why these products were necessary, we often heard clinicians singling out certain patients who could benefit from this product, i.e., those with back problems or the elderly patient who may have difficulty bringing his or her head back in the dental chair. We find it important to point out that even the healthy patient feels an amazing difference using these products, so the investment shouldn’t be made for just those one or two patients — keep the products in the chair and let everyone benefit from them! They can truly make a difference.

What other types of products do you offer?

We carry two different size headrest supports (one is the original size and one a little thicker for those patients with longer necks or those who have difficulty being in a reclined position), a U-shaped neck support de-signed for sedation dentistry, and a child booster seat. Any practitioner who treats young children knows the children simply won’t fit the dental chair properly. Our booster seat lifts them up, putting them in the proper position in the chair. We are also in the midst of developing another type of booster, this one for that age group who has outgrown the booster seat yet does not yet fit the dental chair properly. This would be geared for children age 7 to early teens.

This sounds like a rewarding product line to be a part of.

At every dental show in which I exhibit our products, I am approached by past customers thanking me for one of the best investments they’ve ever made in their practice — now that’s rewarding!

Crescent Products, Inc.
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Crescent focuses on patient comfort

An interview with Judy McDonald, division manager

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Atlantis abutments are uniquely designed and fabricated using Atlantis VAD™ (Virtual Abutment Design) system, a patented process that combines state-of-the-art 3-D optical scanning, advanced software and manufacturing methods to deliver patient-specific abutments that provide optimized function and esthetics of a cement-retained restoration.

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- **Atlantis 3-D Viewer.** Patient-specific abutment designs brought to life through optimized 360-degree views.
- **Lab-based scanning.** Further efficiency is now available through the use of the 3M™ ESPE™ Lava™ Scan ST System by dental laboratories for scanning and sending of Atlantis case images, which eliminates the need to ship case models.

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Cory Wanatich, DMD, Periodontist

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Jerald N. Rosenberg, DMD, Periodontist

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