



SEPTEMBER / OCTOBER / NOVEMBER / DECEMBER 2017

# IVI Visions

**Your Obligations  
as a Physician  
of the Mouth**

**Controlling  
Overhead Part II**

**Uncovering the  
Cervical-Occlusal  
Link**

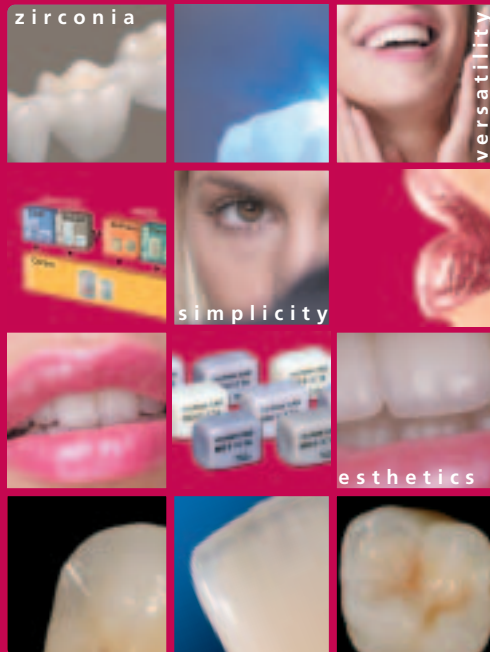
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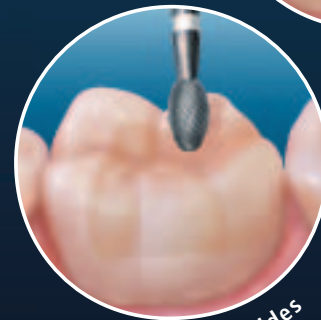
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The Las Vegas Institute for Advanced Dental Studies (LVI) publishes LVI Visions. Please send any comments or suggestions to 9501 Hillwood Dr., Las Vegas, NV 89134. Telephone (888) 584-3237 or (702) 341-7978. Web address • [www.lviglobal.com](http://www.lviglobal.com).

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E D I T O R I A L  
BY WILLIAM G. DICKERSON, DDS, LVIM

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# *Your Obligations as a Physician of the Mouth*



*Several years ago, Reader's Digest ran an article titled "Is Your Dentist Ripping You Off". The author visited 28 different offices to be "diagnosed". There was such a discrepancy in the diagnosis, ranging from no treatment recommended to several thousand dollars in diagnosed treatment.*

**T**he conclusion of the article was that the dentist that diagnosed the least was the best dentist and the one that diagnosed the most was the worst. In actuality, the dentists that diagnosed the least were uneducated or felt guilty about diagnosing what needed to be done. For those of us who went on the internet to see the authors x-rays, we can verify that his oral health was in a horrible condition. And the truth was that the dentist who diagnosed the most was the best

and most comprehensive dentist offering complete restorative dentistry. Those that diagnosed nothing were the worst. They were unable to diagnose what they could not see.

The same concept is being applied today when it comes to comprehensive "mouth doctor" dentistry. For those that have not been trained in this area, they can not diagnose what they can not see. The less they know, the more everything seems normal. It is like a physician that is unable to diagnose a disease because he or she

has never been trained to recognize the obvious signs and symptoms that one who has been trained, would easily recognize.

So let's talk about your duties as a dentist when a patient enters your practice. It is your obligation to diagnose the condition of the mouth even if you are not trained to treat it. It would be like a surgeon who does not like doing brain surgery or does not know how, NOT diagnosing a brain lesion because he does not want to or does not know how to treat it.

# *The bottom line is; every dentist should diagnose their patient's mouth as if it were their own.*

However, many dentists do this unconsciously. The problem is that most dentists do not diagnose many pathological conditions because they do not recognize the signs and symptoms.

Although it is your obligation to diagnose the pathologic condition of the mouth, it is the patient's right to say no to treatment. Too many dentists get upset and take it personal when a patient decides not to have the treatment done. Just as it is the right of a cancer patient to reject cancer therapy, not accepting treatment is the patient's right and no one should be indignant if that is their decision. Just make sure you document that the patient was informed of the problem and that the patient refused the treatment.

Much of the population is not in their mandibular physiologic comfortable position. Why that is was discussed in the previous issue of this magazine. But if a patient is NOT in their physiologic position, it is the dentist's obligation to let them know. However, just because someone is not in the right physiologic mandibular position, does that mean they need to be treated? Does everyone who is not in their physiologic position need to

have a full mouth reconstruction? The answer is of course, NO. Not everyone who is not in their physiologic mandibular position needs restorative treatment nor do they need any treatment if they are asymptomatic. ***The bottom line is; every dentist should diagnose their patient's mouth as if it were their own.*** The ethical question to ask is, what would you do if it were YOUR mouth?

When a patient is evaluated, the treating dentist needs to determine two things about the patient's habitual biting position.

1. Are they in their comfortable position or not?
2. Do they have related symptoms?

Someone who is not in their comfortable mandibular position may not have any symptoms. What are some related symptoms? Headache, migraines, neck pain, shoulder pain, facial pain, back pain, ringing of the ears, vertigo and many others. Some signs of occlusion disharmony are worn teeth, abfractions, exostosis, fractured teeth, malocclusion, etc. So if they do not have any symptoms and are not in their comfortable position, do they need to be treated? The answer is; only if they need

restorative treatment anyway due to decay or restorative breakdown. If they do not have symptoms, they do not need to be treated. However, it is still the obligation of the treating dentist to inform the patient that they are predisposed to developing problems so if in fact they do start to develop problems they will seek the help of a qualified dentist.

Even if someone has symptoms and is not in their comfortable mandibular position, they may CHOOSE not to be moved into that position. They may decide that the treatment is worse than the symptoms or do not want to make treatment of their disorder a priority. That is the prerogative and the right of the patient. It is their right to have treatment or not to have treatment and live with the symptoms. Just as a cancer victim can choose not to have treatment, so can your patients choose not to have dental treatment. However, if these patients decide to be restored in their current pathologic position, I would advise the treating dentist not to guarantee the longevity of the restorations. Whatever damage they have done to their teeth because they are "trying" to get comfortable,



they will continue to do so after being restored. The beauty is that the diagnosing dentists can by means of an orthotic mandibular repositioning appliance determine if the symptoms are bite related and if they can eliminate those symptoms before ever touching a tooth.

### So what are the treatment choices?

1. No Treatment
2. Existing CO treatment
3. Aesthetic Treatment
4. Comprehensive Restorative Treatment

#### Comprehensive Restorative Treatment

Comprehensive Restorative Treatment can be several options. Coronoplasty (equilibration), orthodontics, posterior restorations, full arch, full mouth or a combination of these are the options. Depending on the situation, any of those treatments are a viable way to correct the pathologic situation of the bite.

The first step before beginning any comprehensive treatment is to

determine if the symptoms ARE bite related. By means of orthotic mandibular repositioning appliance, the diagnosing dentist can determine if the symptoms are bite related and if they can eliminate those symptoms. Once the correct comfortable position is found and symptoms are eliminated, the dentist then determines which treatment option to permanently place the patient in that position.

Is the correct position close enough to their existing position that it can be accomplished by means of a coronoplasty? Sometimes as little as 0.5 mm off of muscular harmony can make a huge difference and the patient may have painful symptoms. A comprehensive bite adjustment may alleviate those symptoms. There have been cases of mine and other LVI faculty where this was achieved, even the elimination of a lifetime of migraines.

If the bite is so far off that a coronoplasty cannot correct the problem, then orthodontics and/or restorative becomes the treatment option. Ortho is ALWAYS an option in neuromuscu-

lar complete comprehensive dentistry. Although not many adults will choose orthodontics because of the time involvement, it should always be discussed. They may need restorative treatment anyway due to unaesthetic teeth or broken down dentition. Ortho may make them straight and correct the position, but the teeth will end up straight and unaesthetic.

In conclusion, it is the obligation of every dentist out there to diagnose their patient's mouth as if it were their own and to learn as much as possible about dentistry so they can offer complete comprehensive treatment or at least diagnose it. Remember, a dental degree is just a license to learn more about dentistry. The question is; are you really learning more? Are you still doing only what you were taught in dental school? Have you not evolved to a different level of patient care? Are you truly a physician of the mouth? If not, then you owe it to your patients to become one, so you can offer them the best possible treatment and care they can receive.

*The ethical question to ask is, what would you do if it were YOUR mouth?*

INTERVIEW

D. GARY WOLFORD, DDS

*You have an interesting perspective about TMD because you are an oral surgeon. Since most oral surgeons are prone to doing a lot of surgery, instead you usually avoid surgery on your patients; can you explain why this is?*

*How did YOU discover NM dentistry?*

I had TMJ problems when I was a teenager. I had orthodontic therapy completed at age fifteen and three months later I got hit on the left side of my jaw playing football. After my orthodontic therapy was completed, I grew three inches. After getting hit, I developed a left internal derangement, with clicking on opening and closing, in my left temporomandibular joint. I was misdiagnosed. I was told that the clicking was normal. This was in 1958. I noticed that after football practice I had no pain, headaches or clicking sounds. I would get left side facial pain, headaches, cervical and shoulder pain. One afternoon, I took my football mouth guard home and wore it while I was doing my chores. I noticed that I did not have any of the left sided pain. I wore the soft mouth guard at night and whenever I had pain for the next several years.

I was actually treating patients neuromuscularly, although I didn't really know it, because we were evaluating patients and prior to surgery, were having them bite into a registration material to where they felt most comfortable. For patients undergoing orthognathic surgery, we would then mount the models to this comfort bite and perform maxillary and/or mandibular surgery to place the patient's jaws in this comfortable position. The results were very successful. In 1984, I was teaching a graduate education course in the Diagnosis and Treatment of Temporomandibular Joint Disorders at the University of Detroit Mercy Dental School when one of the attendees, Dr. David Murphy, who was a general dentist in Marlette, Michigan, approached me after the course and said that he had several patients that looked like some of the "funny" ones that I had presented. He had a piece of equipment that he thought would let me prove what I was teaching. Two Wednesdays a month, he brought the Myotronics K-5 instrumentation from his office down to Henry Ford Hospital. We would work up four patients a day. I quickly realized that my theories on moving the jaw relationship to a position at which the patient felt comfortable could now be proven with the documentation and measurements of the K-5 system. I went out to Seattle to take a course given by Myotronics. Dr. Robert Jankelson was the course instructor. I sat in the back row and Dr. Bernard Jankelson stood over my left shoulder and Dr. Jim Garry stood over my right shoulder and they both kept saying "why is an oral surgeon here". I replied, "Because your equipment can document and prove what I'm seeing in my surgical patients". At that time, I believe I was the first patient they evaluated with an internal derangement.



*You have had a long and successful career that has not only taught dentists how to incorporate TMD Diagnosis and Treatment Planning into their offices, but how to do it using the principles of muscular harmony. Can you explain how you fell into teaching this aspect of dentistry?*

I started teaching the principles of neuromuscular dentistry in earnest after I came back from the Seattle, Myotronics meeting. Now I could prove that we could eliminate the patient's pain by constructing an orthotic to the myotrajectory. My therapy successes using conservative therapy were immediate. Since I no longer had to treat patients surgically, but could treat them with an orthotic and have orthodontic and reconstructive prosthetic work done on patients to eliminate their pain, was very rewarding. The patients did not have the complications of sensory loss that is involved with orthognathic surgery.

*Can you explain to everyone why you decided to join the distinguished LVI faculty?*

I was very honored to be asked to join the LVI faculty. I met Dr. Dickerson at a North American Neuromuscular Study Club meeting. He attended as a guest in Seattle, Washington the day before a Myotronics meeting. I presented my Classification of Craniomandibular Disorders at that meeting and Dr. Dickerson asked me to join the faculty and become one of the instructors in the TMD course.

*You've had such a fulfilling life, what would you consider the greatest aspect of your life?*

The greatest aspect of my life, besides my wife Claudia and three children Lynn, Donald and Daniel, is the fact that they have tolerated my passion for neuromuscular dentistry. Secondly, was realizing that the neuromuscular dental philosophy can eliminate many patients' pain and suffering and allow them to return to a normal life situation. Lastly, being a faculty member at LVI, where I have the opportunity to teach many dentists how to diagnose and treat patients with craniomandibular disorders.

*Which professional accomplishment(s) do you value most?*

I most value becoming a Diplomate at the American Board of Oral and Maxillofacial Surgery, obtaining a Fellowship in ICCMO and becoming a lecturer at the Las Vegas Institute for Advanced Dental Studies.

*Many dentists are afraid to incorporate TMD into their practices, mainly I think because they don't understand it. Do you think it is something most dentists will find rewarding?*

Any dentist who becomes involved with neuromuscular dentistry very quickly realizes how much pain relief can provide to patients. The large number of dentists attending LVI courses emphasizes that neuromuscular dentistry is successful.

*Why is it important that dentist at least understand occlusion more than they currently do?*



*Who do you admire and why? Who are your mentors?*

It's not that they need to understand occlusion; it's a need to understand how the mandible opens and closes. We have evaluated over 13 thousand patients over the last 27 years using Myotronics equipment (K-5, K-6I and K-7). All patients that I have evaluated that had facial pain due to the way their teeth and jaws come together have an abnormal jaw closure pattern. If we consider that the mandible is a unique bone and is the only bone in our body that has a left and a right side that is connected, that the maxilla does not move, and the muscles that move the mandible during function, (mastication), must move the mandible so the lower teeth interdigitate with the upper teeth. We can measure the closing trajectory of the patient's mandible in three dimensions, anterior-posterior, vertical and lateral. The anterior posterior closing problem has been identified by neuromuscular dentists for years. In fact, patients with internal derangements, when you reduce the discs, the mandible is always positioned anteriorly to where they normally close their teeth together. When Dr. Bill Dickerson developed the LVI golden vertical, we then had a standard to measure vertical deficiencies between the maxillary and mandibular arches. Using the LVI global measurements we are now able to show in our group of patients, 99 percent of the patients close posteriorly to the myotrajectory and 99 percent of patients have a vertical over closure. It is time for dentistry to evaluate how the patient's mandible closes. I do not know of any dental school in the country that teaches dentists to evaluate how the jaw closes. Instead, they teach us to manipulate the mandible. Any time a dentist puts his hands on a patient's jaw to affect closure of the mandible, we no longer have a physiological mandibular closure.

My father was an oral surgeon in Johnstown, Pennsylvania who was one of the best technical oral surgeons that I have ever seen. Dr. Robert V. Walker was the head of my program at Parkland Memorial Hospital in Dallas, Texas. He had great vision in the training of oral surgeons in the diagnosis and treatment of trauma, orthognathic surgery and condylar pathology. In fact, he wrote one of the original articles on the diagnosis and treatment of unilateral condylar hyperplasia. I actually had no mentors. As an oral surgeon using the Myotronics equipment starting back in 1984, there was nobody else in my area using the equipment. I virtually was self taught and developed the Classification of Craniomandibular Disorders based on my clinical findings and experience. The dedication and perseverance of Drs Bernard and Robert Jankelson to develop the Myotronics equipment and successfully battle the Federal Drug Administration to have the Myotronics equipment obtain approval. Dr. Norman Thomas for his brilliance and to be able to teach the LVI TMD course with him. I have a very special admira-

*Why do you believe it is that some are afraid to find out about the truth of NM dentistry?*

tion for the courage and dedication to neuromuscular dentistry that Dr. Bill Dickerson has provided at LVI. My mother, who has been legally blind since she was 19 years old, has always been very supportive and never complains about her inability to see.

Dentists do not want to know what they are doing wrong. Dentists do not understand mandibular closure pathways. This is a problem because no dental school teaches a dentist how to evaluate how the jaw closes. Every patient who has pain when their teeth and jaws close together has an abnormal closure pattern. The concern is why they don't want to understand. Ninety-nine percent of my patients have a regular general dentist and seventy-five percent have had orthodontic therapy. It's about time dental schools start to teach dentists how to evaluate how the patients jaw closes.

*What is the biggest problem in dentistry today? What bothers you the most?*

The failure of dentistry to evaluate how the mandible closes. The emphasis on the use of MRI's to evaluate disc position, which is only 20 percent accurate. The failure of dentistry to recognize the success of neuromuscular dentistry.

*How can an average dentist, who is nowhere near as smart as you, apply the principles that you teach in their practices?*

I have never claimed to be very smart. I have always claimed to be very practical, observant and an excellent diagnostician. We evaluate patients with a history, extensive clinical examination, radiographic evaluation including a PA and lateral ceph, panorex with the patient biting their teeth together, axially-corrected tomograms and electromyographic, computerized mandibular scanning and electrosonography. We construct the orthotic to the neuromuscular position and we are able to eliminate the patient's pain. Any dentist utilizing the clinical Classification of Craniomandibular Disorders, the appropriate clinical evaluation and constructing an orthotic to the patient's myotrajectory can successfully complete Phase I of treating neuromuscular dentistry.

*If you could give a piece of advice to all the dentists out there what would it be?*

Come to LVI. Complete the core courses. Take the TMD course so you can fit all the pieces together and treat your patients to the neuromuscular position.

*What do you think the future of dentistry is and why?*

I believe the future of dentistry is neuromuscular dentistry. I strongly believe that within a relatively short time, dentists that are not treating patients using neuromuscular philosophy and procedures will have increased problems with their treatment of patients. I am seeing this in my practice. Many of my referring dentists are becoming aware of the value of neuromuscular dentistry. I have been averaging three to four new patients a day for the past ten years. More dentists are referring patients for neuromuscular evaluation.

*Do you have any final thoughts you would like to share with the readers?*

If I had not had an internal derangement of my left temporomandibular joint, was incorrectly diagnosed, had inappropriate treatment recommended and was able to eliminate my jaw dysfunction pain with a soft bite guard, I wouldn't be here. All patients who have facial pain due to the way their teeth and jaws come together, have an abnormal jaw closure pattern. The only way that you can measure or diagnose an abnormal jaw closure pattern is with the Myotronics equipment. The only Institution that is teaching dentists to evaluate how the jaw closes is the Las Vegas Institute for Advanced Dental Studies. Prior to my introduction to the Myotronics equipment, I was operating on 100 patients a year. I was basically doing osteotomies to advance the maxilla and occasionally plicating the disc in association with the maxillary advancement to eliminate the abnormal closure pattern. Since 1988, when I left Henry Ford Hospital to open up my new practice, I have operated on less than 100 patients in 19 years for patients with craniomandibular disorders. The majority of those, probably about 60, had previous joint surgery, which was unsuccessful. This is because oral surgeons, orthodontists and general dentists are not taught to evaluate how the patient's jaws close. If a dentist can eliminate a patient's abnormal jaw closure pattern, he will be able to eliminate the patient's pain and successfully treat their problems.

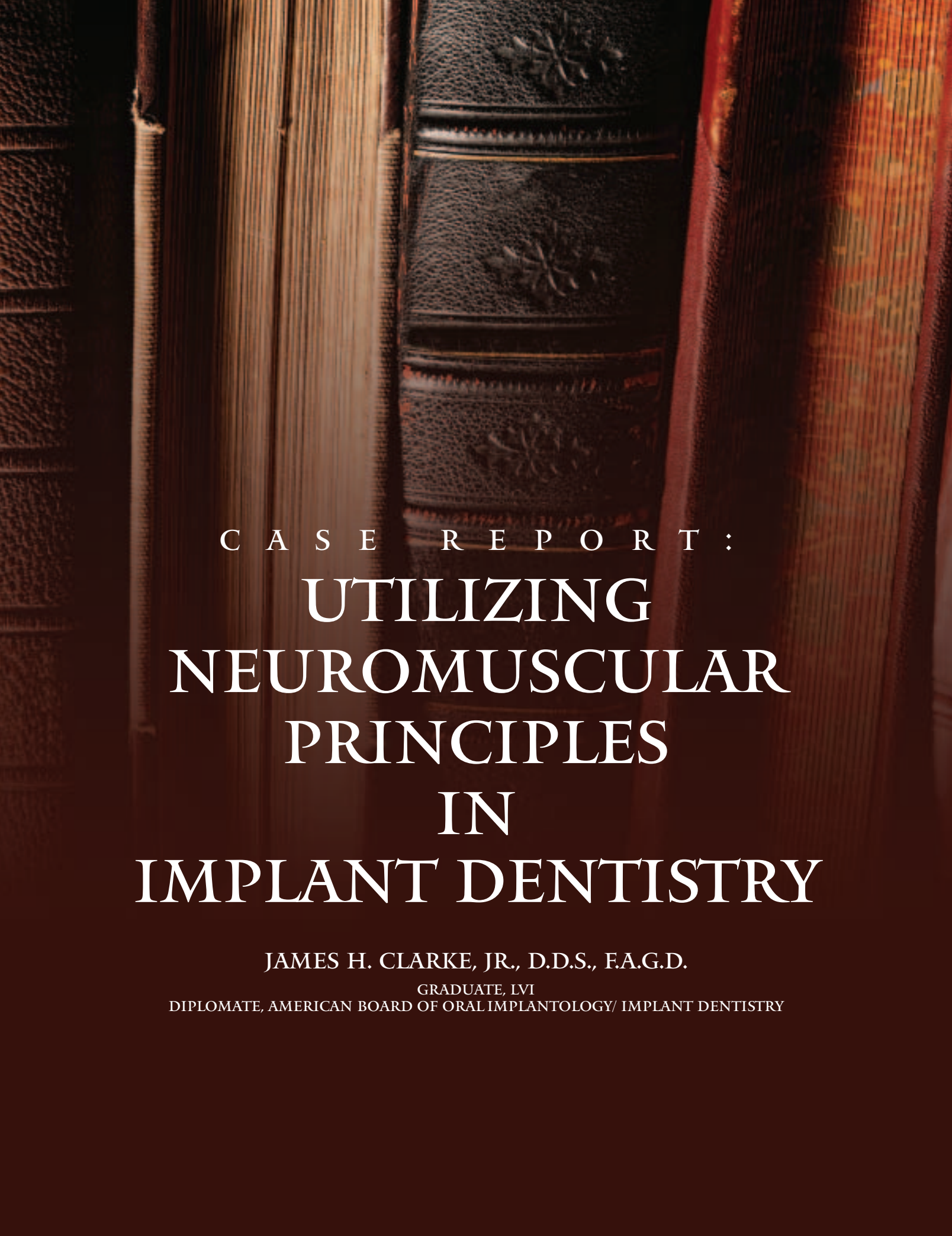


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### **TMD Developmental Diagnosis Course Dates**

2007  
September 10-12  
December 12-17

2008  
April 9-11  
November 17-19



C A S E R E P O R T :  
UTILIZING  
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JAMES H. CLARKE, JR., D.D.S., F.A.G.D.

GRADUATE, LVI

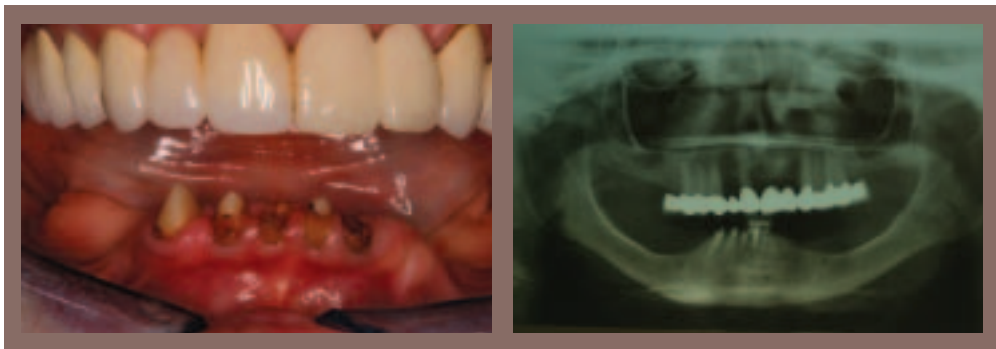
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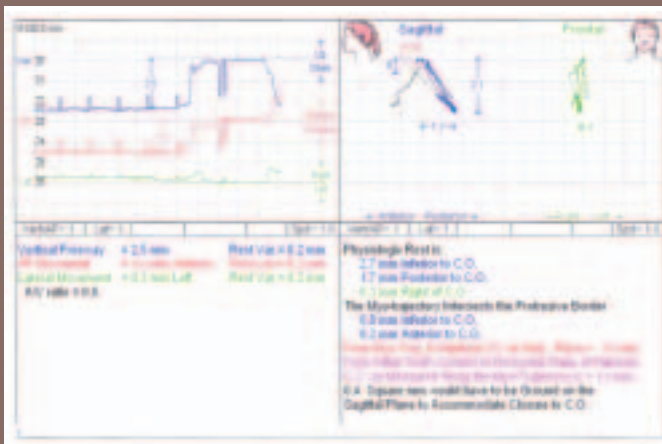
**T**

he patient presented with the request to have “implants hold my lower teeth down.” In the pre-clinical exam she represented that she had been referred to this office from a colleague familiar with our philosophy of treatment and was a recent arrival to the city. She had a non remarkable health history and a background in physical therapy. She was aware of a click in her right jaw and had some muscular pain of the neck, face and the jaw. Her intra-oral exam showed a poorly fitting lower removable over-denture due to un-cemented attachments on the remaining roots. Panoramic radiographs confirmed edentulous posterior segments. Impressions were made of the existing upper arch and the lower arch and the existing over-denture was used to articulate the case to her habitual occlusion. After agreement of the treatment plan and proper informed consent, the case began. The immediate treatment plan was to extract the remaining residual roots, perform an alveoplasty, prepare osteotomy sites and insert six Bio-Horizon Maestro root form implants and, by utilizing an indexed Silteck of the wax-up, prepare the abutments intra-orally and load and deliver a plastic FP-3 prosthesis. (Misch Classification: Fixed replacement teeth with gingival simulation.) During the healing process a LVI fixed mandibular orthosis would be developed using information gained from ultra-low frequency tens and the kinesiograph (K-7). This neuromuscular position of the mandible would then be transferred to proper articulation and a fixed twelve-unit FP-3 porcelain fused to metal bridge would be delivered. It should be noted that to keep the prosthesis stable, taller custom abutments would be needed prior to completion of the case.

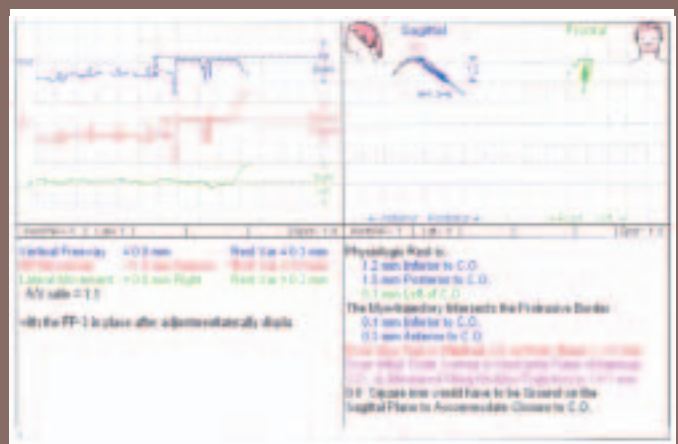
The articulated case was sent to the lab for a wax-up (Williams Lab) to represent the lower dentition to the first molar area and to prepare the indexed Silteck. Upon return from the lab the patient was scheduled for the procedure.



The patient was pre-medicated with antibiotics and pre-sedated with two .25mg. tablets of triazolam (Halcion). She was taken to the operating room and prepared in the usual manner for oral surgery procedures. Patient was administered bilateral inferior nerve blocks of 2% Xylocaine (1:100,000 epi.) and bilateral mental nerve blocks using 4% Articaine (1:100,000 epi.). Following achievement of anesthesia and completion of an intra-oral scrub using .12% chlorhexene and sterile draping of the patient, the procedure began. A full thickness periosteal flap was preformed by initiating the incision using a #15 Bard Parker blade on the left posterior attached tissue on the ridge, carried forward around the residual root tips on the labial and lingual and then extended distal through the attached tissue on the crest of the ridge on the right side. The tissue was reflected to reveal the residual roots and the absorbed alveolar bone. The exit of the neurovascular bundle of the inferior alveolar nerve was identified, bilaterally, and 4-0 silk tie backs were placed. The remaining roots were luxated and removed. A 558 bur using copious amounts of sterile water was used to perform an alveoplasty until the ridge width provided ample bone for predictable implant placement. The patient's existing over-denture had the lingual flange removed bicuspid to bicuspid prior to the surgery and was used as a guide for the placement of the six root forms. The osteotomies were performed using the recommended technique of high torque, low speed in an electric handpiece using copious sterile water. The grit blasted 4.0 and 3.5 mm. diameter implants were secured and the abutments used to seat them were tightened. Interrupted absorbable 4-0 gut sutures were placed between the abutments and over the edentulous ridges. An angled abutment was placed in the most labial root form. A small piece of cotton was packed into the screw hole of each implant abutment and then back filled with Geristore. The abutments were prepared intra-orally using copious water and a high speed electric handpiece. After the preparation of the abutments, the area was irrigated and a layer of Rubbersep was placed over the prepared abutments to aid in the removal of the transitional acrylic FP-3 prosthesis. The indexed Silteck was loaded with Exacta bisacrylic Shade A-1, tapped to remove the air entrapments, placed into the mouth over the abutments and, secured by the opposing occlusion, seated over the upper arch and closed to the soft tissue stops. The hardened acrylic was removed from the Silteck and, then, trimmed and stained. The plastic FP-3 was luted with Durelon cement. The sedated nature of the patient was not conducive to extensive occlusal adjustment but it was noted that a harmonious bilateral contact did occur. The patient was given post operative bilateral Gow Gates blocks using 4% Marcaine (1:200,000 epi.). There was an estimated blood loss of 10cc. The patient was dismissed in good condition in the accompaniment of her daughter.

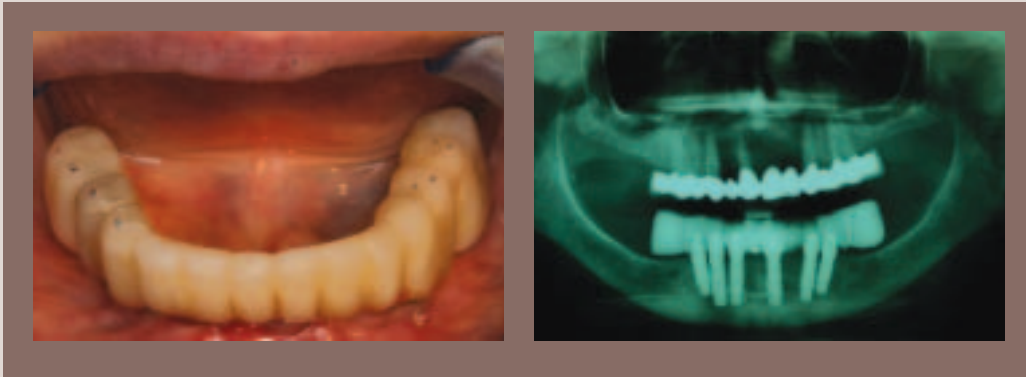


Before Orthotic

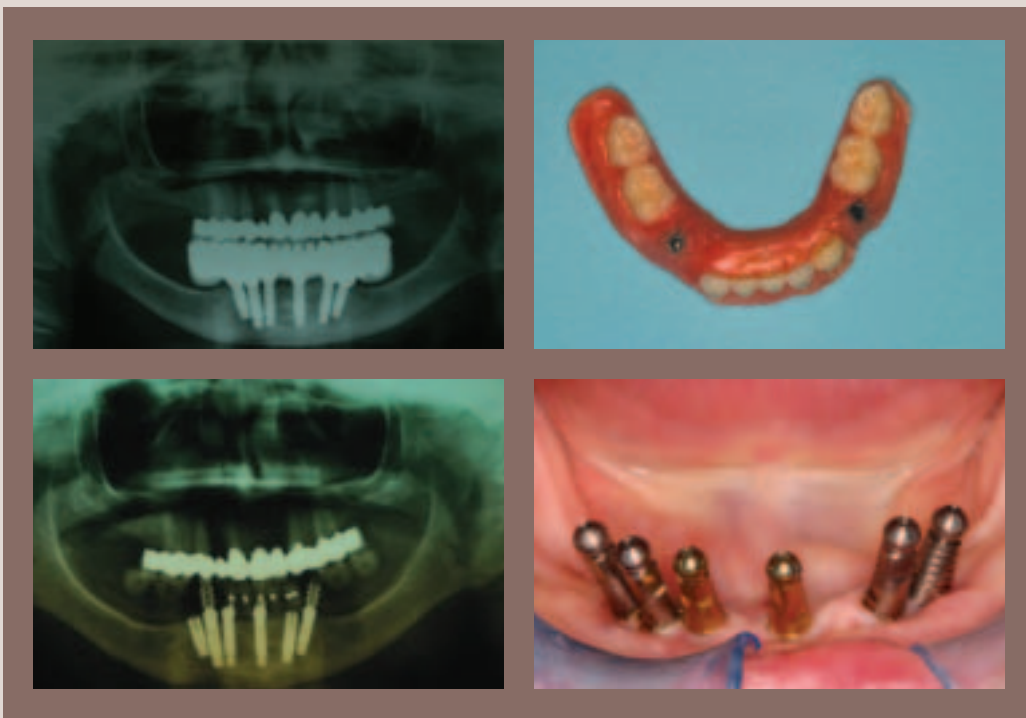


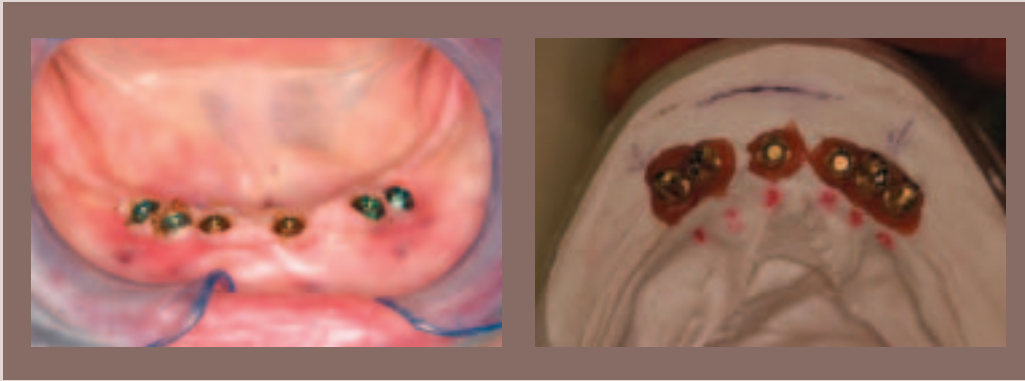
After Case Finishing

During the healing process, the patient underwent a tens and K-7 evaluation whereby a more physiological mandibular position was determined. A new wax up was performed using the transitional FP-3 as a base for support and then later another fixed orthotic was made chair side. The patient wore this for a period of time until the muscles were relaxed and the joint noise dissipated.

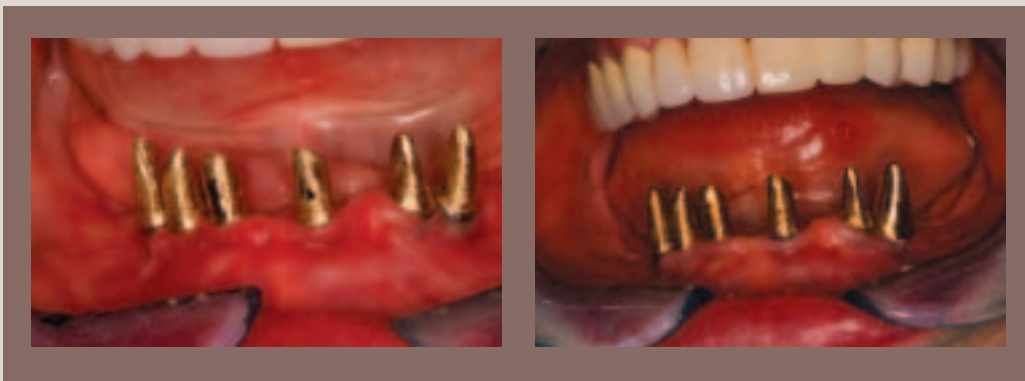


It became apparent from retention problems and resultant torquing of the lower prosthesis/orthotic that more efficient abutments would be needed. To arrive at the best position and maximum advantage for support the position of the lower teeth was required. The ability to transfer a sectioned orthotic to the articulator in this case was suspect for this important step. A transfer did serve as a guide for a wax up with denture teeth that were tried into the mouth and evaluated for correct neuromuscular position. After the position of the mandibular teeth was achieved, a closed-tray impression transfer was accomplished using polyether impression material. The impression was sent to the lab for fabrication of the custom abutments.

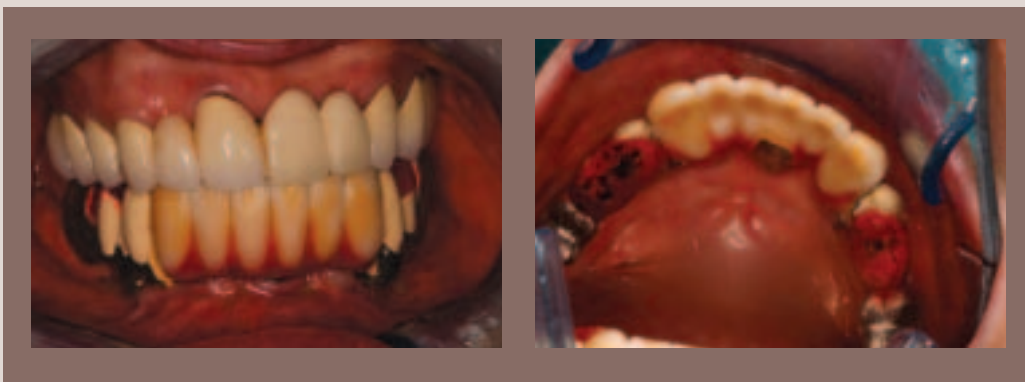




The abutments were further refined prior to the framework adding a coping was on the most distal implant on the left and minor adjustments with cutting copings on two of the others. After placement and radiographic confirmation an impression was taken and another orthosis was made chair side for the case.



The mandibular transitional FP-3/orthotic was left un-cemented, though retained in the mouth.



A framework was fabricated and wax was used to simulate tooth placement. The wax was adjusted in the mouth and the occlusion verified. A porcelain gingival shade guide was used to get as close as possible to the patient's gingival tone. The case was returned to the lab (B.I.T. Lab) for completion. Upon return the case was placed in the mouth without cementation and adjusted. The patient returned one week later where the lingual cusps of the lower first molar were softened and the bite was adjusted using ultra-low frequency tens and Kerr green wax. The case was seated with "soft access" cement.



## Looking Back

What I would do different and what was learned from this case was, at times, painful (for the author). First, at the time of implant insertion I would have better spacing on the right side to provide greater room for bone healing and better access for patient hygiene. She was given a Hydrofloss and Clyosis during the healing and final stages. I would not be surprised that the implant planning software used with the CAT scan technology could have provided better placement guidelines. I could have used the same technology to provide a bone model for a HA coated custom designed subperiosteal implant. This would have provided better support and increased the anterior-posterior support for the opposite side cantilever. I would have also taken a transfer impression, that I did take later, to have custom made abutments fabricated at the time of placement. And, again, "not knowing what I do not know", these abutments may have been able to be made ahead of the day of surgery based upon the implant planning technology.

The transfer of the bite from the orthotic was more difficult because the indirect transfer necessitated by the lack of draw and poor height of the hand prepped abutments. The orthotic broke in the distal sections and this would delay the healing of the muscles and the bite and resulted in delayed results and increased chair time and real time. The effective time and lab cost involved made the case more of a “learning experience” than a profitable one

These are the types of cases I seek to treat and I learn something each time. My biggest “get” is even though I have been placing and restoring implants for over twenty-three years I am behind by not utilizing the technology afforded by CAT scan technology. Therefore, I will involve myself in the implant programs of LVI and Dr. Leo Malin.



**James H. Clarke, Jr., D.D.S., F.A.G.D.**

*Diplomate, American Board of Oral Implantology/ Implant Dentistry  
Fellow, American Academy of Implant Dentistry*

*Dr. James H. Clarke, Jr. graduated from Baylor Dental School in 1974 and then began his private practice in Houston. His focus from the beginning of his career was to distinguish himself as a consummate professional through thorough communication with his patients and the ability to deliver these results through constant education on a higher level. His belief is that this journey is never ending. His studies and achievements thus far have enabled him to earn the distinctions he has, beginning with a Fellowship in the Academy of General Dentistry. His extensive studies of implant dentistry and the application of that science to his patients' needs earned him a Fellowship from the Misch Implant Institute, a Fellowship in the American Academy of Implant Dentistry, a Diplomate in the International Congress of Oral Implantology and a Mastership from the American Academy of Implant Prosthodontics. With a Diplomate Board Certification from the American Board of Oral Implantology/Implant Dentistry and with Graduate status from the prestigious Las Vegas Institute for Advanced Dental Studies his use of neuromuscular principles in treatment planning forms a core of excellence. He continues to study at LVI to seek a greater understanding of the physiology of applied neuromuscular treatment to deliver results of excellence in oral rehabilitation.*

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# CREATE YOUR VISION

Alan J. Singleton, DDS





*It is about dreams,*

*desires, possibilities,*

*life expectations*

*and your reality.*



*Creating and writing a vision statement is an extremely important process. It is about dreams, desires, possibilities, life expectations and your reality. You have*

*heard this before but it's not enough to simply agree with it, the results only surface when you take it to heart. At first, writing a vision may seem like an overwhelming task. There are some simple steps that can start you on the right track, or maybe help you re-visit the vision you already have. I have found this worth putting my time and thought into.*



**I**t really does start to all happen when you embrace this, and do it for yourself. It is not a one shot deal. Make it a part of your life. So where do you start? I have myself struggled with this in the past. I have found a few things out over the years that have made it easier. Don't be afraid to just get started and write some things down. The vision that you create today can be different from the vision you create tomorrow. I have resisted creating a vision for fear that it was not perfect and I may change my mind. I have come to realize that one of the beauties of creating my own vision is that I can always create a new one. You can create your reality. By thinking, dreaming and writing your own vision you start to take control of your reality. Failing to create your own vision allows someone else to create your reality for you (ask me how I know). You should always be looking at your vision to make sure it is what you want, knowing that you can adjust and re-create

anytime you want. In fact, the process of re-thinking and re-creating may allow you to get closer and closer to that ideal vision that is you.

Find somewhere that inspires you to create. Maybe you have a secret place out on your favorite hiking trail, a quiet bench by a stream, a big blanket on the beach, heck maybe it is walking thru a crowded noisy shopping mall. It takes a commitment to find the time and a place that allows you to think and create. It wouldn't hurt to have some paper to write it down on, so go ahead, spoil yourself, and buy a nice journal to write in.

I love to let my thoughts flow free sitting at 38,000 feet in an airplane looking out at the earth below (a glass of scotch can help). I start to see a bigger picture, put things in perspective, and see farther for where I want to go. You want to look further, and have faith that the possibilities are endless. Do not worry about the how. Once you are back on the ground (so to speak) you simply put one foot in front of the other and

make decisions that support your vision. Jack Canfield has a great analogy I really like. When you drive at night the headlights only illuminate a couple of hundred feet in front of you, you trust that the road continues beyond what you can see. You know where it is you want to go and you choose a road that will take you there, then you simply focus on the piece of road you can see in front of you (make choices that keep you on that right path).

Setting goals is very much related to creating your vision. Short and long term goals can help give direction towards your vision. That ideal vision, that sometimes feels unattainable, can be broken down into steps by having goals that work towards it, and that you know you can accomplish. Make some short term goals and as you accomplish them, the next goals to set will appear.

This incredible growing awakening in society of choosing, creating, and the knowledge of the "power" we have individually and collectively has been shared by so many great teachers and messengers, especially during the past decade (or maybe that's just because I have been awakened to it during the past decade). There are already ways to deal with what we label as problems. Someone else has already traveled that road. Seek out and be open to answers already available. If you dwell on the problems, you dwell on the problems. Focus your attention on what it is you want (your vision). Choice is a powerful word. As I try to "teach" my children about making their own choices with thought to-

wards the outcomes and consequences I realize how important it is for me to be conscious of choices. In all things; relationships, people, the environment, work, stress, play, behavior, giving, receiving, etc. From our environment and surroundings we are constantly receiving stimuli. With this stimuli, combined with our wants, desires, paradigms and visions, we are always making choices. When we fail to be conscious of our choices we wonder why things turn out the way they do. Make an effort to be conscious of your choices.

Be sure to look at the whole picture when creating your vision. By that I mean, look at your whole life. Dentistry is a large part of my life; it does not however define me. When we meet someone new and are asked the question "What do you do?" we tend to define ourselves by our "job". All the people I have met (especially thru LVI) are much more than that. I heard someone respond to the question "How are you?", by saying "Smart and handsome." Can you answer the question "What do you do?" in a way that encompasses more than your job. Look at who you are emotionally, physically, and spiritually in relation to your health, family, relationships, work and hobbies.

What do you want to be? What do you want to do? What do you want to have? These are 3 separate parts of the whole picture. For example I want to be healthy, blissful, patient and respected. Things I want to do (be specific); backcountry skiing, travel for pleasure, play with my kids, cosmetic and restorative dentistry (your job fits in this category).

Examples of things I want to have; beautiful, warm family home, a sweet ride (Mercedes-Benz SLR McLaren works for me), financial freedom (in excess), freedom to make choices, and a balance of time between friends, family, personal relationships and private time. The have comes last, first find out what you want to be. Write your vision around all the parts of your life so you create the balance that is right for you. If it is 90% dentistry and that is where your passion and emotion are, than that is great. It can also be 10% dentistry. It is not right or wrong as long as it is your truth. When you are doing dentistry, you want to have the passion and energy to give 100% to it. The same applies to the other areas of your life. Find the balance that allows you to do that.

Consider a quote I first heard adapted into an inspirational turning point in the movie Coach Carter but originally given by Nelson Mandela

at his inaugural speech in 1994:

*Our deepest fear is not that we are inadequate.*

*Our deepest fear is that we are powerful beyond measure.*

*It is our light, not our darkness, that most frightens us.*

*We ask ourselves, who am I to be brilliant, gorgeous, talented, fabulous?*

*Actually, who are you not to be?*

*You are a child of God; your playing small doesn't serve the world.*

*There is nothing enlightened about shrinking so that other people won't feel insecure around you.*

*We were born to make manifest the glory of God that is within us.*

*It's not just in some of us; it's in everyone.*

*And as we let our light shine, we unconsciously give other people permission to do the same.*

*As we are liberated from our own fear, our presence automatically liberates others.*



I still have many questions, and as I write these words I know more answers will come for me. As you write your vision more answers will come to you. I feel there is a balance that will feel “right”. My right is not the same as everyone else’s right, and that is what makes it right. If you are always worrying and thinking about what another person is thinking, or how they may react, you are allowing someone else to create your reality. If you want to truly create for yourself, you have to have the attitude and tell yourself that it does not matter. It has nothing to do with self centered greed. As Nelson Mandela so eloquently states, our actions to create, and live, our own true vision gives others around us the freedom and opportunity to create their own vision, based on their ideal truth. A vision at the expense of another never comes without a catch. It is the act of unconditional giving that results in receiving back more than you gave. Your vision will manifest when it allows everyone’s free will.

I learned the golden rule in early grade-school; “Do unto others as you would have others do unto you.” Indulge me in a philosophical thought; we are all more alike than we sometimes may believe. On some large scale we are all one and the same; respect yourself and those around you enough to create your own vision, and although we are all one, we have different wants and therefore different visions. Since we want different things, there is more than enough to go around. Stop worrying about your engrained paradigms of what you “should do and should be”. Write your vision about what you want! When you actually write the words, use words like “I have” and “I am”. If you say “I want” then you will always be “wanting”. Feel the emotions of already having. Make it in the present.

Take some time and list the kinds of dentistry you like to do, the types of people you like to work with, and the environment you like to work in. Then write a vision that encompass-

es all of this. In my opinion there are different types of niche practices. For me the definition of a niche practice is one that is true to your vision. It can therefore be different for different dentists depending on what they want. If you love doing full dentures than your niche practice is a schedule full of edentulous patients. If it is to do full mouth reconstruction only, than that is your niche. It can also be anywhere in between. The first step is creating the vision that you want. Don’t worry how you will make it happen. Just create your ideal vision. The tools you need to make it happen can be found at LVI. When the student is ready the teacher will appear. When you know what it is you want, then you will be ready for the tools to help take you there. Being focused and directed toward your vision is different from trying to force it to happen. It will not help to force the issue; just always make decisions that support your vision. It may happen overnight, it may take longer. Be grateful for what you have



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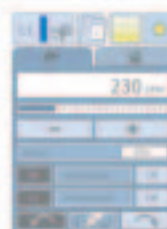
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### MX® SYSTEM

## OPTIMA MX® All in one

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now in the present, and then more of that will come to you and propel you towards your vision.

This is an incredible honor to write an article about visions in a magazine entitled Visions. Each time I visit my vision, I am able to be more focused towards what I want. The process of writing this article, and sharing it, has allowed me to do just that. Thank you for allowing me this opportunity. I hope you are inspired to create your own.

Make a commitment to start

writing something down. Look at it a few times a day. Is it what you want? Add to it, take away from it, share it with your friends and be grateful for how far you have already come. You may be amazed at how it becomes easier and easier. I give myself total creative freedom and therefore am not obliged to what I have written. Remember you can always change it. This gives you the freedom to start, have fun with it and remember to always be true to yourself.

Carve your own path.

Dr. Alan Singleton is a graduate of the University of Alberta, earning his B.Sc. in 1990 and his D.D.S. from their School of Dentistry in 1992. He is a graduate of LVI Global. Dr. Singleton lives in Penticton, BC, Canada. He provides advanced dental care in both the small town of Osoyoos, BC, and the city of Penticton, BC. His general dental practice has a focus on Neuromuscular Restorative Dentistry and Orthodontics. His restorative practice provides services which include amalgam replacement with non metal alternatives to full mouth reconstruction. Dr. Singleton has provided comprehensive Orthodontic care for over 14 years, treating both adolescents and adults. Dr. Singleton is an involved member of numerous professional organizations. Dr. Singleton is proud to be a clinical instructor at LVI.



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Roger Roubal, DDS  
Omaha, Nebraska

*"Since being back from the IACA, my team and I are so excited about what we learned there, being around incredible minds, sharing ideas, meeting old friends and making new ones, the atmosphere was just unbelievable. I've been to a lot of dental meetings ADA, AACD, Greater NY, AGD, and State meetings. The IACA is by far the best meeting that anyone can go to."*

Chong Lee, DDS  
McLean, Virginia





# 2007 IACA CONFERENCE CHICAGO



# 2007 IACA CONFERENCE CHICAGO

*"I've just arrived home from my first IACA with my entire team, it's after 3:00 AM in the morning and I am wired and excited to get back to the office on Tuesday. It felt like the Super Bowl of dentistry with Bob Jankelson, Norm Thomas, Bill Dickerson, Jay Gerber, Anne-Maree Cole, Heidi Dickerson, Mike Miyasaki, Ashley Johnson, Sherry Blair, Brad Durham and on and on and on..."*

Drew Markham, DDS  
Huntsville, Ontario

*"What impressed me the most was seeing all of those giants in dentistry right in there with the rest of us in the meeting rooms, learning that one more thing that will help them grow."*

David Miles, DMD  
Aiken, South Carolina



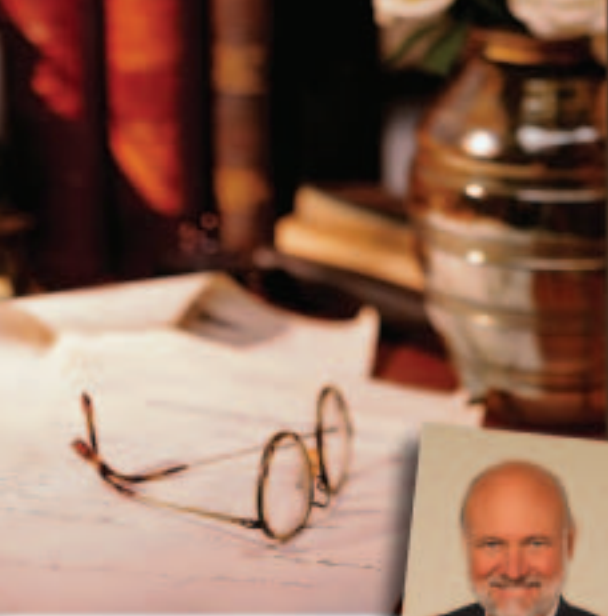


*"I just wanted to share with everyone that the IACA meeting in Chicago was INCREDIBLE! We honestly have never had that much fun for four days straight ever in our lives! My team is four completely different people this morning! Don't miss next year!"*

Jay Jensen, DDS  
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# THE WEATHERS' REPORT

YOUR PATIENTS BENEFIT WHEN YOU RAISE YOUR FEES

Arthur "Kit" Weathers, Jr. DDS

*Surprisingly enough, raising your fees might be the best thing that ever happens to your practice AND to your patients. In fact, if your patients knew all the facts, many would actually WANT you to raise your fees.*

*I firmly believe that most of your loyal patients would prefer to pay a little more rather than suffer reduced quality and/or service. Or worse yet, watch their favorite dentist be forced into early retirement. Selecting and maintaining your ideal fee structure is one of the most important facets of a healthy practice.*

## **Quality, Service or Low Price – Choose Two**

It's impossible to provide the highest quality, the best service and the lowest price without killing your business. You can have two out of the three, but the laws of economics preclude maintaining all three at the same time. Beware of companies that promise the highest quality, the lowest price and the best service. Invariably, at least one of the three must be compromised. No one can be all things for all people.

## **Patients like knowing their dentist is successful**

Your patients might joke about making the next three payments on your Mercedes, but they really don't want their dentist driving a Ford Pinto. Human nature is such that most people want the best quality and service available, and they also realize that quality costs more.

The Ritz-Carlton chain of luxury hotels is a great example of a company dedicated to high quality and five-star service; while

definitely NOT trying to cater to travelers searching for the best deal. We can learn a lot from Ritz-Carlton.

WalMart and McDonalds provide low price and decent service, but they realize they cannot also have the highest quality, and shoppers understand the difference. For economic reasons, many low income dental patients are forced to shop for the cheapest price, but are those the patients you really want to attract? Before you answer, consider the following:

## Maintaining the Standard of Care

---

If a general dentist performs a procedure normally done by a specialist, the GP is held to the same standard of care as the specialist. That means, if you do a root canal, you must use the rubber dam, locate and clean all canals (including that pesky MB2 in upper molars), completely obturate the entire root canal system, etc., or you can be held liable.

If you obtain the necessary training and skills to perform endodontic therapy equal to that done by the endodontist, why would you then charge 50 percent less for the same service? Surveys by Dental Economics, The McGill Advisory, Dentistry Today and others routinely report that GPs are charging approximately 50 percent less than what endodontists charge for the exact same procedure. For example, in 2006, the average general practitioner's fee for an anterior root canal was approximately \$500 while endodontists averaged around \$750 for treating the same tooth.

If you cannot perform to the same level as the endodontist, you should not do the root canal, but if you can do it as well, perhaps it's time to adjust your fees. It's also time to clearly identify what type of practice you would like to have.

## WalMart or Ritz-Carlton?

---

I believe that most patients want the best dental care available, but some have to settle for the lowest price. It's important that you decide which market you want to attract

When most people hear the name

Ritz-Carlton, words like "tops in their field," "prestigious," "highest quality," "the finest," and "in a class of their own," come to mind. Wouldn't you like for your patients to make similar statements about your practice?

## How Do You Decide What to Charge?

---

If you want to market your practice based primarily on having the lowest fees, the decision is easy. Simply call all the dentists in your area, check their fees and make yours lower.

Word will get around and you will soon be covered up with patients. You will then need to learn how to cut corners, eliminate service and work as fast as possible. While you're at it, you might as well sign up for every HMO and PPO you can find.

If, however, you do not want to compete on price, I have a few suggestions. Whatever you do, don't price yourself in the middle of the pack or you will commit financial suicide. This common and often misunderstood practice virtually guarantees a mediocre practice at best.



*Remember that increasing your fees by only 10 percent adds 28 percent to your bottom line if your overhead is 65 percent.*

People who want to avoid average or below average treatment will usually look for the dentist with the highest fees. Although charging high fees cannot guarantee high quality, the public usually assumes that to be the case. They can't tell if your preps are good, your margins are tight or if you filled that mesio-buccal canal all the way to the terminus, so they assume your fees must be high because you provide the best treatment.

If you have the latest and greatest, high-tech equipment, that's another indication that you must be at the top of your profession. How else could you have paid for all that fancy stuff?

One of the best ways to adjust your fees is to hire a professional to compare your fees with other doctors in your zip code. This way you can quickly and systematically maximize your fees. Dr. Charles Blair has reviewed hundreds of practices, and he computes over 100 different statistics for each participating doctor's dental practice and provides industry benchmarks for comparison purposes. Go to [www.drcharlesblair.com](http://www.drcharlesblair.com) and check out Dr. Blair's Revenue Enhancement Program and new Insurance Coding Manual.

Dr. Blair does not recommend raising all of your fees by the same percentage across the board. He warns doctors to be careful of "sore-thumb" fees such as new patient exams, cleanings, x-rays and recall exams, and by using over 100 statistical parameters to analyze each doctor's practice, Dr. Blair has determined that the average practice is losing over \$100,000 in profitability annu-

ally to management and coding errors that are fairly easy to correct. If you take time to analyze your practice, it will be one of the best investments you will ever make.

"In the eyes of the patient, no fee is a bargain," says Blair, "and every practice loses a few patients every year over fees, or at least that's what they say! You can cut your fees next year and lose a few patients; you can keep the same fees next year and lose a few patients; or rebalance and raise your fees next year and lose a few patients."

### **Even small increases add up**

---

Remember that increasing your fees by only 10 percent adds 28 percent to your bottom line if your overhead is 65 percent. Raising fees by 20 percent adds 57 percent, and it's all profit. Incidentally, your fees should never end in a zero. If your current fee is \$450, for example, consider raising it to something like \$497.

Also, I suggest you never discount your fees for two reasons. First, you are telling the patient, "Yes, I can do your case for less money because I've grossly inflated my original quote." Secondly and most importantly, by giving a discount you run the risk of lowering the value of your work in the future.

Let's say you discount your single tooth implant fee from \$3997 to \$2997 as long as the patient "promises not to tell anyone about the discount." Three of her closest friends ask who did her work, and she gladly gives them your name. When her friends ask how much she paid for

the implant and crown, she says \$2997, and as promised, she "doesn't tell them about the discount."

When the three friends show up at your office and you quote them \$3997 for an implant and crown, they gasp, "You charged my friend \$1,000 less." So now you give the three friends the \$1,000 discount, but ONLY if they "absolutely promise not to mention the discount" to any of their friends...

You get the idea. Between the lady and her three friends, you have essentially given away a free implant and crown. If you hadn't offered the discount, you could have treated one less patient and collected the same amount of money, and by treating four patients instead of three you had to work 25% harder. Not to mention the fact that you had to pay the lab fee for an extra crown, buy an extra implant, pay your assistant, discount future "friends" and on and on... Leave the discounts to Southwest Airlines and automobile salesmen.

### **"Good is the enemy of great."**

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In his best selling book, *Good to Great*, Jim Collins says, "The vast majority of companies never become great, precisely because the vast majority become quite good -- and that is their main problem."

This is a great time to raise your fees and upgrade your practice. The baby boomers are retiring and they want to look and feel younger. Best of all, most of them have finally saved enough money to pay for the things they want. Ask Harley-

Davidson how many boomers are finally getting that bike they've always wanted.

For most people, looking younger includes making their teeth whiter and more beautiful. White teeth, with nice rounded mamelons, definitely help people look younger, and that's exactly what the boomers want. The one common denominator of every "Extreme Makeover" show is improving the patient's smile.

Isn't it time to change your good your practice into one that's great. Most dentists settle into the good category, and complacency holds them there. Incidentally, if you really want to take your practice to the next level, you MUST involve your team.

### **Why involve team members in the business?**

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Educate your team about the business of dentistry if you want to maximize your profitability. Most doctors are uncomfortable discussing fees and business concepts with their team, but unless your team understands the goals of the practice they cannot help you achieve them. Unwittingly, they may even be sabotaging your efforts.

The team sees large amounts of money coming into the practice, and unless they understand overhead expenses, the cost of acquiring and maintaining necessary technology, and keeping up with advances in continuing education (which allows your practice to provide high quality service), they cannot help motivate your patients to want the best dental care possible.



*"Don't be afraid  
to give up  
the good  
to go for  
the great."*

*Theodore Roosevelt*

### **TEAM = Together Everyone Achieves More**

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Therefore, if you want to provide quality dental treatment, meet or exceed the standard of care, and minimize stress in your practice, your team must to be striving for the same goals.

### **Summary**

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It's been said, "If you don't charge what you're worth, you become worth what you charge." That's true, but I suggest you take

the opposite approach. Do NOT charge what you are worth. "Charge MORE than you're worth, and you will still become worth what you charge."

Finally, the most important thing of all is to enjoy what you do. Albert Schweitzer said it best, "Success is not the key to happiness. Happiness is the key to success. If you love what you are doing, you will be successful."

Remember also that nothing is ever perfect. Anyone who says that it takes sunshine to bring happiness has never danced in the rain.



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*Dr. Weathers is the author of numerous articles on innovations in endodontic treatment products and processes as well as intraosseous anesthesia delivery systems. His most recent four part series of articles entitled, "Endodontics, From Access to Success," appeared in Dentistry Today. Dr. Weathers has also introduced the well-reviewed C.E.Magic "edutainment" interactive learning system, entitled "Antibiotics in Dentistry" to the field of dental continuing education.*

*Dr. Weathers serves as the Director of Endodontics at the Las Vegas Institute for Advanced Dental Studies (LVI). Lecturing extensively to dental organizations, Dr. Weathers integrates an academically grounded approach to his subject with humor, magic, and mnemonics to enable his audience to recall his well-accepted techniques. As the founder of the Practical Endodontics "Root Camp," Dr. Weathers offers numerous two-day, hands-on training sessions at the Las Vegas Institute and his facility in Griffin, GA.*

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*The Endo Experts*

As Designed by Dr. Kit Weathers

# Functional Classification Of Cranio-mandibular Disorders

**D. Gary Wolford, DDS, FICCMO**



**H**istorically, temporomandibular joint disorders (TMD) involve specific clinical findings. Costen<sup>1</sup>, in 1934, described TMJ syndrome to include (1) preauricular pain, (2) tenderness to palpation of the closing (elevator) muscles of the mandible, (3) decreased opening and (4) joint noise. Joint noise during the period of 1970 through 1990 was specifically defined as a reciprocal clicking caused by displacement of the articular disc anteriorly to the condylar head on closure and reduction to normal position on opening. Greene and Laskin<sup>2</sup>, in 1968, introduced the term myofascial pain disorders (MPD) to include patients that had preauricular pain, decreased opening and pain to palpation over the elevator muscles of the mandible. Patients with pure MPD do not have any joint noise. Farrar and McCarty<sup>3</sup> defined internal derangements as a result of a tear of the discal ligament with reciprocal clicking in the temporomandibular joint.

Dr. Bernard Jankelson developed the Myotronics equipment that measures mandibular movement and electromyographic evaluation of the muscles of mastication in 1966. This equipment provides the documentation as to how the mandible functions and to that point in space where the closing muscles want to close the mandible. Dr. William Dickerson changed the world of dentistry by founding the Las Vegas Institute for Advanced Dental Studies and developing a neuromuscular protocol for treating patients.

Over the last fifteen to twenty years, temporomandibular joint disorders have become a catch-all term for general dentists, physicians and lay people. The following classification of craniomandibular disorders includes the majority of factors that can affect mandibular movement and function. The classification is the result of 40 years of clinical evaluation and treatment of patients with craniomandibular dysfunction.

The Functional Classification of Craniomandibular Disorders is divided into eight categories, which are indicated by Roman numerals. Each of the subdivisions under the Roman numerals is listed in order of lesser to more severe problems. I is myofascial pain dysfunction (MPD). II is internal derangements, which are caused by a tear of the discal ligaments. III is intracapsular pain, not related to internal derangements. IV is chronic hypomobility (decreased opening). V is mandibular hypermobility. VI is Growth disorders – skeletal abnormalities. VII is Traumatic injuries – fractures – hemarthrosis. VIII is abnormal jaw closure.

This is a functional classification in which each of the eight categories are the result of an injury or dysfunction of a specific craniomandibular anatomical entity.

## **I. Masticatory Muscle Disorders (muscle pain)**

1. Protective muscle splinting
2. Muscle spasm activity
3. Muscle inflammation (myositis)

Normal incisal opening is 50 mm (the distance between the incisal edge of the maxillary incisors to the incisal edge of the mandibular incisors on wide opening). Normal lateral excursions are 10 mm. Any mandibular opening greater than 50 mm and/or lateral or protrusive movement greater than 10 mm is diagnostic of hypermobility (subluxation) of the mandibular condyle. Patients with protective muscle splinting have an incisal opening which can be increased to 50 mm with gentle passive opening of the patients lower jaw with finger pressure. Muscle spasm is defined when the incisal distance cannot be increased to 50 mm with finger pressure by the practitioner. Trigger points can be palpated in the masseter, medial pterygoid or temporalis muscles. Muscle inflammation (myositis) usually involves pericoronitis of the mandibular third molars or as a result of multiple inferior alveolar nerve injections. The incisal opening is less than 30 mm and cannot be increased by finger manipulation. Lateral excursions are usually normal (10 mm.) unless the lateral pterygoid muscles are involved. Myositis may also be caused by a buccally erupting maxillary third molar. Masticatory muscle disorders are the most common cause of facial pain and the reason patients seek treatment. Patients with protective muscle splinting and muscle spasms all close posterior to myotrajectory.

## **II. Disc Interference Disorders (internal derangements)**

1. Early derangement
2. Mid derangement
3. Late derangement
4. Dislocated disc (Closed Lock)

Patients with an internal derangement have a reciprocal click on opening and closing. The opening click is always at a greater incisal opening than the closing click. The click is produced following a tear of the discal ligament which attaches the articular disc to the condylar head. The lateral and medial discal ligaments are most commonly torn. The posterior ligament is never torn. Based on my clinical evaluation of over 14,000 patients, an early derangement is defined as an opening click which occurs within 0-20 mm of

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opening, mid derangement between 20-35 mm of opening and late derangement at a greater incisal opening than 35 mm. A dislocated disc occurs in a patient with a history of reciprocal clicks who does not have a click on opening and closing and the opening is usually less than 35 mm. An important clinical evaluation to determine the difference between muscle inflammation or myositis and a dislocated disc is to have the patient attempt to move the jaw from one side to the other. Normal lateral excursions are 10 mm. Patients with myositis will have a marked, limited decreased opening, but their lateral excursions will be normal. In patients with a dislocated disc (closed lock), the patient will not be able to move the mandible more than 3-5 mm toward the contra-lateral side. They will have normal excursions toward the affected side, if the internal derangement is unilateral.

### **III. Inflammatory Disorders of the Joint (joint pain)**

1. Synovitis and capsulitis
2. Retro-discitis
3. Inflammatory arthritis
  - A. Degenerative arthritis
  - B. Traumatic arthritis

Synovitis and capsulitis refer to an inflammatory intracapsular clinical situation in which the patient has pain on opening and palpation with the teeth separated and with wide opening. Retro-discitis occurs when the patient has pain and discomfort on closing. Inflammatory changes in the joint include degenerative and traumatic arthritis. These will have radiographic evidence of loss of condylar contour and sclerosis involving the anterior aspect of glenoid fossa and condylar head. Clinically, patients with degenerative arthritis will exhibit crepitus on opening and closing.

### **IV. Chronic Mandibular Hypomobilities (decreased movement)**

1. Contracture of elevator muscles
2. Capsular fibrosis
3. Ankylosis
  - A. Fibrous
  - B. Osseous
4. Coronoid hyperplasia

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These patients have decreased mandibular opening and may have decreased lateral excursions. The patients are painless unless an attempt is made to increase the opening. This may be the result of connective tissue disease (scleroderma, lupus), following trauma (capsular fibrosis, fibrous and osseous), intraoral surgery (scar tissue) and skeletal abnormalities (coronoid hyperplasia). I emphasize that these conditions are painless but have decreased opening and occasionally, decreased lateral excursions. In unilateral cases, decreased lateral excursions will occur towards the contralateral side. Hypomobilities are very often misdiagnosed as a closed lock.

#### **V. Mandibular Hypermobilities (excessive movement)**

1. Subluxation
2. Spontaneous dislocation of condyle
  - A. Disc condyle function normal
  - B. Associated with internal derangement
3. Chronic (recurrent) dislocation of condyle
  - A. Disc condyle function normal
  - B. Associated with internal derangement

Hypermobility is most commonly misdiagnosed as “TMJ”. This is mandibular subluxation. The patient has a partial tear of the capsular ligament fibers that limit anterior condylar translation. Subluxation occurs when the mandibular condyle moves past the most dependent portion of the articular eminence. This can be diagnosed with fluoroscopy and tomograms of the temporomandibular joint. Subluxation is commonly misdiagnosed or not diagnosed with transcranial radiographs. Spontaneous dislocation occurs when the condyle moves past the midpoint of the articular eminence, and the patient cannot return the mandible to maximum intercuspation without manipulation of the condyle. Dislocation of the condyle can occur with or without internal derangements. If subluxation occurs with an associated internal derangement, you have two clicks on opening and two clicks on closing. This is very difficult to treat conservatively. Patients with a subluxation should have a bite block placed between their teeth when dental work, including prophylaxis is performed. Subluxation occurs when the incisal opening is greater than 50 mm, and lateral excursions and mandibular protrusion are greater than 10 mm. Subluxation can also occur with incisal openings less than 50 mm. This can be documented with axially corrected tomograms and computerized mandibular scanning.



## VI. Growth Disorders of the Jaws (skeletal malrelationships)

1. Aberration of development
  - A. Vertical maxillary deficiency (vertical hypoplasia)
  - B. Vertical maxillary excess (vertical hyperplasia)
  - C. Maxillary hypoplasia (Anterior – posterior)
  - D. Maxillary hyperplasia (Anterior – Posterior)
  - E. Mandibular AP hypoplasia (Class II)
  - F. Mandibular AP hyperplasia (Class II)
  - G. Apertognathia
    - i. Posterior
    - ii. Anterior
    - iii. Lateral
  - H. Asymmetry
    - i. Maxilla
    - ii. Mandible
2. Class I, II, III
  - A. In centric occlusion
  - B. In myotrajectory
3. Acquired change in joint structure
  - A. Adaptive changes
  - B. Proliferative changes
  - C. Degenerative changes
4. Unilateral condylar hyperplasia

Vertical maxillary deficiency is defined clinically as a patient who does not show maxillary incisors with the teeth at rest or smiling. These patients normally have a mandibular plane angle that is less than 25 degrees. Vertical maxillary excess is defined with patients who show maxillary mucosa when smiling. These patients generally have a high mandibular plane angle (greater than 30 degrees). Apertognathia should be defined as anterior, posterior or lateral. Apertognathia must be evaluated to rule out whether it is skeletal or functional.

Posterior apertognathia usually occurs after iatrogenic treatment of jaw dysfunction problems or with decreased posterior maxillary growth. Lateral apertognathia may be due to abnormal mandibular growth or tongue habit. Anterior apertognathia is usually due to increased posterior maxillary growth or anterior tongue thrust. Mandibular asymmetry will produce abnormal opening and closing. Class I, II and III relationships are less important in evaluating the patients

with craniomandibular disorders, however most patients will have a Class III molar relationship with a myotrajectory bite. Acquired change in joint structure must be evaluated. Unilateral condylar hyperplasia is a one-sided growth of the condyle producing a mandibular asymmetry and is more common in women.

## **VII. Traumatic Injuries (fractures of the jaws and/or teeth)**

1. Fracture
  - A. Open
  - B. Closed
  - C. Non-displaced
  - D. Displaced
2. Hemarthrosis

Traumatic injuries include fractures of the mandible and maxilla. These are usually treated separately in an attempt to return the patient to former function prior to the fracture. In my practice over the last 40 years, patients who sustain mandibular and/or midface fractures that are appropriately treated rarely develop craniomandibular disorders. Hemarthrosis is the acute occlusal emergency that occurs when a patient sustains trauma to the mandible that produces bleeding inside the joint. These injuries should be treated on an emergency basis with impressions being made and a soft bite guard being constructed to fit over the lower teeth. This will aid in decreasing continued trauma to the intracapsular structures as a result of swallowing function.

## **VIII. Abnormal Jaw Closure**

1. Posterior
2. Lateral
3. Vertical

All patients that have myofascial pain (I), internal derangements (II) and inflammatory disorders (III) close posterior to myotrajectory and/or have increased vertical overclosure.

Obviously, the clinician must be aware of other clinical entities including malignancies, neurological diseases, infections, and systemic diseases.

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### **Bibliography:**

1. Costen, JB: Syndrome of sinus and ear symptoms dependent upon disturbed function of the temporomandibular joint. *Ann Otol Rhinol Laryngol* 1934;43:1-5.
2. Laskin, DM: Etiology of the pain-dysfunction syndrome. *J Am Dent Assoc* 1969;79:149-153.
3. Farrar, WB, McCarty WL: *A Clinical Outline of Temporomandibular Joint Diagnosis and Treatment*, 7th Ed. Montgomery, Ala.: Normandie Publications; 1982.
4. Wolford, DG: Evaluation of Patients With Facial Pain and/or Craniomandibular Disorders. *Neuromuscular Dentistry – The Next Millennium Anthology Volume*; ICCMO 1999; 109-117

# FUNCTIONAL CLASSIFICATION OF CRANIOMANDIBULAR DISORDERS

- I. Masticatory Muscle Disorders (muscle pain)**
  - 1. Protective muscle splinting (729.1)
  - 2. Muscle spasm activity (729.1)
  - 3. Muscle inflammation (myositis) (728.0)
  
- II. Disc Interference Disorders (internal derangements) (524.63)**
  - 1. Early derangement
  - 2. Mid derangement
  - 3. Late derangement
  - 4. Dislocated disc
  
- III. Inflammatory Disorder of the Joint (joint pain)**
  - 1. Synovitis and capsulitis
  - 2. Retrodiscitis
  - 3. Arthralgia (524.62)
  - 4. Inflammatory arthritis
    - A. Degenerative arthritis
    - B. Traumatic arthritis
  
- IV. Chronic Mandibular Hypomobilities (decreased movement)**
  - 1. Contracture of elevator muscles
  - 2. Capsular fibrosis (524.61)
  - 3. Ankylosis (524.61)
    - A. Fibrous
    - B. Osseous
  - 4. Coronoid hyperplasia (524.02)
  
- V. Mandibular Hypermobilities (excessive movement) (830.0)**
  - 1. Subluxation (hypertranslation) (830.0)
    - A. Associated with internal derangement
    - B. Disc condyle function normal
  - 2. Spontaneous dislocation of condyle
  - 3. Chronic (recurrent) dislocation of condyle
  
- VI. Growth Disorders of the Jaws (skeletal malrelationships)**
  - 1. Aberration of development
    - A. Vertical maxillary deficiency (524.03)
    - B. Vertical maxillary excess (524.01)
    - C. Apertognathia (524.20)
    - D. Asymmetry (524.11)
  - 2. Class I, II, III
  - 3. Acquired change in joint structure
  - 4. Unilateral condylar hyperplasia
  
- VII. Traumatic Injuries (fractures of the jaws and/or teeth)**
  - 1. Fracture
    - A. Open
    - B. Closed
    - C. Non-displaced
    - D. Displaced
  - 2. Hemarthrosis
  
- VIII. Abnormal Jaw Closure (524.50)**
  - 1. Posterior Closure
  - 2. Vertical Closure
  - 3. Lateral Closure

Dr. Wolford graduated from Temple University in 1967 and completed his residency in Oral and Maxillofacial Surgery at Parkland Memorial Hospital in Dallas, Texas. He is a Diplomate of the American Board of Oral and Maxillofacial Surgery. He was the former Chairman of the Department of Oral and Maxillofacial Surgery at Henry Ford Hospital and director of the Oral and Maxillofacial residency program at that institution.

He is a Fellow of the International College of Craniomandibular Orthopedic and a Regent in ICCMO. He developed a Clinical Classification of Craniomandibular Disorders. He is the current President of the North American Neuromuscular Study Club.

His practice focuses on the diagnosis and treatment of facial pain and craniomandibular disorders. He has used electro-diagnostic instrumentation for over 20 years and over 8,000 patients. He emphasizes a conservative, non-surgical approach to treating patients with facial pain and jaw dysfunction.

Dr. Wolford had an internal derangement due to trauma at when he was 15 years old. After treating himself with various orthotics for over 40 years, he underwent full mouth reconstruction at LVI and is now headache and pain free for two years. His pre and post reconstruction tomograms show condylar changes after full mouth reconstruction.

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**M**y story is of a teenager and her mother sitting in front of me describing the deterioration of her ability to enjoy life due to her neck pains and jaw problems (a problem). As a doctor, my major goal is to improve this patient's health and quality of life (find a solution).

Katie presented to me as a 19-year-old white female collegiate athlete. Along with the above-mentioned problems she also has a history of a mild cardiac arrhythmia and no confirmed diagnosis. She had the routine cardiac tests that were prescribed by her physician and cardiologist to confirm a differential diagnosis. Her test came back negative and she was informed that they would continue to monitor on an as needed basis, when she noticed her symptoms returning. She does not take any medications, has no known drug allergies and no history of drug use.

Katie has well-developed musculature of the shoulder, back and neck regions because of a teenage gymnastic career. She remains active as a member of her college scull and rowing teams, as well as teaching gym-

nastics in the summer months.

This patient had an overclosed, class II occlusion, with skeletal retrognathia. Her chief complaint was an inability to open her mouth (her opening was 28mm), and a noise coming from both joints, with associated tenderness. She completed orthodontic treatment as an early teen with a relapse into a malocclusion. She also reported upper cervical muscle tenderness and pain that translated to her trapezius, suboccipital and sternocleidomastoid muscles. She also reported referred pain to the top of her head and occasionally into her mid-temporal regions. In addition, if she did not see her chiropractor on a regular basis, she would suffer tremendous headaches, radiating from the back of her head, up to the top of her head. Before her consultation in my office, a prominent oral surgeon evaluated her for the lack of maximum opening and the joint noise. His recommendation was a joint exploration and an adjunctive procedure to distalize her existing articular discs, with no treatment for her neck pain.

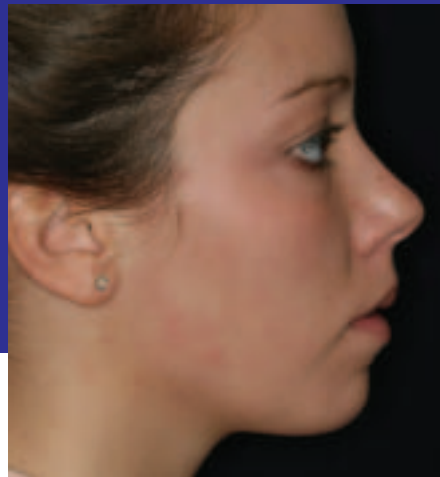
I felt that the recommended treat-

ment by the oral surgeon would not resolve the presenting problems and her chief complaints, due to the fact that there was no room present for the disc in her TMJ space. My question to the patient and her mother was, "Did the surgeon explain how he was going to wedge the articular disk of tissue between the bones of her skull and the bones of her jaw and keep it there?" I felt that this patient's mandible needed to come down and forward in order to give her the room necessary for recapture of the disc. Because of her TMD problems, occlusion, as well as her muscle tenderness and associated headaches, a neuromuscular approach was the necessary and conservative course of treatment.

My treatment recommendations were to be made based upon her physical presentation, radiographs, signs and symptoms and the consult letter from the oral surgeon. I wanted to steer away from the surgical intervention of her TM joint and the surrounding capsule that was to be scheduled with the oral surgeon. I wanted to give the patient and her mother some hope of a non-surgical



*Placement of Orthosis*



*Without Orthosis*



*With Orthosis*

option that would improve her bad days, increase her better days and give her the prospect of great, pain free days. Understanding our goal to avoid surgery was in accord; we proceeded with case evaluation and a neuromuscular work-up.

This patient is what brought me to the realization that I had to begin changing my placement of the Myo-trode S.G. leads in an attempt to aid my new patient. Because of the signs, symptoms, and physical presentation of the patient, as well as past patient presentations and experiences, I began to contemplate the new Myo-trode placement. You see, I treat a good deal of edentulous and partially edentulous patients who typically present with a similar forward head posture and severe tightness throughout the upper cervical and suboccipital regions with resultant head and neck pain.

Based upon the theory of TENS, a light went on for me. Why not move the Myo-trode leads up to where the patient is actually experiencing the problem – i.e. suboccipital and posterior cervical muscle regions? Therefore, I changed the lead place-

ments to those new areas, and it was working for me. I was taking better denture bites, better denture impressions and more importantly, my patients were telling me that they felt greater relief after their TENS session. As mentioned at the beginning, I had to tailor my treatment to fit the patient. I had begun to adopt this treatment approach and the altered Myo-trode placement for the symptoms and presentations of my other patients.

With the understanding that occlusion has its origin at the atlanto-occipital region, further relaxation of this area would be a benefit to the patients presenting with pain in this complex of muscles. Due to Katie's past athletic training and resulting athletic posture, bracing of her mandible would play a critical role in stabilization of her cervical region. This in turn would continue to prevent muscle fatigue and the resultant pain. It furthermore occurred to me based upon her forward head posture, class II occlusal scheme and the relief received by her regular chiropractic visits, that the cervical plexus and C1, C2 and C3 needed to be relieved.

The anatomy of this region raised in me the suspicion of my patient experiencing a greater occipital nerve entrapment due to trigger point activity or hypertonicity of the trapezius muscles and semispinalis capitis muscles. This could in turn be the chief and originating cause of the postural, occlusal and pain problems she was experiencing. In addition, her cardiac arrhythmias could also be the result of a positional change of the vertebral artery, due to the muscle stress placed upon her upper cervical vertebrae, because of the need for muscle compensation and accommodation.

With all of this in mind, I began to place the Myo-trode SG over the area known as the Suboccipital Triangle. This triangle is bounded by three suboccipital muscles and is covered by the semispinalis capitis muscle (the same above mentioned muscle associated with the entrapment of the Greater Occipital Nerve). In addition, keep in mind on the floor of this triangle is the Vertebral Artery (I reference the diagramed picture from Travell and Simons' volume 1, pgs. 474 and 475.) I use this book all the

*I wanted to give the patient and her mother some hope of another non-surgical option that would improve her bad days, increase her better days and give her the prospect of great, pain free days.*

time as a guide and as an aid for patient education. It serves as further validation to the patient about the role of active trigger points and the pain that they cause. My exact placement varies from patient to patient, due to the presentation of their specific anatomical structures. Keeping as a general rule of thumb, placement should be in the general vicinity of the inferior pole of the Occipital bone. In other words as you palpate the Mastoid Process of the skull, move your index finger toward the midline of the vertebral column, until you drop into that triangle of muscles. A more muscular or heavy person will be more difficult to palpate (reference Travell and Simons' vol. 1 pg. 473 for a general location of the triangle).

Placement of the Myo-trodes on my patient using the J-5 Myomonitor in the traditional position of the coronoid notch and my new placement in the suboccipital region was of great benefit to Katie. After the second TENS appointment the patient noticed a great deal of neck mobility

and less frequent headaches. These two appointments were approximately two days apart. At the second appointment, we decided to attempt a neuromuscular K-7 (scan 4/5) myo bite. With the bite registration, a



mandibular anatomical orthosis fabricated by Aurum Laboratories was used as an appliance. She was instructed to wear it as many hours of the day as possible, most importantly when sleeping and when performing her athletic weight training and exercise regime. Before delivery of the orthosis, and for eight weeks while

wearing the orthosis we continued to use the J-5 once a week, with the patient maintaining her schedule of visits to the chiropractor for cervical alignment and muscle massage. With this, I began to notice that her mouth opening was beginning to increase, and her head, neck and TMD issues were beginning to resolve. She now had an increase of her vertical component of 3mm and a skeletal class I appearance due to her Anterior/Posterior mandibular shift, which gave her a terrific profile. Both Katie and her family were more than pleased, because her quality of life had returned.

The one thing that I had failed to account for though, was her athletic posture and how she trained, because she fractured her orthosis while

doing her conditioning exercises. Because of the new wrinkle and further interviewing of the patient, I decided to take a new neuromuscular K-7 (scan 4/5) myo bite. It was done in an unconventional way. I had the patient stand, she picked a spot on the wall in front of her to focus on with her eyes, she wore her athletic



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*My goal was not to go through the process of showing EMG's  
or Scans or endless pictures of jaw tracings,  
it was to open our minds to best help our patients.*

footwear and I corrected her head and neck posture according to the EMG readings from the K-7, then we took the neuromuscular bite just like always, but instead of sitting, she was in the standing position. I found out from my patient that she spent more time standing and running than she did sitting. Another orthosis was designed and fabricated from a material called Natural flex; it is anatomical and very strong. My patient has no problems wearing it. We were able to match her tooth shade to the material, and she now wears it while eating.

By wearing her orthosis constantly her TMD and cervical neck issues were much improved. Additionally, came a change in her head and neck posture for the better, because she was now experiencing no signs or symptoms relating to her undiagnosed cardiac arrhythmia. With the new bite came another increase in her VDO by 1mm, making the total a 4mm change.

I began treating Katie in December of 2005 and she says her relief cannot be explained by words. She is able to eat again without pain and she is regaining the opening of her mouth (approx. 38mm). She does not suffer from her head and neck aches and is

excited about not having to worry about that old part of her life. She is beginning to turn the corner and has nice muscle stabilization. She does not mind wearing her orthosis, because she is painfully aware of the consequences. She is very happy that the TM joint surgery was avoided. I believe that orthodontics with a component for expansion of her arches is in her future. She realizes that there will be a next step and is looking forward to that part.

As an aside, I have also found that when performing longer dental procedures placement of the J-4 or J-5 Myomonitor at a subthreshold to threshold amplitude improves patient comfort at the completion of their appointment. I believe that it is helping the posturing muscles of the neck, which in turn reduces the feedback to the muscle spindles. Also, keep in mind that many patients have years of poor occlusion, posture, nutrition, oxygen intake, proper muscle activity, etc. Because of these factors, I caution you to not promise the healing effects of TENS to them in one appointment. I have found with my patients, it may take several appointments to unwind and detangle the muscles and associated nerves before

they start to feel relief and the benefit of TENS therapy.

My goal in writing this article was not to go through the process of showing EMG's or Scans or endless pictures of jaw tracings, it was to open our minds in order to best help our patients. The practice of neuromuscular dental medicine for me has been a wonderful transformation. My knowledge and education (obtained from LVI Global) has given me the greatest chance to start my patients down the road to muscle harmony and stability which will ultimately improve their quality of life.

*Dr. Pawlowicz graduated from the University of Pittsburgh School of Dental Medicine in 1993. He currently has completed over 1000 hours of advanced study and coursework. He is a fellow in the International College of Craniomandibular Orthopedics. An LVI Global Instructor for both adhesive aesthetics and occlusion courses, Dr. Pawlowicz is a Delegate of the Pennsylvania Dental Association, Director of the Western Pennsylvania Dental Society and a consultant to Dentsply.*

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# Ask Heidi

Dear Heidi,

Q

I'd like to say that we are "paperless" however we are not entirely ready for that. We put all our treatment notes in the computer and do all of our billing through the computer but, our doctor still writes down the next procedure on paper and we physically go to the front desk to schedule it. The problem is many patients do not schedule at that time. I know this sounds silly but, sometimes we can't read the doctor's writing and when we go back to see what he wants done next, the patient is out of there! How can we improve in this area?

Sue  
Portland, Maine

A

Sue  
Portland, Maine

Sue,

What you are describing is a HANDOFF. The doctor hands off the patient to you, and you hand off the patient to the receptionist. Think of it as a relay race. You are running with the baton and you catch up to then next person on your team and hand them that baton. Now, what happens if you drop the baton? RACE OVER! The same thing is true in the situation you described. Our job is to bring the patient through the office in a fluid way, handing them off where necessary and not "dropping the baton". Are you following me? Great, I know you are! So let's now relate this to your office. When you approach the front desk with the hand written instructions for the next visit and the receptionist does not clearly understand what is written this causes confusion, possible misunderstandings and so forth. You have to walk away to find out the correct information and by this time your "race is over". The patient did not have a very good flow of information and understanding. **Try This:** The next time the doctor has something else to schedule for the patient, find out what it is, walk the patient up and verbally tell the scheduler, in front of the patient, exactly what the doctor would like scheduled next. Now there is not a question to the patient as to what is needed, and you are HANDING OFF the patient with a transfer of information that they hear again another time. Your case acceptance will improve dramatically as you "hold on to that baton".

You'll win the race with proper handoffs!  
Heidi

Q

Dear Heidi,

I have a new associate who has a lot of down time. I try to come up with things for her to do but I am running out of ideas. She is frequently in our personal office killing time on her computer. What can you suggest?

Dr. M  
Atlanta, Georgia

A

Dr. M,

Your question is excellent. Many doctors have shared this same issue with me. It is a tough one to answer because I do not know the details of the arrangement with your associate. If she is being primed to take over your practice and your existing patients, then she should become busy as you transition your patients to her. In saying that, I have seen a lot of dentists who have a hard time letting go of “their” patients and only toss work over to the new guy when they either don’t really like the patient, or don’t want to do a particular procedure. Only you can soul search and figure that one out.

But, let’s say your arrangement is that she is to grow the practice with you and bring on her own patients. Then she needs to be encouraged to work “on the practice” not just “in the practice”. You should mentor her in a way that will help bring clients in the door. For example, the associate should get involved in community associations and events, schools, and similar things that will form new business and personal relationships. Marketing that you have a wonderful new associate by placing an “announcement” in your local paper is another way of introducing the associate and what she is all about to your community. What I am saying is the associate should be encouraged to turn down time into an opportunity to grow the practice. Let her know that she is not confined to the four walls of your office. She can go out and creatively make things happen!

Hope this helps,  
Heidi

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*Lori Kemmet, DDS, LVIM*

# Controlling Overhead Part II

*Thank you for staying tuned to read part two of Controlling Overhead. No other subject is more important to your business. Financially successful dentists will implement change to achieve a better bottom line. I promised to offer you some ideas to help whittle down your overhead. Your largest expenses are supply, lab, team and marketing. Here are some ideas for reducing your expense in each of the first three categories.*

***Your largest expense categories to monitor are:***

<b>Expense Category</b>	<b>Recommended OH % Range</b>
Staff	15-20%
Lab	10-14%
Marketing	10-12%
Supply	3-6%
Rent	3-5%

**Decrease Supply Overhead**

A healthy supply overhead is 3-6%. I have two practices and each one tracks spending for supplies on a computerized spreadsheet. This system is very important when establishing a new practice with new team members and just as important for an established practice. I like not worrying about a team member running wild with purchasing supplies.

Establishing spending goals is critical to the success of any business. Let's say your goal is for a 5% supply overhead at year end.

Here is a system that will insure this overhead.

Let's say for example that you collected (not produced) \$100,000 in January.

This gives you \$5,000 to spend on supplies for the month of February.

**Example: January Collection = \$100,000**

$$\begin{array}{r} \text{X } 5\% \\ \hline 5,000 \end{array}$$

February Available Funds	\$5,000
Actual expenditures: Patterson supplies	-1,750
Ultradent supplies	- 600
Axis supplies	- 650
Myotronics supply	- 250
American Eagle	- 500
	<hr/>
	+\$1,250 (goes to reserve)

**What is the reserve account and how is it used?**

The reserve account increases or decreases based on the month expenditures.

In this example you would start off with a positive reserve account balance of \$1,250. This positive balance reflects that you are in control of your



spending. If you had spent more than \$5,000 you would be over your goal of 5%. Having a negative reserve is not bad as long as you can correct your spending in future months.

The reserve account has a continually changing balance. You don't actually open an account with this name – it is simply a number in your computer that reflects your ability to control your spending.

The reserve account should build and at the end of the year be used for a major purchase.

Major purchases could include a new sterilizer, digital sensor, etc. Understand that if your reserve account does not build you will have an overhead greater than 5% for supplies.

March expenditures will be based on February collections. Say for example you collect \$120,000 in February. You now have \$6,000 ( $120,000 \times .05 = 6,000$ ) to spend on supplies in March.

This responsibility is best given to one team member. Preferably one who is good with math. Dentists – you should not be spending your time with this task!

## **Decrease Lab Overhead**

### **Raise your fees**

Your crown, onlay or veneer fee should be 6-7 times your lab fee. If your lab fee is \$300, for example, your fee should range from \$1,800 - \$2,100 per unit. A \$2,100 fee with a \$300 lab fee creates a 14.2% lab overhead. Remember that a healthy range for lab overhead is 10-14%. If you are utilizing a high end lab then reconsider your fee. Most dentists undervalue their services and could raise their fees without resistance from their patients. If you don't think this is true – try it - how else will you ever know?

### **Wax up or no wax up?**

I love the contouring aspect of a smile enhancement. For this reason I do not order a wax up for an eight, ten or twenty unit veneer case. We only order a wax up when we change the vertical dimension. Heather, my assistant, and I do the mock up directly in the mouth the same day as our preparation. We determine shape and length prior to anesthetic and always get the guest involved in the process. Most people enjoy being involved in the decision making process regarding shape, length, translucency, surface texture, etc. Solving this piece of the puzzle in the beginning lessens problems on the

*Establishing  
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is critical to the  
success of any  
business.*

*Profitable  
businesses always  
look for ways to  
decrease overhead  
and maintain  
quality.*

back end. I tell my guests, “If you like your temporaries you will love the final result.” And why should a lab decide the final esthetics of your enhancement? I believe the most artistic dentists complete the mock up and delegate a talented team member to get it started.

The next two scenarios illustrate how lab fees can affect the lab overhead. Deciding not to have the lab do the wax up can make a significant difference in overhead percentages. In the first scenario, lowering your lab fee by \$40 lowers lab overhead by 2.6% (21.3% - 18.7% = 2.6%). With a veneer fee of \$1,600 your lab fee would need to be \$224 to achieve a lab overhead of 14%.

If you decide to keep your veneer fee the same you should explore a lower lab fee. Profitable businesses always look for ways to decrease overhead and maintain quality.

Veneer fee = \$1,600	Lab Fee = \$340	Lab Overhead = 21.3%
Veneer fee = \$1,600	Lab Fee = \$300	Lab Overhead = 18.7%
Veneer fee = \$1,600	Lab Fee = \$224	Lab Overhead = 14%

If your lab fee is to remain the same the restoration fee should be increased in order to lower overhead.

Veneer fee = \$1,800	Lab Fee = \$300	Lab Overhead = 16.6%
Veneer fee = \$1,900	Lab Fee = \$300	Lab Overhead = 15.8%
Veneer fee = \$2,000	Lab Fee = \$300	Lab Overhead = 15%
Veneer fee = \$2,100	Lab Fee = \$300	Lab Overhead = 14.2%

Your challenge is to calculate your lab overhead now! Use this equation:  
Lab Fee/Veneer Fee = Lab Overhead

### **Pay your lab in advance**

I pay my lab in advance. When I send my case a check goes with the case and in return my lab offers me a savings of 5%. The lab does not have the expense of sending out statements, possible collection fees and they have great cash flow! Isn't it nice when both parties win! In order to send in your check you must first be paid at the time of service. Check with your lab to see if they would offer a savings for payment in advance. If you pay your lab bill

with a credit card expect their answer to be no. When you send a check the lab does not have to pay credit card transaction fees. A 5% savings on a \$300 lab fee is \$15. While this amount is small initially it adds up quickly on a large case. Some offices have \$200,000 in lab fees at year end. Five percent of \$200,000 is \$10,000. If you collected 1.5 million, with a \$200,000 lab expense, \$10,000 in lab savings would equate to a .7% reduction in lab overhead. Are you going to ask your lab? You won't get a yes unless you ask!

### **Create a warranty policy**

Dentists are notorious for giving their dentistry away. If a patient breaks a crown during the first year of service it should be warranted differently than if it breaks during year six. Your dentistry is not meant to last forever. So when someone asks you, "How long will that last?" you should respond, "Nothing lasts forever and to be fair to you and me I have created a warranty policy that explains your responsibility and mine." Also ask how or why something failed. Fracture of a crown from a car accident should be handled differently than a fracture from chewing food. During the first year we replace the crown at no fee and then from years two-five our responsibility for the cost of the remake goes down and the patient's goes up. Most importantly - be flexible and fair. Deliver your warranty policy at the seat appointment and document this in your chart. For a copy of our warranty policy e-mail Lisa@incrediblesmiles.com.

## **Decrease Team Overhead**

### **Fewer employees**

So many dentists overstaff. I have a friend that has been overstaffed for years. He knows it and does not have the heart to let anyone go. Understand that if you can function as efficient or more efficiently with one less person you are directly affecting your bottom line (your take home pay). Walter Hailey used to say, "Get rid of the turkeys."

If you help the turkeys move on you win and they do too. So what if she is not a turkey?

Someone is still gobbling up your food! Move it or lose it! In an LVI style practice that performs more elective procedures you need fewer employees. Your overhead for team should decrease since the need for additional personnel decreases.

*"Nothing lasts forever and to be fair to you and me I have created a warranty policy that explains your responsibility and mine."*



*Lori Kemmet graduated from The University of MN Dental School in 1989. She maintains two private practices in Boulder, Colorado. Lori has been instructing at LVI since 1998 and attributes much of her success and passion for dentistry to her relationship with the dentists she has met at LVI and her Incredible Smiles team. She was the recipient of the LVIM award in 2004. Lori has a fee for service practice devoted to neuromuscular and cosmetic dentistry. She loves our profession and inspiring other dentist to feel great about their future.*

## **Increased production**

If you don't have the heart to terminate a position you need to generate additional income to justify the expense. But I ask you what is easier – letting someone go lovingly or trying to generate additional income? Increase your production by implementing more quadrant, arch and full mouth dentistry. You could also improve the production by adding another producer or capture production from procedures you normally refer out to other dentists.

## **Total Employee Overhead**

Remember that bonuses and employee benefits (medical, 401K, etc) need to be included in your team overhead percentage. If your team overhead is greater than 20% somewhere there is inefficiency. You either have one or two extra people who are not always busy or you, the doctor, need to diagnose more comprehensively and/or provide dentistry more efficiently.

## **In Conclusion**

I look at my financials every month. It's just a habit – my pulse on my business. Robert Kiyosaki of the Rich Dad Poor Dad series said, "Repetition is how we learn, and by repeatedly going over your monthly numbers, not only do you establish a good habit, you gain insights into your spending patterns, you can make corrections earlier, and you ultimately take control over your financial life."

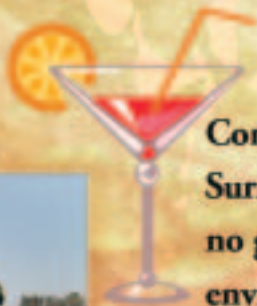
Your dental business is your cash machine. This machine is easy to start and sustain. But will you sustain it with a healthy mindset? Do you have specific projections and goals for your overhead? Do you have goals for yearly and daily collection? You must talk about it with your team. You must include them in the financial planning of this cash machine. Set goals together for overhead and reward them when those goals are reached. Take them to the next IACA conference in Orlando, Florida if they can keep supply overhead at 4-5% of collections for the year. Guess what – you will easily be able to pay for their trip!

E-mail me with any questions you may have!

*lori@incrediblesmiles.com*



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## **Michael Miyasaki DDS, LVIM**

*Dr. Michael Miyasaki is LVI's Vice President of International Operations. A 1987 graduate of USC School of Dentistry, he developed a highly successful reconstruction practice in Sacramento, CA. Following his passion to teach and mentor other dentists, he became associated with LVI in 1996 where he now works full time. Michael practices in the LVI faculty practice, lectures and publishes articles on the latest aesthetic, occlusion and materials available.*

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- CORE VII: Full Mouth Reconstruction**



# PRODUCT

## REVIEWS

## *Your Dental Life Can Be Easier And Safer*

*This review will showcase two products that can have a tremendous effect on all dental professionals, making dental life easier and safer. The first product, which I am very excited about, is Protemp™ Crown a newly introduced material by 3M/ESPE. I consider this new material a sure buy. The second product is one that impacts our safety and comfort, MICROFLEX gloves. Now, I know many would not consider gloves as exciting, however they do make up a substantial cost in most dental practices. I know that often I bought gloves solely on their cost. There is more to consider when purchasing gloves and I will present some food for thought you can utilize when placing your next order.*

### 3M / ESPE's Protemp™ Crown Temporization Material

Every day you create many single unit temporary crowns. How do you make yours? There are several different techniques to create a temporary, and I've tried them all. One technique involves using a metal tooth-shaped 'tin can' temporary, smashing it into place, cutting off the excess metal and filling it with temporary cement. Problems that can develop from this method are:

- Aesthetics are non-existent
- Marginal integrity is provided primarily by cement
- The temporary doesn't reflect the type of work you do

Another method to create temporary crowns is to use a powder-liquid material and a matrix. Fill the matrix by salt-and-peppering in the material, place over a preparation model and pressure pot it for a nice dense temporary. This requires an impression be taken in order to create the matrix and time to develop a nice tooth-colored temporary. Problems associated with this method are:

- Taste and smell are terrible
- Generates a lot of heat as it sets
- Puts you behind in your heavily scheduled day

When I had the opportunity to work with 3M/ESPE's new Protemp™ Crown material, I predicted they would be a winner.

3M/ESPE says this material is the "world's first single-unit self supporting, malleable, light-curable composite crown." Let's take a closer look at the features mentioned in this statement. First, it is ideal for most single-unit crown temporiza-



tion needs. It is very hard to beat this new material that is quick and easy to use.

Second, Protemp™ Crown is self supporting. You measure the space needed to fill with a disposable measure, get the appropriately sized temporary (nine sizes are available) and you're ready to begin. There are no smelly materials to mix or mixing tips to worry about.

Second, Protemp™ Crown is self supporting. You measure the space needed to fill with a disposable measure, get the appropriately sized temporary (9 sizes are available) and you're ready to begin. There are no smelly materials to mix or mixing tips to worry about.

Third, and I like this feature the most, is it is malleable. You can squeeze it to close the interproximal contacts or narrow an occlusal table.

You can trim off the excess material with scissors at the gingival margin and you can have the patient close into it to maintain occlusal stops. If you are short at the margin, stretch the material down or fill it in with a flowable composite.

Once the temporary is ready the fourth feature allows you to light cure it and set the material. You have control over the material and set it when you are ready. After some polishing with your favorite composite polisher you are ready to place the completed temporary with temporary cement in just a matter of minutes. There is no need for a matrix, hard plastic temporaries that are hard to trim or unsightly metal temporaries.

3M/ESPE reports the average time to fabricate a Protemp™ Crown temporary is four minutes or less and in the end you will provide your patients with a strong, aesthetic temporary that fits well. The tissues will be healthy when you place the final restoration reducing your tissue management headaches.

I am excited to see what other uses 3M/ESPE will develop for this material. I know I've got some ideas.

*Check out this website for more information:*

[http://solutions.3m.com/wps/portal/3M/en\\_US/protemp-crown/Protemp\\_Crown](http://solutions.3m.com/wps/portal/3M/en_US/protemp-crown/Protemp_Crown)



Trim following gingival contour



Light cure



Finish and polish



**MICROFLEX Gloves**

It is not often that we spend much time pondering which glove to use as long as it is inexpensive. But can't you tell the difference between a great fitting shoe and one that isn't? You and your team are wearing gloves all day. When the glove is a little too big, we learn to pull the tips to our fingers, like rolling up our sleeves. When the glove is a little too small, we learn to constrict the blood flow like a whale on a long underwater dive so that our hands shrink allowing our fingers to extend into the glove. We can adapt, but think

about this: a glove too large invites accidents as we catch our instrument on the excess material and like a sling shot fire our periodontal probes across the room or we lose our tactile sense. A glove too small puts our hands under strain causing fatigue and other possible maladies. You don't walk around in shoes that constrict your feet do you?

Latex allergies are common because of the increased exposure to latex in so many settings. Everywhere you go people are wearing gloves to prevent the transfer pathogens. Gloves and latex sensitivity hit home for me when

a family member developed latex sensitivity - balloons during parties are a thing of the past.

Have you ever begun working on a patient who then queried you, "Latex?" You quickly scan their health history to see 'latex allergy' circled and proceed to apologize, write in big red letters on their chart a reminder and change your gloves. How do you feel about powdered gloves? White hand prints on your pants and other embarrassing places. You can always tell the good employees by the number of white hand prints they have on the back of their shoulder from patting them with praise during the day.

Let me give some background about the nitrile gloves. Nitrile gloves are made from a synthetic latex, and do not contain the allergy causing latex proteins that can cause the irritating contact dermatitis and generalized latex allergies. Made from a combination of acrylonitrile, butadiene and carboxylic acid, the gloves have a higher level of chemical resistance to solvents, a higher level of puncture resistance and lower friction. The low friction feature means they are easier to put on than the latex counterparts when not powdered.



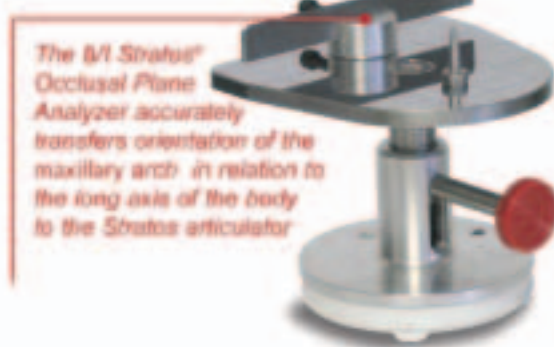


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Common sense would suggest to find a powder-free, non-latex glove that fits well and offers great tactile feeling when holding the small items we work with in dentistry. Some old nitrile gloves I have used in the past fit terribly and I hated using them. Today I use the MICROFLEX FreeForm SE (Standard Exam) powder-free, nitrile gloves. They are easy to put on and are extremely comfortable. I can wear them during long procedures and my hands do fine, and they come in my favorite color, blue.

Factors to consider when selecting gloves should be:

- latex or no latex
- powder or powder-free
- the overall quality of the product
- the fit on your hand
- the cost

#### **MICROFLEX highlights the following features:**

- Exclusive, patented\* "super-soft" formulation feels like latex
- Micro-textured fingertips for a secure grip in wet and dry conditions
- Modulated elasticity allowing a full range of motion helping to minimize hand stress
- Polymer-coated to aid in quick and easy donning, even in wet conditions

One potential drawback is cost. Nitrile gloves are, in general, more expensive than latex gloves, but I prefer not dealing with the risks of causing a latex reaction in my patients or myself. You and your patients deserve the best health.

I would encourage you to go to <http://www.microflex.com/products/c>

atalog.asp and review the several different types of gloves offered by MICROFLEX. I'm sure there is a glove in their line that will suit you well.

#### **Conclusion**

I hope you try Protemp™ Crown a new material by 3M/ESPE and consider the importance of the gloves you wear every day. MICROFLEX has an extensive line of products that I am sure will fit your needs. Our work is demanding and I would encourage you to use products that make your days both easier and more comfortable. You deserve both, hence, these recommendations. As always I enjoy your feedback and urge you to continue to submit information on the products that are working well for you.



*Take a look at these products.  
After you do I'd love to hear your comments.  
Your suggestions always are welcome –  
please send them to me at:  
[mmiyasaki@lviglobal.com](mailto:mmiyasaki@lviglobal.com)*

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# GUIDELINES TO DIAGNOSING FUNCTIONAL WEAR



W. SCOTT WAGNER, D.M.D.

*It is NOT designed to be a strict system,  
but rather a system that allows for a general  
classification and easy communication.*

**G**iven the rapid changes that are occurring in dentistry today—in technology, vision, esthetics, diagnosis, and treatment—I am aware of the need for a simple, user friendly way of communicating the condition of a patient’s mouth upon examination. Beyond the basics of occlusal classes, skeletal classes, TMJ classes, I have realized there are very few ways to communicate the health of the actual dentition.

In a comprehensive new patient exam, dentists will chart caries, periodontal disease, missing teeth, and restorations. Further details range from fractures, recession, mobility, and abfractions, to furcations, wear facets, and even Shimbashi measurements.

Today, the ability to communicate the status of a patient’s mouth clearly and concisely in our peer group is somewhat difficult. It is even more challenging to express this to patients. Fractures, wear facets, and loss of vertical are components that are sometimes hard to see and show. Even with x-rays, periodontal charting, digital photos, and models, there is a lot of information not entirely evident without direct examination.

Thus appears the void. I created and have been using this system for about two years now, and have not found many discrepancies or crossover. It is NOT designed to be a strict system, but rather a system that allows for a general classification and easy communication. Think of this as a system to evaluate the functional wear status of the teeth regardless of any occlusal class, skeletal class, periodontal condition or caries.

There are three basic Classes: I, II, and III. Class I is good, Class II is worse, and Class III is the worst. I often present treatment plans to patients that involve three choices (e.g. good, better, best). I decided to use the opposite “good, worse, worst” approach when defining the health of the teeth. Simple concept.

Class I represents very healthy teeth. There is no wear, no fractures are present, and no loss of vertical. This is not terribly common as most people have at least some wear or a fracture, but it does exist.

Class II is the most common and is defined by the presence of wear facets. Additionally it is divided into two classes by the presence of fractures (vertical or otherwise). Class IIa = wear facets with no fractures, and Class IIb = wear facets with fractures.

Class III describes teeth that have severe wear, fractures, and loss of vertical (height/length of the teeth). Defining loss of vertical is strictly to tooth structure (e.g. a normal, healthy maxillary central incisor typically is 9-11mm in length). This should not be confused with Shimbashi measurements that relate vertical height of teeth between the maxilla and mandible. Class III is further divided by the severity of the loss of vertical: Class IIIa = mild to moderate, Class IIIb = moderate to severe.

**Class I:**

No wear facets, no fractures, no loss of vertical (tooth structure only – not to be confused with Shimbashi measurements – although there is a strong correlation)

**Class IIa:**

Wear facets light-moderate, no fractures, no loss of vertical

**Class IIb:**

Wear facets light-moderate, fractures present, no loss of vertical

**Class IIIa:**

Heavier wear facets, fractures present, loss of vertical mild to moderate

**Class IIIb:**

Heavy wear facets, fractures, loss of vertical moderate to advanced. (Class III a & b are typically associated with exposure of dentin)

Class I:



1

Class IIa:



5

Class IIb:



9

Class IIIa:



13

Class IIIb:



17



2



3



4



6



7



8



10



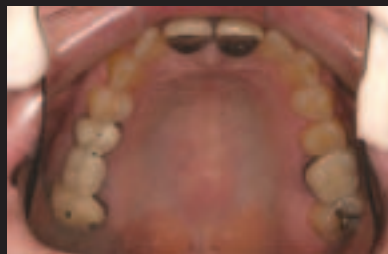
11



12



14



15



16



18



19



20



So we have defined three main categories and their sub-groups. We now have a tool to communicate the relative condition of the dentition. What additional information can we gain by being aware of a patient's Functional Wear Class? Given we know that enamel is the hardest natural substance in the body, we can also surmise that the worse the Functional Wear Classification, the more we must be aware of the forces that potentially caused each condition.

The most obvious problem contributing to fractures, wear, and loss of vertical, is a parafunctional grinding habit (day and/or night). But we must not forget to leave out a host of potential causes other than bruxism: medications (most commonly anti-depressants), a high-stress lifestyle, chronic ice or gum chewing, acid reflux, drug use, old amalgam restorations (which expand or contract depending on the % mix of alloys), nail biting, trauma, caries, poor airway development which can lead to abnormal archform development, and abnormal posture which can cause strain on muscles of the jaws, head, and neck, etc. The list of contributing factors is long. A critical aspect to performing a good service for someone is to be able to ask the question, "What caused the teeth to be in this condition?" Regardless of how simple or complex you anticipate a case being, if you do not ask questions about how they arrived in their condition, you may create problems for yourself in the future.

A thorough exam that identifies any warning signs creates a non-threatening informative session for the doctor and the patient. Documentation of a patient's Functional Wear Class can open a discussion where patients can acknowledge and own their problem. Your job is to provide solutions and choices. Often times when I am doing a new patient exam or a cosmetic consult, I find myself saying, "Mr. Jones, I just want to let you know about the severe wear and fractures that are present in your mouth. You can choose any treatment option you like, but unless we attempt to treat the cause of the damage, I cannot assure that you will not continue to experience similar future problems even if you wear a biteguard."

This simple statement and acknowledgement with a written release prior to treatment is a powerful tool I use especially when patients deny treatment that would correct the cause. They confirm that we are attempting to maintain their comfort and stability in a bite position that I have already told them is pathologic. Additionally, if you use high quality intra- and extra-oral photos during case and treatment presentation, the patient's understanding of what we see as practitioners becomes even more powerful.

The purpose of this five second diagnostic tool is communication. Patients will be impressed by your thoroughness, more confident in your ability, and as I have found, are grateful because I



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*Patients will be impressed by your thoroughness, more confident in your ability, and as I have found, are grateful because I am often the first to communicate why their mouths are in such condition.*

am often the first to communicate why their mouths are in such condition. In my experience, this type of doctor-patient relationship has opened doors and led to patients moving forward with more comprehensive treatment options.

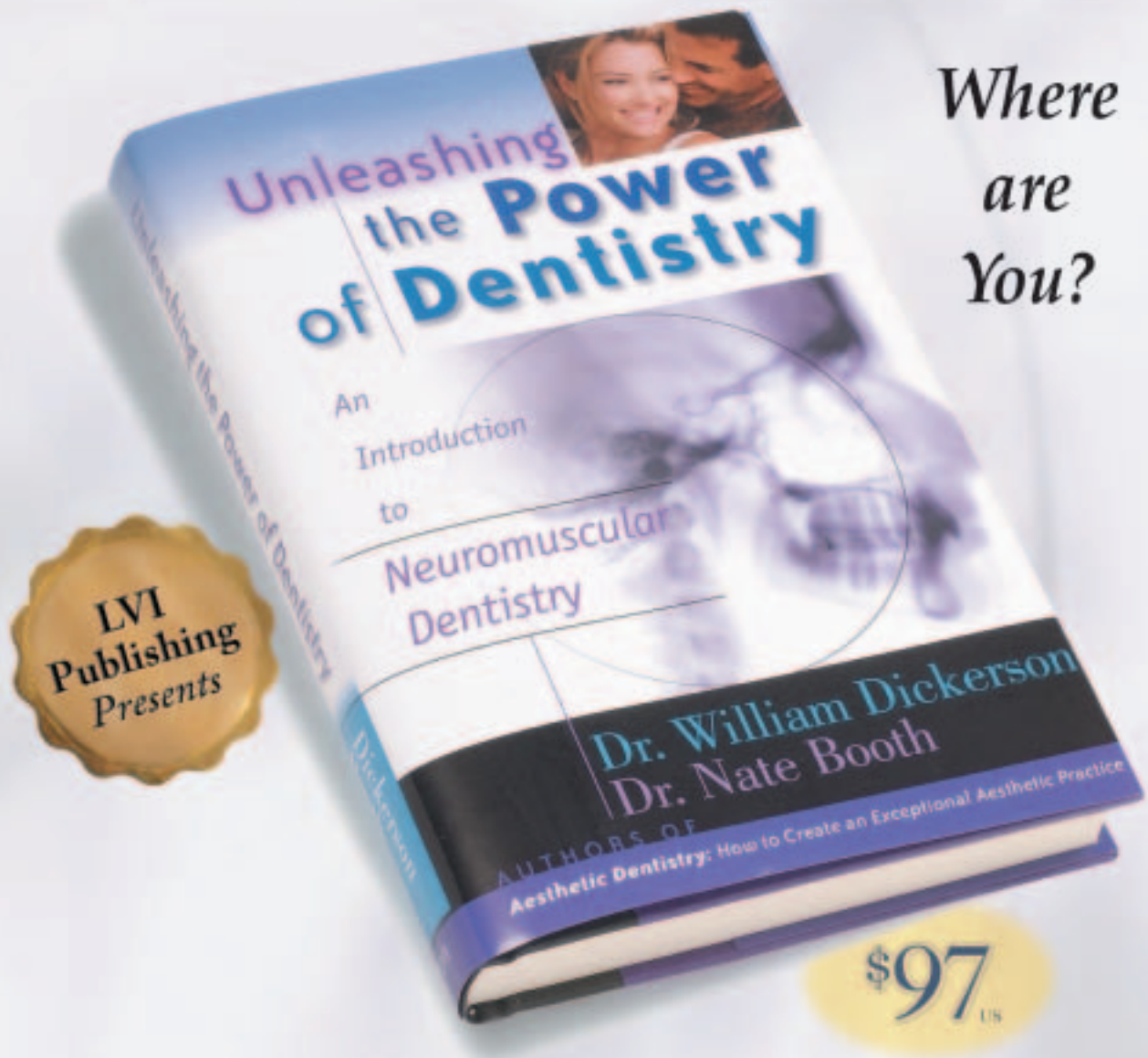
I must clarify; the best way to diagnose these Functional Wear Classes is by direct vision. Accurate models can show wear facets and loss of vertical/tooth structure; however, they do not show many of the marginal ridge hairline fractures that are often present. It has been my experience that these types of fractures are critical to diagnose as they are often the precursors of decay, large fractures, pulp exposure or worse. High resolution intra-oral photos are helpful, but one must be able to 'zoom in' on the teeth to be able to see these fractures photographically. Remember not to confuse normal developmental grooves as one of these hairline fractures. To show how easy these guidelines are used, I will walk through the five examples that I have provided and how each one is defined.

Functional Wear Class I: The first things to notice are the remnants of the mammelons on 9 & 10 (photo 2). The mammelons have no diagnostic value here, but I know these two teeth are in pristine condition. There are no wear facets on the canines or other anterior teeth indicative of bruxing or other pathologic occlusal forces. Examination of the posterior teeth reveals no wear facets, fractures, or other occlusal pathology.

Functional Wear Class IIa: Starting with the anterior teeth, the incisal wear on #'s 8, 9, 24, and 25 is obvious. Take care to notice the notch on the disto-incisal of #11, and the flattened incisal of #27. It is also fun to notice the perfect mammelons on #23 (it is completely out of occlusion); however, diagnosis is based on the whole mouth, not one tooth. Photos 6 and 7 show the incisal wear on the anteriors. Make note of the large wear facet on the ML cusp of the first molar (right side of photo 7). The intra-oral mandibular photo shows large wear facets on the first and second molars (left side of photo 8). No vertical fractures are present. There is no loss of vertical.

Functional Wear Class IIb: All the conditions in the case are essentially the same as Class IIa (e.g. anterior and posterior wear facets are readily evident in all images 9-12). I even pay attention to the chipped porcelain on the occlusal of the maxillary and mandibular first molars which has worn through to the metal substructure. However, the key diagnostic difference between Class IIa and IIb is the presence of vertical fractures. Some are hairline, others are profound in this case. You can easily see the mesial fractures of the maxillary 1st and 2nd premolars in the upper left of photo 11. There is no loss of vertical.

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*It is a simple system that can be implemented easily and used by all specialties in dentistry. The only requirements are vision and time.*

Scott Wagner graduated with Honors from the University Of Florida College Of Dentistry in 1998. He maintains a private practice in Jacksonville, Florida dedicated to Aesthetic & Neuromuscular Dentistry. Scott began his journey at LVI in early 2003 and completed the Graduate core curriculum in 2005. He attributes much of his success to the clinical skills, vision, and passion that is LVI.

Functional Wear Class III (a & b): Encountering a patient with this amount of pathology should raise an eyebrow at the very least (see photos 13-16 & 17-20). Both cases have loss of vertical (height of tooth structure)—the key diagnostic point in a Functional Wear Class III patient. Both have fractures and wear facets. The only difference is the severity of wear (IIIb being obviously greater). In my clinical experience, both IIIa & b are associated with profound exposure of dentin. Many times these patients have lost teeth. Vertical fractures are sometimes so significant, that despite a patient's efforts to save them via root canal & crown, they lose the tooth. Without proper diagnosis and acknowledgement of their condition, these patients routinely develop anxiety, fear, and mistrust of the dental profession. Any money they have spent to save teeth has been, as I often hear, "all for nothing."

Other times, these Class III patients have no pain or discomfort. They only present with severe wear, micro-fractures, and lots of exposed dentin. They typically have a type-A, intense personality. Diagnosis and communication with these patients is key, especially if they opt against ideal treatment. If left undiagnosed, that tooth that you restored which subsequently broke is your fault and not the patient's.

It all comes back to vision, taking the five seconds for diagnosis, and then communication. Among our peer group, a discussion regarding the challenge of treating a Functional Wear Class IIIb patient now paints a very vivid image. Obviously, using that type of language with a patient is non-productive, but the mere fact that you have a diagnosis of their condition allows one to use layman terms to open the discussion. The goal is that patients own their condition.

I did not see a need for this type of diagnostic system until I started learning about, and practicing, aesthetic neuromuscular dentistry. The rewarding aspect for me is that this system applies beyond neuromuscular dentistry. It is a simple system that can be implemented easily and used by all specialties in dentistry. The only requirements are vision and time. A dentist must have the vision (or experience) to see conditions as they appear, and it only takes a few seconds to diagnose and chart.

The implications of this tool and how it can immediately improve communication between all practitioners in dentistry is the primary advantage. I believe that this is a small step that we can all take to elevate our communication and performance in dentistry.

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drscottwagner@bellsouth.net  
www.jaxsmile.com

The Eiffel Tower is shown at dusk, illuminated with warm orange lights against a deep blue sky. The tower's intricate lattice structure is clearly visible.

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