A close-up, high-angle photograph of an elderly man with white hair, smiling warmly. His hand is resting under his chin, and he is wearing a light-colored, vertically striped shirt. The background is dark, making the subject stand out.

JANUARY / FEBRUARY / MARCH 2006

LMV Visions

INTERVIEW WITH **NORMAN THOMAS**

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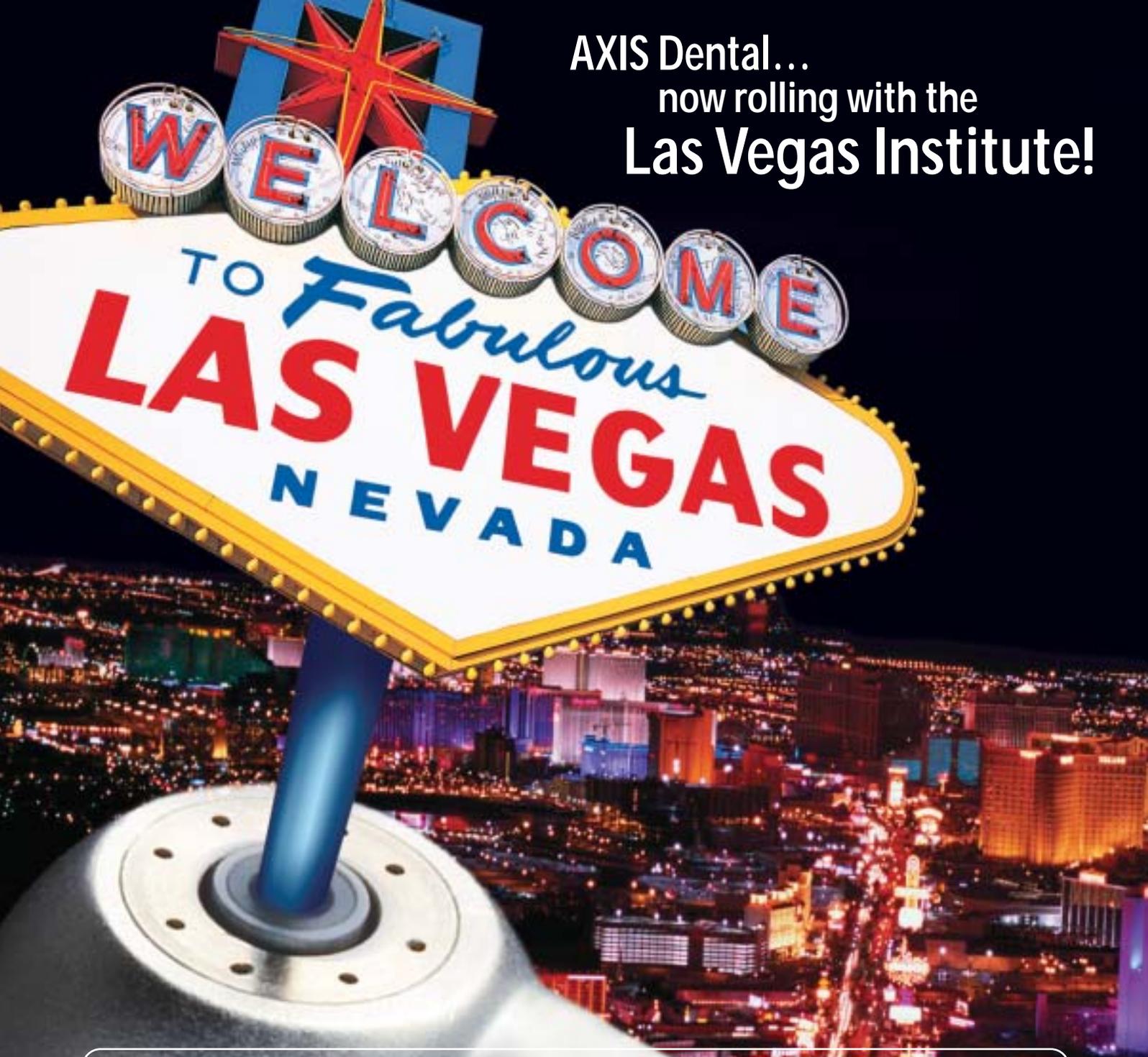


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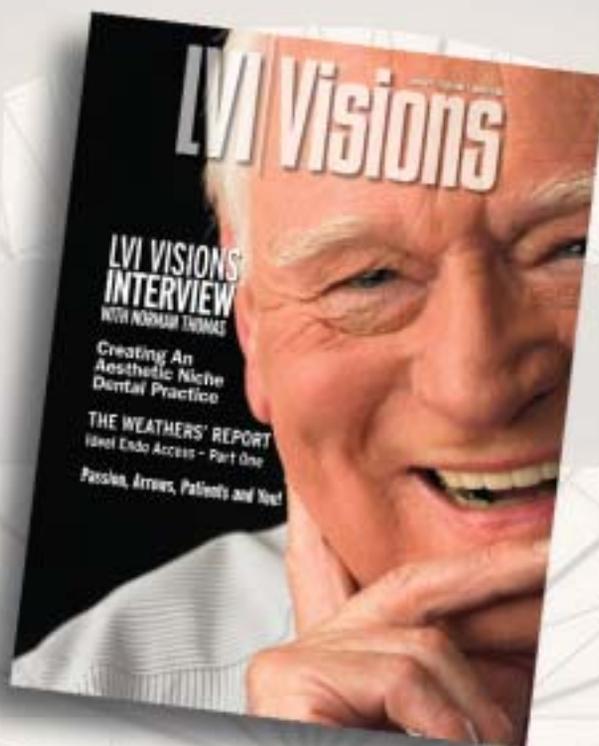
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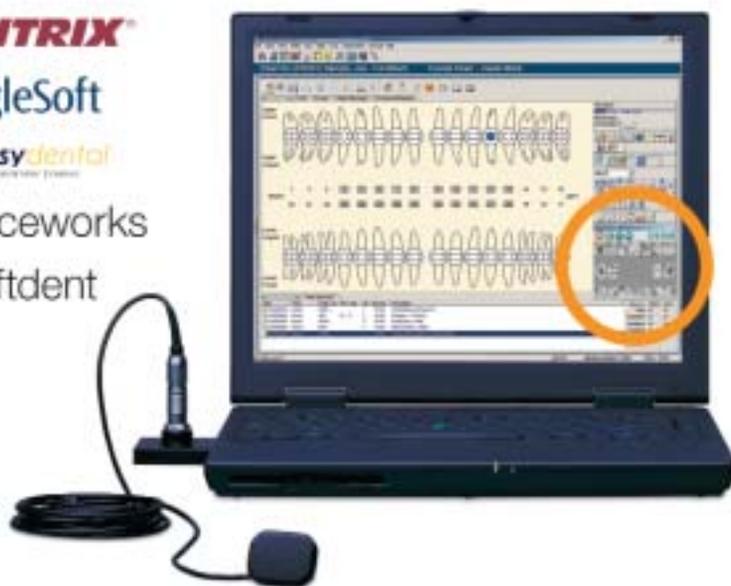


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E D I T O R I A L
BY WILLIAM G. DICKERSON, DDS, FAACD, LVIM



Do You Love Being A Dentist?

The discontentment for those who choose our profession is nothing new. For years, surveys by the ADA have consistently shown that 68% of dentists would not choose dentistry again as their choice for a career if they could start all over again. It is why many have said for years that the golden age of dentistry is over.



But is it?

What makes the difference between those who dislike being dentists and those who love being a dentist? Is it income? Is it patients' respect or appreciation for what they do? A recent study prompted me to interview those who loved being a dentist to find out why. It was apparent to me that most of our LVI dentists were happy in their chosen profession. The first step was to find out what percentage of LVI alumni actually enjoyed being a dentist--then find out why.

A survey was conducted by the independent research firm, Strategic Dental Marketing, which is a nationally recognized research firm used by many of the top companies in the industry. E-mail invitations to take part in the survey were sent to 800 random LVI dentists. They felt they would be lucky to get a 10% response yet they got a 42% response. This was the largest response they have ever

obtained, especially when it was not incentive driven. No one was given anything for taking the survey. It would have been higher but many thought that the survey was just spam and never opened it. Yet a huge percentage did and responded honestly to the anonymous survey. Here were just some of the interesting and eye opening results of this telling survey.

since they started LVI. This was a direct indication that something they learned at LVI had improved their feelings about what they do for a living. It is what led me to do the interview of LVI dentists to find out how others can improve their enjoyment of dentistry.

Over 83 percent of LVI alumni have seen an increase in their in-

It is why many have said for years that the golden age of dentistry is over.

It has always been clear to me that the majority of our alumni loved their occupation, but the results of this survey were beyond my expectations.

97.7% of LVI alumni love being a dentist. Compare this to the average in our profession where 68% wouldn't go into dentistry again.

92% enjoy their profession more

comes--with the majority of dentists having seen an increase in income exceeding 25% since coming to LVI. And another 30% have increased their income by more than 50%. At first glance it might seem that the increase in income that occurred as a result of going to LVI might be responsible for the increase in enjoyment of their

profession, but more people increased their enjoyment than those who increased their income. As they say, money does not buy happiness (although it may allow you to be miserable in a lot of nice places).

80% of LVI dentists make more than the average dentist in the US and Canada. I thought this would be the case, so the fact that the average LVI dentist's income is significantly higher than the average North American dentist is not surprising.

92% of the dentists were either

extremely satisfied with their LVI education or very satisfied. 7.2% of the remaining 8% were satisfied. This result was phenomenal, and looking at the results of those who increased the love of their profession after attending LVI, it is not surprising that they would be appreciative of that education. That is still an incredible statistic. They say you can't please everyone, and yet it looks like we have almost done just that.

97.4% of LVI alumni plan to take

another course at LVI. This correlates closely to the numbers who were satisfied with their education at LVI. Many alumni talk about going to LVI to get their "LVI Fix", which is described as an increased enthusiasm for what they do for a living.

To find out the why of these results, I emailed several of the best dentists in the world who love what they do to find out why they enjoy their profession so much, and what could the average dentist do to "get that feeling"?

Here are the results:



Why do you think most dentists don't like being a dentist?

They are trapped into a needs-based model of delivery of care, and have not seen that--in reality--dentistry is discretionary, and thus competes with other forms of discretionary spending. In this way, the diagnosis of care is distorted into a pre-conceived and biased notion of what the insurance company thinks is necessary, or what the patient thinks is necessary. The dentist is thus put into the role of parent and must convince the patient of the value of what is needed. This leads to a higher level of rejection of treatment plans, and negatively influences the dentist's personal self image. The result is the dentist continues to degrade the level of treatment planning until a high enough percentage of patients accept treatment, and the dentist's self esteem is preserved. The inevitable poor quality and/or inadequate level of care that results from this model of delivery leads to a slow and continuing decline in the satisfaction of practice, because of the incongruity in ethics between what the dentist knows is the best level of care and what is actually delivered to his or her patients.

Dr. David Buck – Seattle, WA

They tell me patients fight about insurance coverage on everything, and complain about prophylaxis fees being in excess of UCR. The young dentists tell me they envy me and my style of practice, and they want to practice like I do when their practices mature. When I ask why they can't start doing that now, they say they would lose their patients. When I ask what is so bad about that, they get confused and frustrated. They can not grasp that they have a choice, today, to define their practice in terms that give them enjoyment.

Dr. Nelson Clements – Valdosta, GA

Nobody likes to be in situations where they have limited control. Most doctors with ordinary practices feel like their practice controls them. They act like victims of the circumstances that surround them--such as their staff, insurance, regulatory control, practice location, the economy.

Dr. Joe Henery – Orange, CA

We need to truly enjoy what we do. Dentists work too hard, too long and don't get paid well. They are still being told what to do by the insurance companies.

Dr. Fred Ables – Atlanta, GA

Too many dentists have never understood the power of continuing education. They view CE requirements as a necessary evil. After all, we all learned everything we had to in dental school. Years go by, and dentistry is still the same. You might buy a few "toys", but you are still doing the same procedures the same way. There is no stimulation; there is boredom. The passion is lost, and it's not easy to get it back.

Dr. Alan Gross – Miami – FL

For the average dentist, it is very frustrating--compromising treatment day in and day out. For people who don't do ideal treatment (because they're scared to offer it or some other perceived barrier) it must be very demoralizing to have continual problems.

Dr. Brett Taylor – Sydney, Australia



What do you think it is that makes you love being a dentist?

Seeing the final product; restorations that disappear. That is so cool. Watching a patient's face as I coronoplasty an orthotic and seeing the stress of years of pain disappear from their eyes. When a patient tells me through their tears that my temporaries have changed their life. I love the clinical result.

Dr. Nelson Clements – Valdosta, GA

Ten years ago I couldn't answer that question. I had a very good family practice and made a good living. I was also bored and really did not enjoy going to the office each day. Life was just getting on a good pair of roller blades and roll in from room to room. I definitely lacked passion; it was just a job. The local meetings did not stimulate my need to learn. Other meetings seemed to offer courses that said the same thing I have heard for years. Today, I love dentistry. I love it even though my peers are trying to figure a way to get out. They are approaching 60 like me and are burnt out. Many have to keep doing it because they can't really afford to retire. But I love it. Why? I don't do what a patient just needs to get done. I help that person achieve what he truly wants to get for himself. I can offer that person treatment he hasn't been offered at other offices. Being able to diagnose, plan and aesthetically treat for functional, comprehensive treatment that truly benefits someone for years to come is very powerful. I feel empowered to do this, and I love it. And, I continue to love it knowing that I have much to still learn.

Dr. Alan Gross – Miami – FL

The ability to actually change a life from the delivery of complete neuromuscular and aesthetic care, and the resulting relationships that develop between patient and dentist. Once a patient has clarified their values and I can join with them to achieve their long term goals, a very mutually satisfying partnership emerges.

Dr. David Buck – Seattle, WA

Again it is so many things, and they are the pearls, the gems whatever you want to call it. It's the rock-solid dental knowledge and philosophy you obtain at LVI. It is a complicated question, very simply answered by going to LVI. It's an attitude, and self awareness, it's the hope you give to all of us. You instill within all of us the belief that we are the best, and that we can practice the kind of dentistry we enjoy, rather than the type we may believe we were supposed to practice.

Dr. Ron Willis – Tallahassee, FL

I feel that I am making a difference in people's lives. Be it a chronic pain patient who now is pain free, or a smile patient who for the first time has the self confidence to smile --I contribute to the improvement of lives. What I do is not dependent on an insurance company or some other entity I serve to meet the unmet desires of guests who are happy to pay for my services. So I have control over my destiny and income. This is why I love being the kind of dentist that I have become.

Dr. Prabu Raman – Kansas City, MO

I love being able to make people feel good about themselves! Feel good about their smiles, their teeth, and their health. It's no longer about fixing the tooth, but it is more rewarding and enjoyable to treat a person. Make them comfortable, make them smile, and in return they change who they are and what they are and do. Making someone be who they really want to be is phenomenal.

Dr. Matt Bynum – Simpsonville, SC

I recognize that I do have control over my situation, and I make what I consider to be good choices pertaining to my practice, or at least choices that are good for me. I do the kind of dentistry that has a positive, immediate effect on people's lives that serves to uplift me and my team as well. You and the eagles I associate myself with at LVI are totally responsible for my attitude shift.

Dr. Joe Henery – Orange, CA

It's just fun, especially the way LVI practices are run. I love the challenge, being at the forefront, and being a leader in dentistry.

Dr. Kevin Winters – Tulsa, OK

The independence, the ability to make a MAJOR difference in someone's life. I like being better than most people at what I do. That is being a bit vain, but personally I thrive on being good at something. I would hate to think I was just average.

Dr. Brett Taylor – Sydney, Australia

Freedom from third parties, the technical abilities to perform any treatment I wish with certainty of a positive outcome, knowing that I am on "top of my game"

Dr. Brad Durham – Savannah, GA



Do you think that money has anything to do with it?

Absolutely. This is America; you are supposed to make a profit. I do not receive any government subsidy checks. And if I could afford to, I would do it for free--just for the thrill of the clinical result.

Dr. Nelson Clements – Valdosta, GA

Money is nice, but I'm sure there are a lot of dentists with practices doing extremely well who don't appreciate what they can do for their patients, and don't enjoy doing what they're doing. Actually, money might be one of the factors controlling dentists' situations, making them afraid to try something different, for fear of jeopardizing their lifestyle.

Dr. Joe Henery – Orange, CA

For some, money may be a driving force, but for me it's No Way. If you are a dentist for the money, you may be disappointed. If you practice with pride, with a high quality and standard, and offer only the very best for the right reasons, the financial rewards can be huge.

Dr. Ron Willis – Tallahassee, FL

Not really, you can make a ton of money in a busy insurance-driven practice. We have figured out how to make money with less work, less stress, and higher satisfaction for not only the doctor and client, but also the team working in the office.

Dr. Jim Harding – Vail, CO

There is nothing wrong with making money. But, if you really love what you do and continue to excel at it, you will profit. Personally, my vision changed after courses at LVI. I saw a clear picture of what I wanted in dentistry. It took some of my financial resources to go in the direction I saw for myself. So, it wasn't the money. But, it was the right thing. The trials and tribulations of starting over at 58 can be daunting, but I have never been happier. Money does not buy happiness. Doing what you love to do, does.

Dr. Alan Gross – Miami – FL

Absolutely! Money is a stress for those not making much of it. And because of this the dentist will push the limits and place the stress on the staff. When you're making it, all is good. But loving what you do, who you do it with, and who you do it for is the key. When all this comes into play, money comes with it!

Dr. Matt Bynum – Simpsonville, SC

I'm not so sure it is really the main thing. There are many dentists who are making a lot of money who are miserable and hate what they are doing.

Dr. Kevin Winters – Tulsa, OK

Money has something to do with it. But it is not the only thing that I aim for. Money is but the byproduct of the valuable service we provide. Money is a validation that my service is valuable to my guests. And, of course, money is needed to take care of my family and my team.

Dr. Prabu Raman – Kansas City, MO

Money does not buy happiness.
Doing what you love to do, does.



What did LVI provide you to make you enjoy dentistry more?

Realizing quality not quantity, being a mouth doctor rather than a tooth Jockey, LVI provided the skills, and direction, gave me the confidence to practice and deliver a higher level of care. Bottom line, we are the best, and it shows in our dental practice and our lives, to offer the highest quality and care.

Dr. Ron Willis – Tallahassee, FL

The ability to create a vision of complete and ideal dentistry. I can provide a level of diagnosis and care that is the most rewarding and challenging dentistry I have ever done. The intellectual and emotional satisfaction of studying, diagnosing and delivering neuromuscular dentistry is beyond anything I could have imagined in my career.

Dr. David Buck – Seattle, WA

LVI as an entity and you, Bill, as an individual, have given me the confidence and inspiration to become the best I can be. By setting seemingly impossible goals and then achieving and exceeding them, you provided a model for me. LVI--through its menu of technical and business courses--has given me the tools to make the dreams and goals become a reality. One of the most important contributions of LVI is the camaraderie of like-minded, optimistic, positive people who contribute at a high level every day. Through the LVI forum and other interactions, they provide a "community" of colleagues who understand our challenges (and offer help) and achievements (and share in those without jealousy) in a way that you can not share with the dentist down the street.

Dr. Prabu Raman – Kansas City, MO

LVI provided the skills and knowledge I use on a daily basis to obtain the incredible clinical results I achieve. This is highly specialized knowledge and skills. I am not aware of any other place a dentist can go to learn what is available at LVI. I can not tell you how many times I have celebrated an outstanding clinical result and had the thought go through my mind "I would not know how to do this without Bill Dickerson."

Dr. Nelson Clements – Valdosta, GA

A great business model, a great practice philosophy, superb technical skills, and the ability to put it all together in a functional package.

Dr. Brad Durham – Savannah, GA

Passion, inspiration, encouragement and a new vision of my future. I knew the minute I entered LVI that I found the place I didn't think existed. Just look at the variety of courses available. It's not just about materials available. It's about science, efficiency, proven techniques, treatment planning, management, and so much more. I have rekindled my spirit and have become a dentist able to diagnose and provide true comprehensive treatment. I look forward to each day because I get to change someone's life. My life changed, and I can now help change another person. That is humanity at its best.

Dr. Alan Gross – Miami – FL

It gave me a realization that I am and can be better than what I was taught to be, which is average. Status quo does not have to apply to those who do not want it to. LVI gave me the confidence beyond what I had to be better and to demand more of myself and my team, so we can better serve the patients.

Dr. Matt Bynum – Simpsonville, SC

Skills to improve but also an amazing network of like-minded and successful people who are there for you when you need help.

Dr. Jim Harding – Vail, CO

Obviously the clinical skills and knowledge to provide the kind of dentistry that is appreciated by our patients. Most importantly, though, the "You don't know what you don't know" mentality approach to remaining open to different ideas, and the opportunity to associate with other professionals with similar values and ideas.

Dr. Joe Henry – Orange, CA

LVI gave me the proper tools to practice dentistry the way it could and should be practiced. It was a launching pad for me to take off to a better practice and a better life.

Dr. Fred Ables – Atlanta, GA

Bill, you helped me believe that anything was possible. LVI provides an atmosphere that fosters relationship. Where else can you go where colleagues truly care about your success.

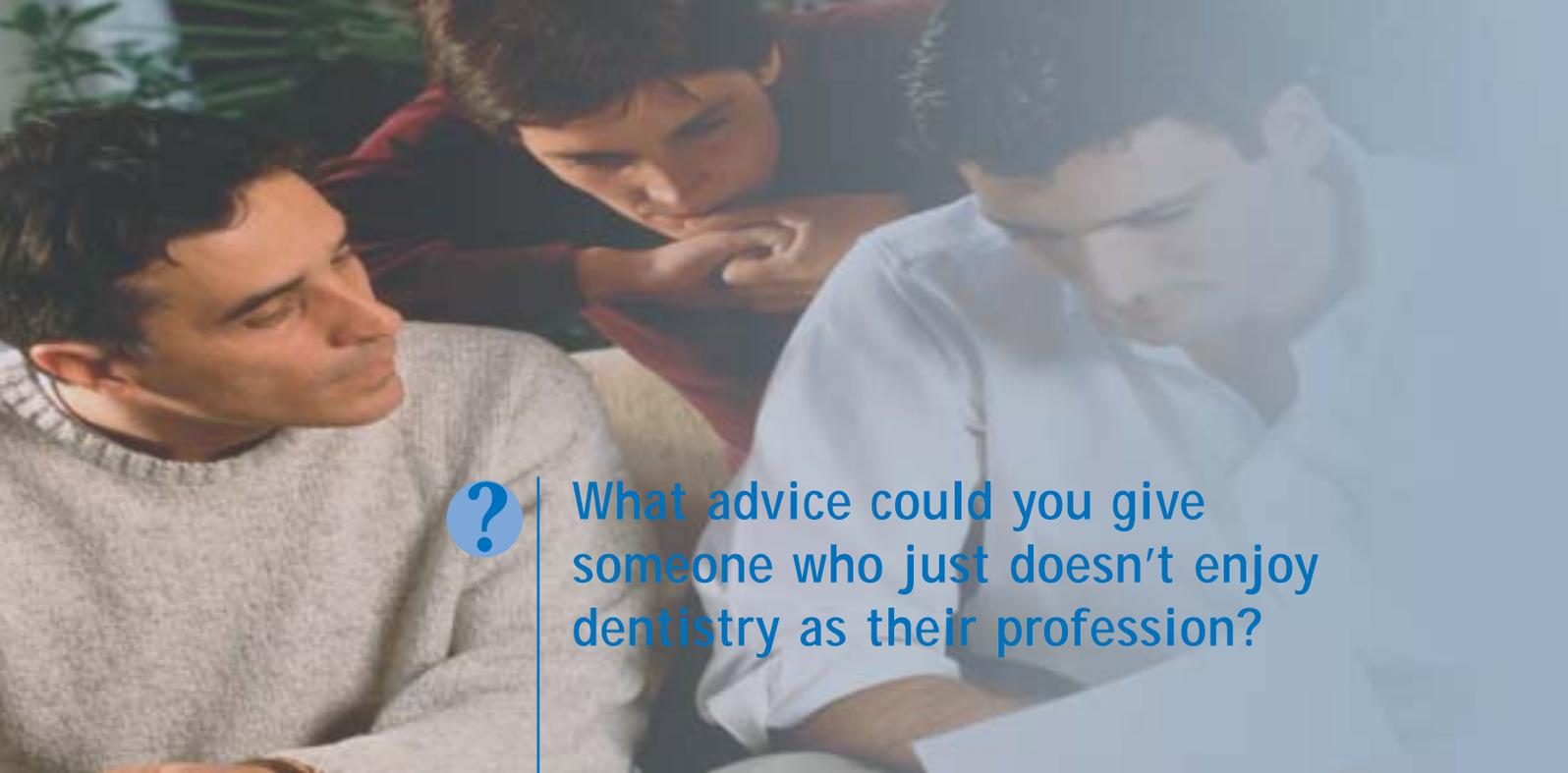
Dr. Lori Kemmet – Boulder, CO

It gave me an opportunity to get better, to continue to improve. It provided a measuring stick to compare what I was doing to what is possible.

Dr. Kevin Winters – Tulsa, OK

Confidence to do my job better. Skill I couldn't learn elsewhere. Comradery. Friendship. Sense of family. Sense of doing something that was more important than dentistry.

Dr. Brett Taylor – Sydney, Australia



What advice could you give someone who just doesn't enjoy dentistry as their profession?

If you don't enjoy dentistry, realize that you have choices. "Everything can be taken from a man but ...the last of the human freedoms - to choose one's attitude in any given set of circumstances, to choose one's own way.- Viktor Frankl" Choose your attitude. Choose to make a change. Choose to be the best at what you do. It has been done before. So it is probable that you can do too. Choose to make the first step - beg or borrow to go to LVI. The enjoyment will follow.

Dr. Prabu Raman – Kansas City, MO

To appreciate that dental school taught you how to pass the state exams, not necessarily how to practice dentistry. The sooner that the young graduate finds a mentor who truly enjoys and is enthusiastic about what they do, the better. LVI alumni should be lamplighters for not only for new alumni but for all dentists.

Dr. Joe Henery – Orange, CA

1. Look back to what drove you to dentistry in the first place... then expand on that passion.
2. Get rid of anything that stands in the way of allowing you to expand that passion.
3. If you can no longer FIND the passion – get your butt to LVI and surround yourself with passionate people.

Dr. Fred Calavasey – Sydney, Australia

You can continue to choose to be unhappy or choose a different path. So many people did not enjoy dentistry prior to attending LVI. We have created a lot of happy dentists – please join us. If you don't enjoy dentistry after LVI then quit – but try this one last magic pill!

Dr. Lori Kemmet – Boulder, CO

It's all about the CE baby! Doctors have to be in a situation to interact with other colleagues and also to continue to grow personally and professionally.

Dr. Kevin Winters – Tulsa, OK

Decide what your practice would look like if it were your "dream practice", and then set out to achieve it.

Dr. Brad Durham – Savannah, GA

Go to LVI and be prepared to open your mind to many points of view.

Dr. Stephen Burch – Alexandria, VA

GO TO LVI as soon as possible and open your mind...

Dr. David Buck – Seattle, WA

GO TO LVI !

Dr. Ron Willis – Tallahassee, FL

Increase your knowledge of the amazing things that are available today or move on to something else. There is no excuse to be the type of dentist who goes to the midwinter every other year to get the minimum CE requirements. In this world of dentistry you must be prepared to be a student of the profession and hopefully dentistry will become your hobby like so many of those who are affiliated with LVI.

Dr. Jim Harding – Vail, CO

Choose your attitude.
Choose to make a change.
Choose to be the best at what you do.



What advice would you give a new graduate on how not to become disenchanted with their chosen profession?



Never stop learning! Stay at the leading and cutting edge of dentistry. The money you spent becoming a dentist has allowed you to be average at best. Invest in your future now by going to LVI and become the best in your profession. You owe it to yourself and the people who put their trust in you. Invest now in an institute that is dedicated to the principles of today and tomorrow's dentistry, and you will be inspired to excel forever. It will keep the passion alive.

Dr. Alan Gross – Miami, FL

Develop a vision of who you will serve and what you will deliver and never give up on it. Be able to communicate your vision clearly to those who work with you. Realize that dental school was a very primitive education and that clinical training beyond dental school is critical for success.

Dr. David Buck – Seattle, WA

If the circumstances of your early practice life start to make you feel disenchanted, realize that it does not have to be that way. Above all, get started on the right path sooner than later. No need to learn from the school of hard knocks. Get started on the LVI journey. If you think that you cannot afford to take LVI courses, think of the time, money and enjoyment of life you are losing by going down the disenchanting path. You cannot afford to put off LVI education.

Dr. Prabu Raman – Kansas City, MO

To appreciate that dental school taught you how to pass the state exams, not necessarily how to practice dentistry. The sooner that the young graduate finds a mentor who truly enjoys and is enthusiastic about what they do, the better. LVI alumni should be lamplighters for not only for new alumni but for all dentists.

Dr. Joe Henery – Orange, CA

Don't compromise what you dream of accomplishing. Don't give up control of your destiny. Don't settle for anything less than achieving your chosen goals.

Dr. Fred Ables – Atlanta, GA

If the new graduate could be mentored by an LVI dentist who is doing well in their dental careers, and also attend LVI asap

Dr. Ron Willis – Tallahassee, FL

I always tell young guys to forget everything they've just learned in dental school and go out and learn how to really be a dentist. Business courses, technical courses, relationship courses. These are where you are really going to learn.

Dr. Kevin Winters – Tulsa, OK

Come out to LVI and learn what fun and dentistry is all about!

Dr. Matt Bynum – Simpsonville, SC

Be willing to be excellent and not conform to the standards set by the insurance companies and average dentistry.

Dr. Brad Durham – Savannah, GA

Never stop learning!

Don't compromise what you dream of accomplishing.

Don't give up control of your destiny.

Don't settle for anything less than achieving your chosen goals.

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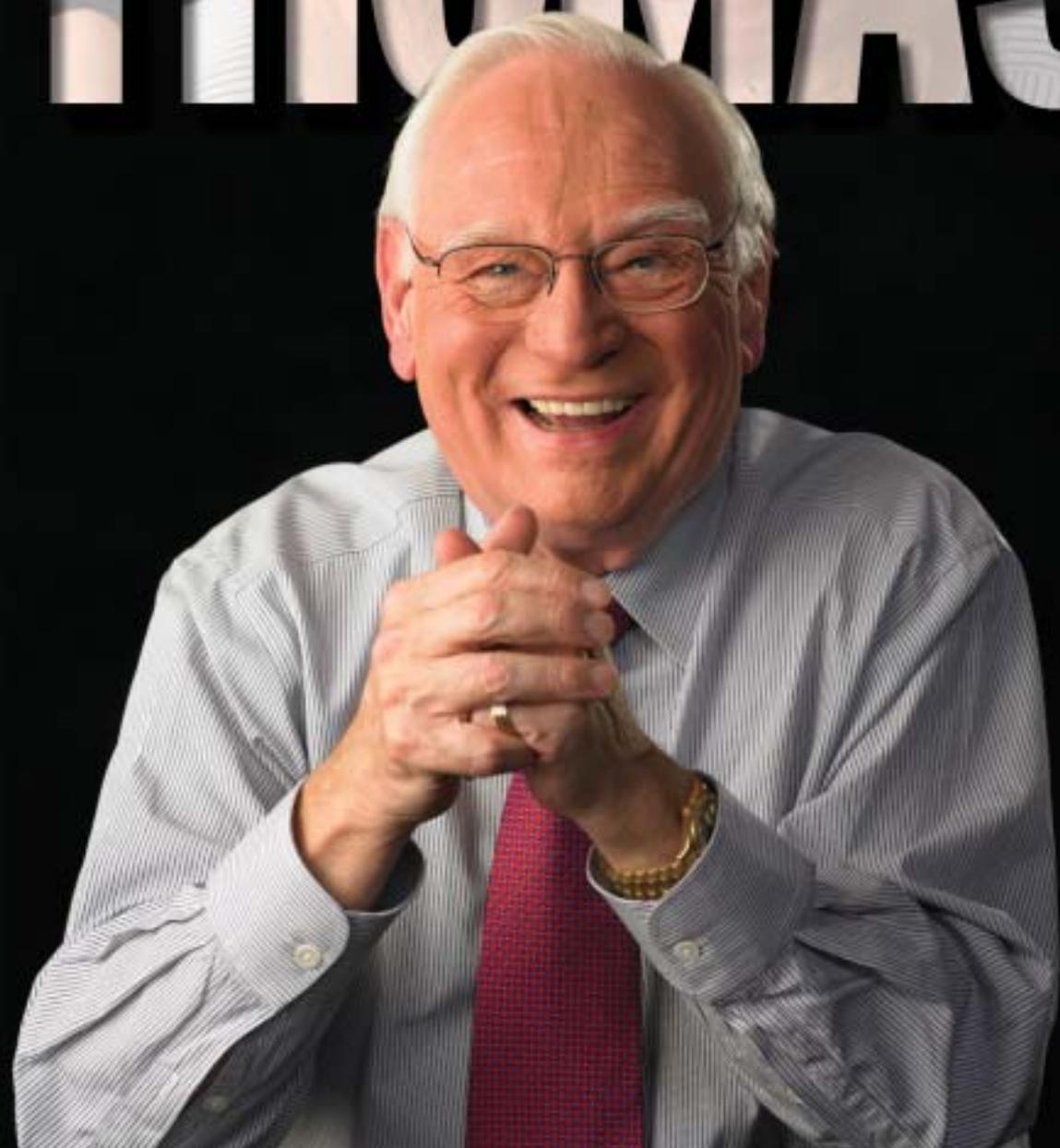
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THE LVI VISIONS INTERVIEW WITH

NORMAN THOMAS



N

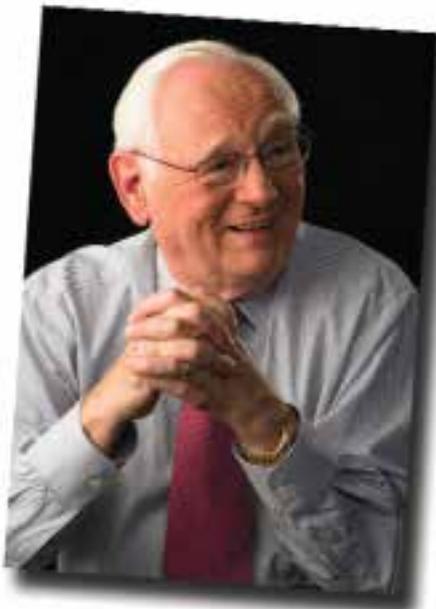
orman always wanted to be a dentist. Born and raised in the United Kingdom, at age fifteen he completed his School Certificate, and in 1948 applied for admission into dentistry. Norman learned that preference had to be given to those returning from WW2 military service as well as older students. His grandfather, a dentist, suggested an apprenticeship as dental technician in the interim.

The war in Korea interrupted Norman's apprenticeship, and he accordingly enlisted in the Royal Army Dental Corps, leading to further training and certification as a dental technician (CDT) in 1951.

On demobilization and transfer to Officer's Reserve RADC in 1952, he was admitted to Bristol University Dental School. He received his BDS degree, awarded with honors and distinctions (Dental Gold Medal and Attenborough Medal in Dental Prosthetics) on December 21, 1957, at age 24.

Interest in temporomandibular disorders (TMD) awakened while undertaking research with Arthur Chick, MDS, PhD, and David Berry MDS, of the Prosthetics Department directed towards finding center(s) for mandible rotation. The latter work ingeniously utilized photography of dots on lightweight structure held above the head and attached by struts to clutches cemented onto the dentition. No evidence remotely suggestive of hinge axes was found. Centric Relation was discarded at Bristol. Immovable kinematic centers were located for all points of mandible and skull motion at the attachments of the temporal ligament and in upper cervical vertebrae. This study was published in the *Journal of Prosthetic Dentistry* (1955).

Introduction to the concept of the "Great Impostor" in the diagnostic differentiation and treatment of TMD conditions came while Norman was serving as House Surgeon and Registrar at Bristol Royal Hospitals. Norm made the decision early on in his dental program that he would continue studies as Oral Physician specialist upon graduation.



Norman served as dental officer with Gloucester County Council to September, 1958, prior to acceptance into Medical program at the University. He was awarded the prestigious Nuffield (Oxford) Fellowship in 1958, to continue studies in Medical Sciences.

Following three years study in the Faculties of Medicine and Science, Norman was awarded second part M.B. (medicine) and B.Sc (Special Honors in Anatomy and Physiology) in June, 1961.

The Medical Research Council (U.K.) awarded Norman Scientific Assistant Status to undertake internship in Pathology at the Royal College of Surgeons under the direction of Sir Wilfred Fish and Professor Bertram Cohen. The research entailed pathogenesis of oral carcinoma following the application of 9:10 dimethyl benz-anthracene in rabbits and histology of earliest lesion in bone metastases of wide range of cancers in humans, which specimens were obtained from terminal patients at Royal Brompton Hospital Chelsea. The joint oral carcinogenesis project with a colleague, at the RCS leads to the Hatton Prize from IADR.

Norman was then awarded the degree in Oral Medicine in 1965, under the supervision of Professor Arthur Darling, CBE. The research project, intimately related to TMD, established the mechanism of tooth eruption resulting from polymerization and crosslinking of follicular and periodontal collagen.

In 1968, Norman was awarded the Chair in Physiology and Oral Biology in the Faculties of Medicine and Dentistry at the University of Alberta, Canada, to teach physiology to dental, medical, and science students. Clinical duties included Prosthetics and Orthodontics and Conscious Sedation. He was awarded a Medical Research Council Grant to set up a research laboratory in "Physiology of TMDs". He supervised over twenty research projects in the Physiology/Neurophysiology including animal Kinesiography, Electromyography and Electroencephalography.

Norman chaired the Science Council of Canadian Dental Association and Recommendations Committee for Oral Biology in Canadian dental schools. As a result, he was awarded Certificate of Merit by CDA.

He was appointed to the Medical Research Council of Canada to Fellowships and Grants Committees in Physiology and Pharmacology

Following examination in Dentistry, he was awarded the DDS equivalent by the University Coordinating Council of the University of Alberta in 1974.

Norman was then awarded Fellowship of the Royal College of Dentists of Canada in Dental Science in recognition of research and publications in Dental Science in 1977.

He completed an Internship Certification Course in Pathology at the Medical College of Virginia, USA, in 1978.

The University Coordinating Council of the University of Alberta granted Norman specialty status in Oral Pathology and in Oral Medicine based on training in Britain and the United States. He then completed his Medical Degree in Traditional Chinese Medicine including Acupuncture at the University of Alberta in 1990. (MDAc)

In 1990, Norman was appointed Professor Emeritus at the University of Alberta.

Norman continued his accomplishments by receiving Fellowship and Mastership in the International College of Craniomandibular Orthopedics in 1983 and 1990. Norman received diplomate status in the American Academy of Pain Management in 1991 (D.A.A.P.M.)

In 1998, he was awarded a Fellowship in the International Dental Academy (FADI). Finally, in 2003, Norman became the Director of Research at the Las Vegas Institute of Advanced Dental Studies.

Norman, you are amazing. Seriously, you have more awards and accomplishments than anyone in dentistry. You have such an incredible resume and past...I'm in awe of what you have accomplished in your life. Can you explain your drive to attain these accomplishments?

There is an old Jesuit saying: "Give me a child for the first five years of his life and you can have him for the rest." That child will never betray the example set during those first five years.

The drive to succeed was instilled during my childhood by my father, Maldwyn Thomas, who was the owner and ultimately the Managing Director of Channel Airlines Division of British United. He inveighed that I should set an example with my life, and especially to remember that anything an individual attained in life could be taken away – except for one's education.

Although my father was very involved in developing his firm, he found time to bond with his children and spent many hours teaching us to read and write—which I accomplished even before I went to school at age five. I recall many tears in the process, but my first day at school proved the worth of it all. I was taken around the classrooms by the Principal to read aloud and encourage my fellow students who were not so lucky. I truly enjoyed the experience, and on my first day at school decided to become a teacher. That drive has persisted.

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

I remember asking a blacksmith once which of the many blows of his hammer against the metal bar on the anvil was the one that actually formed the horse-shoe and he answered "Every one is equally important. None on its own is sufficient to the final product but when put altogether the shoe fits the horse's hoof perfectly."

That is how I feel about the value of the educational process, and particularly, the program, which included preparation of a thesis and its subsequent defense before the searching questions of the Board of Examiners.

Certainly the original researches for them are built upon all of the education and training that preceded the ascent. It includes the exhilaration of discovery and sets one's future direction. Taking courses and degrees and qualifying for a profession is of course very satisfying. It is essentially the replaying of familiar themes of the master technician where the relief of pain and suffering must be undertaken according to strict rules and mores laid down by the licensing authority.

***You are a scientist,
researcher and clinician.
How has that molded your
thinking as a dentist?***

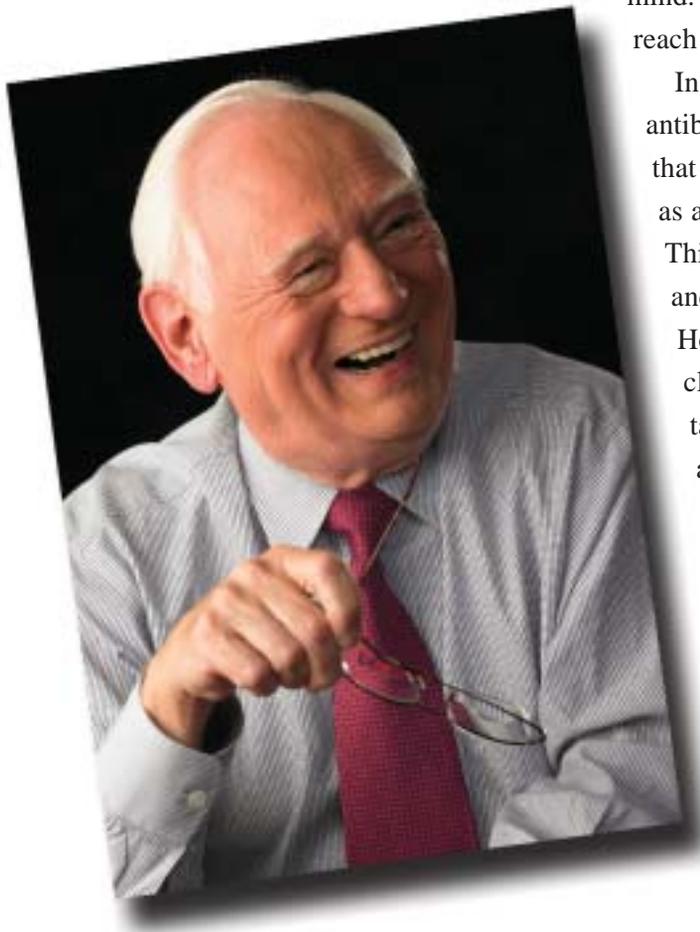
Doing research for a PhD, one is not permitted to move outside of the box (the Null Hypothesis) no matter where the evidence clearly points--or if we do, we must be prepared to face the consequences. Hence, the predicament in which we find ourselves today in Neuromuscular Dentistry that strikes at the very heart of what is accepted and routine. In one sense, it is comfortable to follow and obey the norm even though it is obviously false and lacking in the excitement that goes with exploration and the pursuit of TRUTH. That is the price we pay when we enter a profession. Not so with science which by definition is seeing truth.

The scientist who is essentially seeking the truth must set aside ego for the greater good. The scientist must be more than a technician who strictly follows the norm. The scientist must think outside the box, which means in practical terms, stating the null hypothesis and deducing evidence directed at its disproof.

And when the unexpected emerges, one must be prepared to look it in the eye and see it for its real worth. My researches may have been aimed at answering a specific question about the development of what is colloquially called the "bite". However, I found something even more meaningful, which we now oversimplify with the term Neuromuscular Occlusion – that involves considerably more than a functional process of nerve and muscle action to bring the teeth into the bite. It exemplified the meaning of the phrase "the whole is greater than the sum of its parts", and the importance of a prepared mind. It was a wonderful journey and it would have great outreach for the rest of my professional life.

In this context, one recalls the discovery of the principle of antibiotic therapeutics by Sir Alexander Fleming. He had noted that a bacterial culture exposed to the air degenerated and died as a result of contamination by an air blown penicillium mold. This serendipitous finding changed the course of Medicine, and was made possible by the actions of a prepared mind. However, it would do well to remember that prior to its use in clinical situations, extensive trials had to be undertaken to establish its safety, and even then bacterial resistance to local application of the antibiotic into an extraction site for example was shown to be hazardous.

The unfortunate thing is that dentistry at large and academic dentistry in particular, is blind to the daily advances being made by the application of the Neuromuscular concept, and continue to build pathology upon the pathological entity of centric relation. Unlike the prepared mind, the conic mind holds to outmoded hypotheses and treatment protocols.



Can you explain how your PhD led you to Neuromuscular Dentistry?



The PhD thesis not only ruled out prejudicial and unproven dogma classically taught in dental programs, but unveiled or ruled in new findings as to the pathogenesis meaning and significance of temporomandibular joint (TMJ) dysfunction.

My mentor, Professor Arthur Darling, pointed out that despite much research, the process and mechanism of tooth eruption was something of a mystery. A literature review convinced me of that and I decided to look again at the process of tooth eruption, while keeping in sight the well accepted axiom that “Ontogeny replicates phylogeny”. And that the process and mechanism of eruption across the species are essentially similar.

The null hypothesis was stated that the prime mover was not to be found in the periodontium. Pulp extirpation and enamel organ destruction failed to affect the rate and progress of eruption. If only a sliver of dentin with cementum to give attachment for the periodontium remained, this also continued to erupt towards the oral cavity. These findings have been reported in the Archives of Oral Biology, and under the joint names of myself and my PhD student, Berkovitz and Thomas.

Hence, the null hypothesis was disproved, and it was stated that the prime mover for tooth eruption was located in the periodontal tissues (PDL), which, when removed or suppressed, instantly resulted in retardation of movement of the root remnant. A further null hypothesis was stated respecting the importance of the collagenous component of the PDL. It was stated that alteration in collagen formation and maturation would not affect tooth eruption.

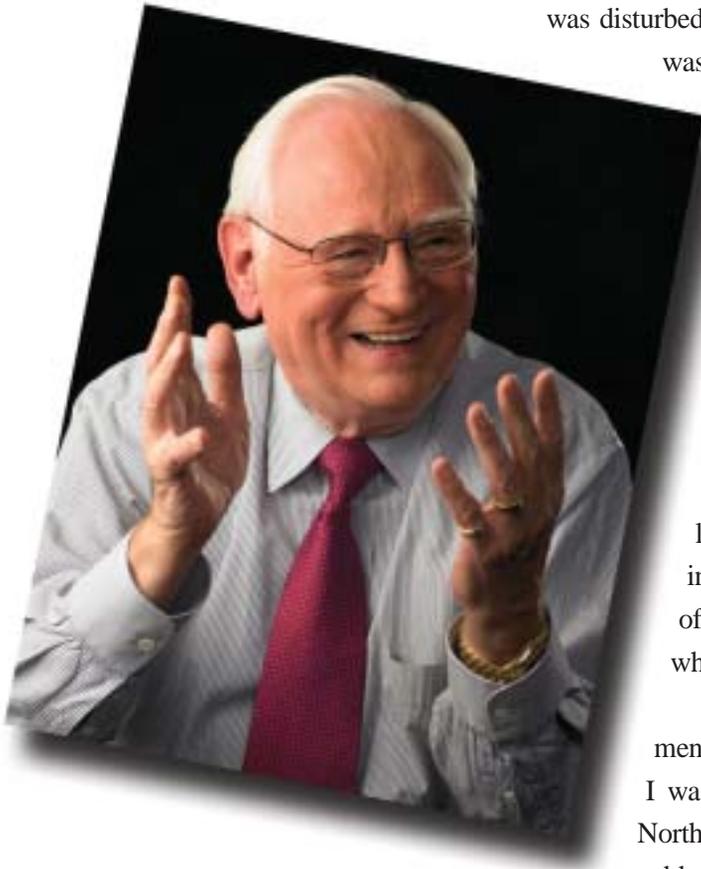
Collagen is a biopolymer, and I had remembered from my dental technician days that during polymerization shrinkage occurs due to the linking of the monomer--in this case, tropocollagen.

An agent, lathyrogen, was found that interfered with one part of polymerization known as cross linking, which is a maturing event in collagen polymerization. When this agent was given in the drinking water of rodents, tooth eruption was retarded--or in the case of very young animals – stopped altogether, both for teeth in the bite and for coronectomized teeth.

These observations directed the way to the concept of neuromuscular dentistry in a way never noted before. Not only was the eruption of the teeth retarded, but the latter was accompanied by marked remodeling of the mandibular and occipital condyles. In brief, there were the combined concepts of vertical overdo sure and neck and back scoliosis, as well as a wide range of neurological effects such as paresthesia, generalized muscle paresis, and fatigue, that we often observe in chronic ascending and descending TMD in man.

As in TMD, the affected rodents exhibited defective tooth eruption, malocclusions, lingual tilting, dilacerations, occiusal faceting, clenching, abnormal facial form, postural anomalies, disturbances in general body metabolism and widespread systemic pathology. It is a serious error to think that only the teeth are affected when the process of tooth eruption is disturbed, or that Aesthetics is just a matter of looking pretty. It is an integral part of healthy bodily function.

All of the musculoskeletal signs and symptoms we see in TMD in man were clearly evident in rodents, and incidentally, the highly regular eruption of the teeth



in lizards was also grossly disturbed when polymerization of periodontal collagen was disturbed or suppressed. The phenomenon crosses species. The latter work was undertaken by Dr. John Cooper when pursuing his PhD at Bristol.

I can tell you that John was very surprised when I predicted this would happen if he provided the anti-collagen agent as we had done in the rodent.

These findings led me to engage in the neurophysiology of TMD and to develop the kinesiograph with the assistance of another of my (Phi) students, Dr. Sue Peyton at the University of Alberta. These researches were undertaken independently of Dr. Bernard Jankelson, who read about our discoveries in the scientific literature and the press. Of course the muscular tissues were also severely affected and their attachments to the bone periosteum grossly malformed. The PhD research had not only led to an understanding of tooth eruption, but also of TMD and the “Great Impostor” range of signs and symptoms especially in the advanced chronic stages, which Hans Selye called the General Alarm! Adaptation Syndrome.

I had been a student for over 30 years, and now the real excitement of discovery and arriving at the mountaintop had become a reality. I was subsequently invited to lecture at many universities in Britain, North America, Australia and New Zealand, as well as in China and Japan and behind the Iron Curtain separating the USSR from the world. I have always been treated with great respect and a deep sense of Brotherhood. How I wish that could be so of Dentistry, where unfortunately, protective politics and egotism divide our profession.

Just as the Smithy had said the tempering of one’s metal is not due to any single blow on the anvil of TRUTH, but requires diligence, persistence and the prepared mind.

You’ve had such a rich and rewarding life. What do you consider the greatest event of your life?

The greatest event of my life took place when my childhood sweetheart Jean and I married in 1953. Jean has never wavered in her faith that one day our dreams would come true, and being here at Las Vegas Institute is a dream come true. We now have five wonderful children--four boys and a girl--all born in Bristol, England before the PhD, when the door to the world really opened.

Of our sons, the oldest and youngest, Martyn and Richard, are both in NM dentistry. Martyn is the International President of the International College of Cranio-Mandibular Orthopedics. Timothy, an ordained minister, is in the United Church of Canada and the fourth, Christopher, is a graduate of the New York Academy of Dramatic Arts, and now is a Manager with Westin Hotels. Our only daughter Stephanie is a lawyer and barrister in Alberta, and formerly president of the Civil Lawyer’s Association there. We also have eight grandchildren, with the ninth on the way, and the eldest is in his final year of dentistry in Bristol.

***Watching you lecture
is so great, as you are
passionate about
what you teach.
How have you
maintained
your passion?***

***Why is it that there
seems to be some
resistance to what you
KNOW is the truth
about occlusion, and the
benefits neuromuscular
dentistry offers to our
profession?***

Passion is exactly what I feel about Neuromuscular Dentistry. It was at church that I first experienced the power of oratory. But it was in school that I learned the power of the word, especially in the Drama classes where we recited the immortal words of Shakespeare, Wordsworth, Robert Louis Stevenson and many others. It is remarkable how after seventy years I remember so many of the lines learned at school.

The stage was always magical for me, and I think the drive for grease paint and applause has never left me. Now at LVI, I am particularly enjoying the role of Yoda wielding his sword of Right. Lecturing is as much showmanship as the Shakespearean stage. I am certainly passionate about the subject matter anyway. I made the right decision in choosing dentistry alright, but “all the world’s a stage and all the men and women merely players. They have their exits and their entrances”.

I honestly believe it’s a combination of who gets to you first – and lack of scholarship. I am willing to bet that relative to the dental membership of State and Province, Alberta sends more students to LVI than any other.

Students at the University of Alberta were introduced to Anatomy and Physiology by DDS/PhDs. It conveys the TRUTH that dentistry is first and foremost Science. I know that the LVI Golden Vertical and the helicoidal occlusion results from the juxtaposition of two spheres. It is not just a matter of aesthetic appeal-it is part of the science of the Universe and one day some bright mathematician will show its connection to the String Theory. Dentistry needs to know its worth, and the place to start is at the commencement of the dental program. As one teacher stated “dentures are coffins”. That is the kind of scholarship and turn-off we hear from dental academics. Rather, there should have been emphasis on the importance of neuromuscular occlusion in the prevention of loss of teeth from caries and periodontitis. There was no appreciation of the potential and application of science in dentistry, and one gains the impression that we simply push our finger into a degrading dike.

In the physiology class, we introduced dental students to ECGs and EEGs along with K61 and K7s. Electromyography, Jaw Motion studies, and Joint Sonography were vital parts of the future of clinical dentistry as much as EEGs and ECGs. And pacemakers are a part of Preventive Medicine.

Physiology was seen as an important part of dentistry right from the start, rather than as a hurdle to get over before they get on with the real business of being a dentist!

At other schools, the physiologist and anatomist professors are medics and/or scientists and the bad example is sown early in the curriculum. This is compounded by the other example, that “real dentists” teach CR in the clinical program. Not so at Alberta. Our Oral Biology professors taught both in the pre-clinical as well as the clinical, and separation of science from the art of dentistry was avoided. There were also electives in the senior years in which EMGs, CMS and ESGs are demonstrated and orthotics were constructed and coronoplastied undertaken in a clinical setting.

That was the purpose of the Nuffield Foundation, encouraging intercalation of the medical sciences in the dental curriculum. It will be recalled that this took place after dentistry, in my case, but several of my students were encouraged to do the same thing and I am delighted to report that all of them stayed in academic dentistry in U.K., Canada, and the United States.

In most schools, once the student reaches the clinical years, they are reduced to technicians once again. You know, I started my professional life as a technician, so I am not knocking the technician, but I am raining on the clinician's parade. It is a poor teaching principle to say technical approach to dentistry is the high road and science may now be left behind. I become very angry when I hear that kind of poor example for our future practitioners. Technical proficiency is important, but it does not replace the science and the philosophy of practice.

As Chairman of the Science Committee of the Association of Faculties of Dentistry, I chaired a Committee to bring Oral Biology Departments into Faculties across Canada. From those schools that instituted such departments, we now see more students among LVI attendees. The seed of scientific scholarship was sown early in their careers, and to that scholarship the student returns, when the charade of dental school training, and not education, is concluded.

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

The biggest problem in dentistry stems from lack of leadership from dental schools. Professors are generally poorly trained in the basic medical sciences, and their students are trained primarily as technicians, which--though necessary--must be accompanied by the concept of becoming doctors in the healing sciences. I recall how as a young technician, the older technicians ridiculed the dentist because of his/her charlatan approach to the concept of being a healer. I do not blame the technician; I blame the clinical academic for not instilling the meaning of Doctor of Healing Sciences.

Although techniques and gimmicks have their place they should not be the foundation of dental practice. It bothers me that dentistry is not seen as a specialty within the medical field.

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

As dentists, we must realize that we are so much more than just tooth fillers and oral technicians. As important as your technical skills, so must be your commitment to your practice as physicians and surgeons. You are doctors with a mission to put the enormity of dental and oral health into the context of general health. See and truly understand that oral and facial aesthetics forms a significant part of an individual's total health and welfare. Who and what you think of yourselves is intimately related to your oro-facial knowledge, and that is communicated to the world at large. When you see your reflection in the mirror, remember that your face is a mirror image of your inner self.

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

In the course of this discussion, I have spoken about the many mentors who have greatly influenced my development as an oral physician, teacher, researcher and communicator, and as a caring doctor of the healing sciences. There are many others who will always be with me because they are part of a bond that will never be broken. Three such mentors are Dr. Bernard Jankelson--who started it all--and Dr. Robert Jankelson, who added and replaced much of my previous knowledge of Prosthetics. And Dr. Jim Garry, whose pivotal studies on airway obstruction and development of allergies so clearly explain the pathogenesis of TMD.

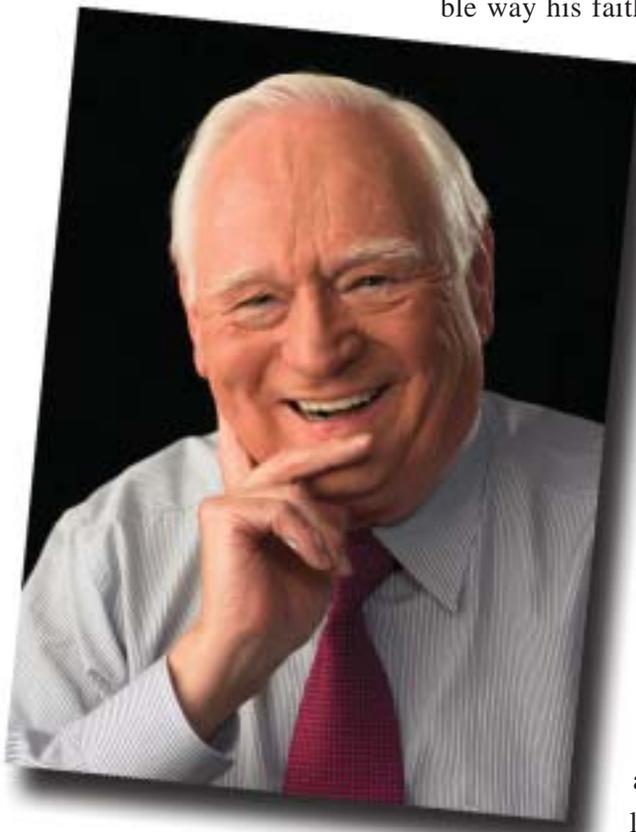
But most of all I want to underline my unconditional admiration and unequivocal respect for Bill Dickerson, Founder and CEO of Las Vegas Institute. He has done more than anyone to advance the merits of Neuromuscular Dentistry into professional and public consciousness. And to link this with comprehensive aesthetics brilliantly demonstrates his vision and foresight in mapping the future of dentistry. Those who do not see the significance of Dr. Dickerson's actions, and continue to oppose the link between Neuromuscular Dentistry and aesthetics, demonstrate a level of ignorance beyond the most charitable comprehension.

Through the development of neuromuscular programs at the Las Vegas Institute, Dr. Dickerson alternatively demonstrates in a concrete and tangible way his faith in the future of Neuromuscular Dentistry, and its impor-

tance to comprehensive aesthetics. Dr. Dickerson has provided the opportunity to rectify the omissions of dental academia to envision the importance of comprehensive aesthetics to general health and the combined significance of a neuromuscular occlusion to body posture and hence total body health.

On behalf of those Neuromuscular pioneers who have passed beyond the bar, allow me to congratulate and thank Dr. Dickerson--not only for his vision, but for his deep sense of concern for the welfare of his fellow man. It disappoints me that Dr. Dickerson and the neuromuscular pioneers have had to suffer the slings and arrows of outrageous criticism, while the self-appointed leaders of our profession raise ineffectual excuses for their failure to envision the growing points of the profession and persist with outmoded approaches to clinical practice.

Those of us who know the scientific literature, and are at the frontier of exciting and new technological approaches to longstanding problems, know there really is no case for those who oppose concepts of Neuromuscular Dentistry.



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

While technique is the handmaiden of progress, its ultimate success depends upon the soundness of the philosophy on which it is founded. That's our first prerogative and there is still research to be done in that department. I see computerized dentistry taking an even greater role in ensuring perfection in obtaining neuromuscular occlusion as well as providing the finished product.

The development of techniques and materials to achieve that end will allow us to prevent collapse of the natural dentition and obviate the necessity to undertake reconstruction. The latter will require advances in public health and its realization of the primary causes of denture collapse. The latter will necessitate the removal of pollutants and allergens from our environment, coupled with the realization that healthy oral functions contribute in greater measure to general health. It is possible, because it exists among the Inuit on the ice floes.

You obviously admire courage. Most people are afraid to make minor changes in their lives. Yet you moved not only from Edmonton to Las Vegas to work full time at LVI, but you moved from one country to another, then to another. It seems such a big move at this time in your life when most your age would be considering slowing down. Why did you relocate you and your wife to Las Vegas?

Because we are so excited about the future of Las Vegas Institute and want to be on the inside and outside, as we move into the new vision and era of the future of dentistry. It's like a second career for me, and I couldn't be more excited about it. We love it here and enjoy the energy that abounds on the campus. I'm having a ball. Hang on-it promises to be a fast ride here at LVI.

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

Yes I do. When dentists finally appreciate the relation between total health and NM dentistry, then one will know their true worth as a member of the health team. Then their efforts will be directed toward total health and no longer simply as tooth filler and provider of prostheses. Of course, that is contingent on the dentist knowing that the oral cavity is a portal to all body systems and the top block in the postural chain. Then the dentist will be a truly effective Doctor of Dentistry, incorporating the higher levels of technical skill in producing the final product of which we may be veritably proud.

Norman Randall Thomas, CDT; BDS (Hons); MB / BS (Special Hons), (UBris); DDS (UofA); Cert Oral Path (MCV); FRCD(C); MDAc(UofA); MICCMO; DAAPM; FADI

*Director of Neuromuscular Research, LVI
Professor Emeritus University of Alberta
Chancellor ICCMO*

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Ask Heidi

Clinical Questions and Answers

Dear Heidi,

Q

Please do not print my name, as my doctor reads *Visions* religiously and I do not want him to know I wrote this... but, here it goes. My doctor is great to work for. He is nice to all of us, he is generous, and we are very proud of the dental work that he does. The problem is, he dresses like a bum. He wears scrubs with his chest hair coming out, he will not wear a lab coat, as he is always “hot”, and his pants are not only wrinkled, but are floodwaters! I know you must think I am super critical, but he really does not portray the image of our successful office. What can we do to encourage him to dress more professionally? I know our team would appreciate any suggestions you could give as we are **DESPERATE**.

C.T.
Phoenix, AZ

C.T.

A

I must admit I chuckled as I read your question. I have seen this visual before! There is no easy answer to your question, as it depends on your doc’s personality. If he takes suggestions well, then you and your team just need to talk to him about your concerns. If not, then we have some work to do. I will share with you that many teams at LVI tell me that when their office “image” gets better, their production increases as well. Clients like to go to a successful practice and you know the saying “image is everything”. So, if your doctor is motivated by production, you may want to share with him that his appearance can help with this. If he has a “professional” appearance his clients may respond differently. It is worth a try. Another thing the team might do is convince your doctor to go on a shopping spree with all of you. Do a “makeover” on him. No, I am not suggesting you buy him the clothes, you just pick them out for him! Let me know how it goes. I am interested in seeing if uping his image affects your practice.

Good Luck,
Heidi



Dear Heidi,

I am thinking of buying a laser. I'll admit that I am kind of cheap and wonder why it would be better than an Electro surge. What would be the advantages of doing so... and can you suggest one?

Thanks,

G.R.
Stockton, CA

G.R.,

I get asked this question quite a bit, and am happy to share some advantages of practicing with a laser:

Lasers penetrate approximately 32 cell layers deep, (in comparison, an electro surge penetrates over 300 cell layers). Because of this, there is no thermal damage caused to the underlying tissue and therefore, no collateral damage.

Hemostasis is amazing with laser utilization. You can really control bleeding which helps in visualization, impression-taking and more.

The results are predictable, as the tissue does not change with the laser. When gingival recontouring is done during an aesthetic procedure, you can be assured you will not encounter recession or rebound later.

There are no contraindications for the use of the laser... so, you can use it on the majority of your patients as need be. You don't have to worry about it contacting tooth structure, bone, or even implants.

I cannot imagine practicing without my laser. It makes everything so much easier... I "tweak" every aesthetic case I do by making the gingival margins as perfect as possible. Even when doing a single unit, using the laser prior to impressioning makes it easier to capture the margins every time. And, on days I feel adventurous, you will see me using it to do a frenectomy or help an ailing patient who has aphthous ulcers. I could go on and on... the bottom line is you will not regret purchasing one.

Of course I think the best laser on the market currently is the LVILase. The LVILase is portable, and under \$10,000. It works wonderfully. Call 1-888-584-3237 to order yours today!

Hope this helps, now get lasing!

Heidi



Dear Heidi,

When I place the temporaries for my anterior cases using the technique I learned at LVI, they do not look as good as I expect, or as good as the ones we did at LVI. There is a lot of flash around the margins and I have to do a lot of contouring and polishing to make them presentable. I routinely send a model poured from alginate to my lab and ask them to send me a wax-up and a temporary stent. I thought I was doing this right. What can I do to make these temps look better? Can you please give me some pointers to help make my job easier and assure beautiful temporaries each time? I want my patients to rave about how they look in their temps!

Much appreciated,

R.D.
Avalon, N.J.



R.D.,

A

I can certainly help you out with this one. Our attendees at LVI say the LVI temporary technique alone is worth coming to the Advanced Anterior course. First off, you are doing a lot of things right. Using a stent formed from the wax-up is the way to go. I remember when we used to place composite on the individual preps and make each temporary one at a time. That sure took a lot of time and patience! Not only does using a stent save you time, but you can get some beautiful results. One thing that can make your technique even better is to use a different material to take your impressions with. Alginate is probably the least accurate of all impression materials. You should kick it up a notch and take your impressions with Polyvinylsiloxane (PVS). PVS materials are extremely accurate and you can send them directly to your lab where they can do multiple pours, if needed. Because of its accuracy, the wax-ups and stents will be much better because it is a more accurate fit.

The result: less flash and temporaries that resemble the beautiful wax-ups the lab has made. Many people do not want to use anything other than alginate for preliminary models due to cost. My question to them is, do you want to pay up front or later on? You see, if you use mediocre materials up front you will have mediocre results and this will then cost you time and money when you place the temporaries. So, start using PVS. You will see a big difference!

While we are on the subject, I have one other suggestion for you. To really make a “wow” factor with your patients you can spend a little time customizing them. To do this you may want to try Kolor + Plus® by Kerr. It is a light-cured, liquid resin color modifier and opaquing kit. It includes eight different color modifiers. You can use yellow and brown for cervical blending, white for a halo effect or hypocalcification marks, and blue or grey for incisal translucency. These are just a few examples of how to make your temps go from good to great! Try these ideas out and let me know if you see improvement.

Thanks for your email. I can see you do not settle for mediocrity!

Heidi

Dr. Heidi S. Dickerson is the Vice President of North American Operations. She is a 1994 graduate of the University of Illinois School of Dentistry. She had a private restorative practice in Philadelphia, PA before relocating to Las Vegas to accept her full-time position at LVI. Due to her commitment to excellence, spending countless hours mastering aesthetic and restorative dentistry, including the LVI curriculum, she changed her aesthetic-restorative dental practice into a neuromuscular based practice. Dr. Dickerson instructs, lectures, and motivates LVI students through their curriculum, enhancing their educational experience. She also practices in the LVI Faculty Practice.

Send any of your clinical questions to her at:

LVI 9501 Hillwood Drive, Las Vegas, Nevada 89134 or via e-mail at hdickerson@lvilive.com

2006 LVI Courses featuring Dr. Heidi S. Dickerson include:

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* Strategic Dental Marketing 2nd Quarter 2004 data

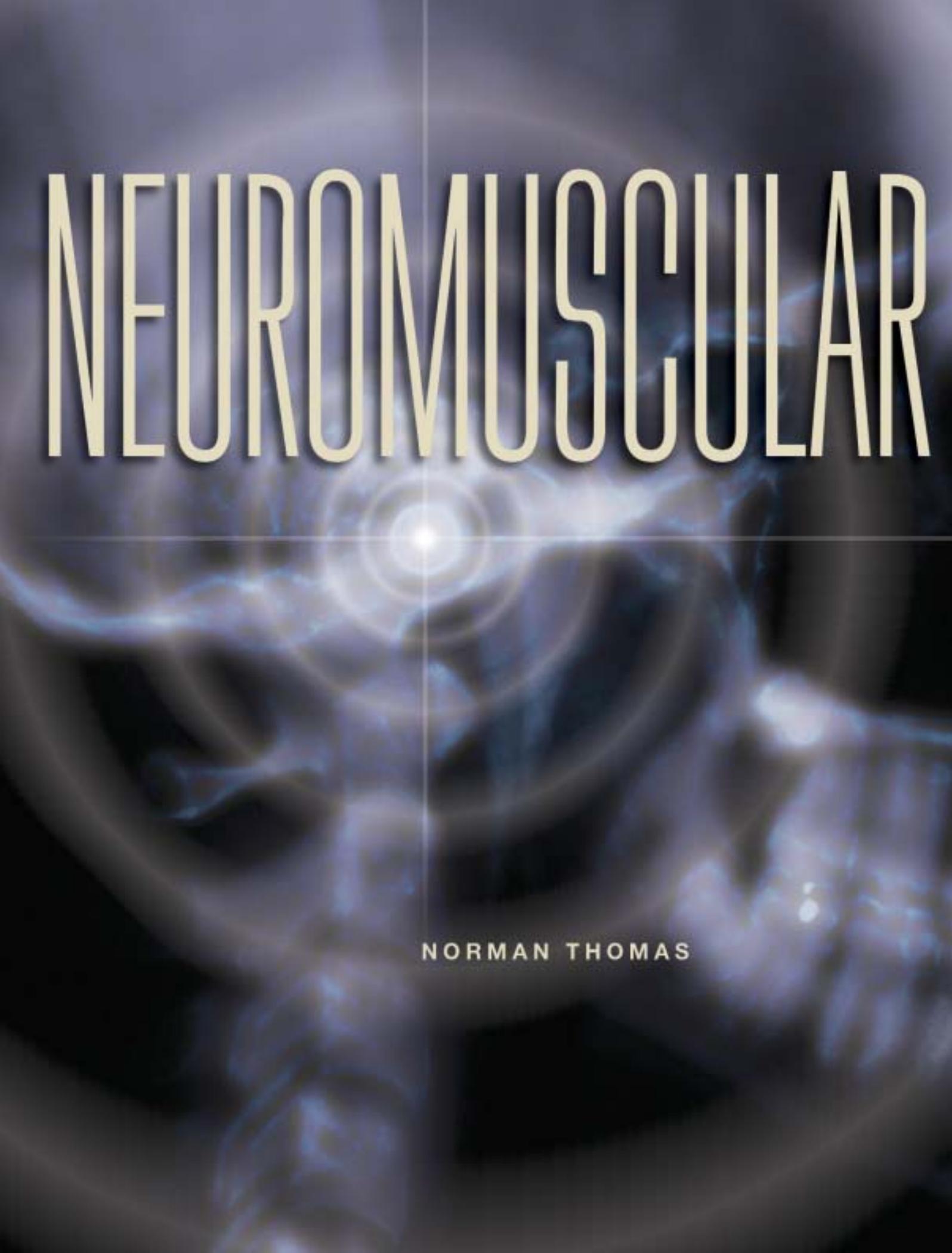
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NEUROMUSCULAR



NORMAN THOMAS

OCCCLUSION

The incidence of occlusal anomalies and/or Temporomandibular Disorders (TMD) among civilized communities has reached staggeringly high incidence. Between 85 and 90% of the adult community have TMD depending on the source and the method of examination (which is critical). This high incidence is principally attributed to the onset of upper airway obstruction and congestion in childhood due to inhalation and ingestion of allergens and exacerbated by soft pulp-like foodstuffs, which require minimal mastication and contain little or no abrasive items essential to creating a functional occlusion. Lack of breastfeeding and abnormal shaped teats on bottle-fed children presents another negative influence.

It is also being increasingly demonstrated that Temporomandibular Disorders (TMDs) are associated with a great variety of local and systemic symptoms that mimic unrelated conditions (hence its characterization as the GRAND IMPOSTOR). Collapse of the dentition and associated hypertonicity of the head, neck, and jaw musculature accompany the essential lesion of upper airway problems. More recently, it has been shown that there are also anomalies of the spine and pelvis. This makes for difficulties in diagnosis and for profound differences in opinions as to the cause(s) and pathogenesis of TMD. Consequently, the incidence of TMD is probably even higher than the above quoted figures.

While general dental practitioners generally agree that the occlusal/bite anomaly is due to mouthbreathing, mainstream academia--on the other hand--does not espouse malocclusion as a cause of TMD. The latter maintains that many individuals with malocclusion do not have overt signs and symptoms of TMD.

While intermittent pain may be experienced in the early stages, chronic continuous pain is usually a late event. With the passage of time, added complications, including systemic and psychological signs and symptoms are characteristically portrayed, which make for difficulty in differentiation of chronic TMD from any other chronic condition. This is mainly because mainstream academia has, in general, ignored the significance of electronic instrumentation in the early recognition of TMD and has opted for psychometric in-

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strumentation. The explanation is evident in the observation that all chronic conditions exhibit similar signs and symptoms known as the General Alarm/Adaptation Syndrome (G.A.S.) to distress (Selye).

The first stage in G.A.S. involves autonomic nervous system effects with the supplement release of adrenalin and noradrenaline from the adrenal medulla to produce the characteristic 'fright and flight' response. These include altered heart rate, labile blood pressure, rapid breathing, increased muscle tone, and thyroid activation of general metabolism.

The second stage is a process of adaptation to the distress and is accompanied by increased activity of the Hypothalamic/Pituitary/Adrenal (HPA) axis. Secretion of Adrenocorticotrophin hormone (ACTH) from the anterior pituitary follows stimulation of the hypothalamus and production of increased cortico-releasing factor (CRF). ACTH in turn principally stimulates the production of mineralo and gluco corticoids that promote metabolism of ions like sodium and potassium and glucose respectively in an attempt to bolster

the body's defense against distress. The autonomic catecholamines and adrenalin and noradrenaline as well as sodium and potassium ions in addition to energy essential glucose are important to nerve and muscle metabolism which promote nerve irritability and muscle tone in second stage of the TMD condition.

In the third stage, the overstimulation of the adrenal cortex leads to its atrophy such that the patient enters a state of general collapse. Given that this collapse is shared by chronic conditions in general adds to the TMD designation as the Great Imposter. However, it is becoming generally accepted that the fundamental problem is a dysfunctional occlusion or bite, which is now understood to have far-reaching effects on the physiology of the total organism. Thus, since the early 1970s, the concept of a Neuromuscular Occlusion has burgeoned largely as the result of physiological researches undertaken by Dr. Bernard Jankelson and complemented by the morphological studies of Dr. Casey Guzay's "Quadrant Theory". Neuromuscular Occlusion defines a physiologically balanced bite essential to prosthetic and orthodontic reconstruction of the dentition with greatly improved stability of the total physiological health of the individual, while Guzay expounds an anatomically-based analysis of an anomalous occlusion and its correction. In this paper, we shall concentrate on the physiological connections of the occlusion.

Centric Occlusion defines the Adaptive/Accommodative state of maximal intercuspation of the teeth

(MIP) when the jaws are voluntarily closed into what is colloquially referred to as 'the bite'. This adaptive state results from anatomical and physiological adaptation essentially through central nervous system integration of peripheral proprioceptive (positional and movement sense) and nociceptive feedback to various levels of the central nervous system. These peripheral components, according to the Jankelson formula, include the teeth, jaw joints, and musculoligamentous structures identified as the stomatognathic triad. But we soon see that this is an over-simplification and should be extended to include feedback from the balance organ of the inner ear to the relevant brainstem nuclei known as the vestibular apparatus. The positioning of the Balance Organ is dependent upon resolution of forces exerted by the bite, and head posture, visual feedback, and tension of the musculature attaching to the head and jaw. Central integration of neural feedback from the stomatognathic system and the associated structures results in summation effects at the motor neurone, the final common path output from the brain computer. This output sets the base tone of the jaw, orofacial, pharyngeal and cervical musculature in particular muscles, which not only serve the functions of chewing, breathing, swallowing and hearing but also posturing of the head. In this regard, it should be understood that the feedback from the way the teeth are related to each other during rest and when in occlusion is an integral component of all these functions. To really understand this,

**NEUROMUSCULAR
or MYOCENTRIC
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we must realize that tension in the connective tissues plays a vital role.

NEUROMUSCULAR or MYOCENTRIC OCCLUSION is identified as the position of balanced nontorqued maximal intercuspatation of the teeth. In practice, the latter is obtained by involuntary (TENS-induced) isotonic closure trajectory of the mandible from a true resting position towards a non-torqued skull and orthogonal to the earth's gravitational field. This involuntary closure of the mandible results from neurally mediated jaw and facial muscle contraction produced by preauricular transcutaneous electrical stimulation (TENS) of the motor division of the trigeminal and facial nerves.

The starting point for the closing trajectory is the true resting posture of the mandible where the jaw and orofacial muscles are all at their optimum physiological resting length. This is achieved by relaxation of these muscles by antidromic stimulation of the motor nerve such as to produce hyperpolarisation and hence refraction of the motoneurons to all proprioceptive and nociceptive feedback. Thus the true REST position of

the mandible relative to the maxilla is taken as the point of minimal and balanced electrical activity of the jaw and skull musculature. This rest position is that point in space from which muscle force is optimal to physiological effort. Once the non-adaptive posture of the mandible is established with no deflecting forces during closure to the neuromuscular occlusion, the central nervous system is voluntarily capable of achieving the same with maximal physiological economy and efficiency not otherwise possible.

In Jankelson's words, TENS was effective due to its ability to deliver "unequaled precision in the REGISTRATION of occlusion".

In order to support the precision of the myomonitoring bite, Jankelson devised 'kinesiometric instrumentation' in 1975, in which jaw motion, electromyography and later sonography of the jaw joints of the pre- and post-TENS condition could be undertaken. This permitted an objective assessment of the pre-existing pathology and the changes induced by subsequent bite corrections. As already mentioned, this new electronic instrumentation was considered a useful research tool by mainstream academia but an over-prescription for clinical dentistry. These workers failed to provide a workable understanding of the pathology of TMD and falsely assumed that their 'normal' controls were healthy. As indicated earlier, between eighty-five and ninety percent of subjects in civilized communities are unhealthy and thus the very few controls have to be carefully screened.

Synchronized neural stimulation of the jaw musculature as a whole is central to the concept for precise registration of the neuromuscular occlusion. In this, Jankelson's theory of the myomonitor was also met with considerable opposition (particularly from the academic community) because it was held that TENS only acted locally on the muscle. Jankelson countered the criticism with a demonstration that the latency of the muscle response was too long for direct muscle contraction.

Nevertheless, it was then argued that the myotrajectory was unphysiologic since the myomonitor stimulated jaw elevators and depressors synchronously (which did not normally occur during voluntary activities) and thus could give rise to both fatigued resting condition and myotrajectory.

Fujii and Mitani (1975) and Fujii (1977), however, demonstrated that TENS causes repositioning of the mandible to true REST by antidromic refraction (hyperpolarisation) of the alpha and gamma motoneurons free from proprioceptive and nociceptive input. Nevertheless, it is not possible to conclude from EMG amplitude alone whether the repositioned mandible results from muscle relaxation or fatigue. It was argued that TENS of the trigeminal and facial musculature does not necessarily immediately correct head/neck posture, which could overload the masticatory muscles and hence fatigue them by cutting off blood supply both in lengthened and contracted muscles. But Thomas (1988, 1990) demonstrated by frequency analysis of the EMG signal



**Imagine an animal
in the wild sensing
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source of danger
or prey and not being
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oriented with respect
to its environment.**

that TENS certainly does relax the jaw musculature.

The latter studies also similarly establish that the absence of fatigue resulted from refractoriness of the motor neurons to any proprioceptive input and therefore could be used to differentiate the orthogonal (upright) posture from the non-upright condition. On the other hand, occlusal deprogrammers (NTIs, etc.), jigs, shims, and centric relation manipulation of the jaw used to seat the mandibular condyle will produce fatigue in the strained jaw and head musculature and hence result in an unbalanced bite.

Thus, it becomes evident that since the jaw musculature also plays a role in posture and it integrated with general postural mechanisms, then its relaxation and continuous adjustment by TENS will eventually lead to complete improvement of the body posture. Of course, when there are structural defects such as short leg or subluxed atlanto-occipital joint, these must be corrected by the orthopedic means for completion. It should therefore be understood that when the jaw joint has been subjected to structural remodeling due to

occlusal or postural problems, it makes no sense to seat the distorted condyles to obtain bite correction. Rather, the postural correction of the jaw muscles to the resting position will allow the jaw joint to assume a balanced position in relation to its articular eminence.

Since the skull houses the neural substrate of the visual, acoustic, vestibular olfactory and occlusal systems, they should ideally be orthogonal to each other, otherwise they will not function to their maximum efficiency. Indeed Sherrington, the 'father of neurophysiology', showed that the upright posture is a reflex brainstem mechanism in which an upright posture was maintained even though the animal was decerebrated. In the resulting decerebrate rigidity, the jaws, head, neck, and body posture were all orthogonally related to each other and to the earth's gravitational field.

Imagine an animal in the wild sensing the presence of a source of danger or prey and not being stabilized and oriented with respect to its environment. Clearly, its survival would be considerably compromised. The vestibular nucleus in the brain stem receives feedback from all of the above systems where it is integrated to give rise to coordinated motor responses. In this context, it is important to understand that the 'bite' is an integral component of the postural system response. Thus, in the ideal situation, the force of the occlusion should not be deflected away from the vertical or long axis of the tooth so as to result in non-upright posture of head, jaw, neck, and body. Clearly the latter will also

LIFE-CHANGING THOUGHT #14

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occur if there is arch size discrepancy. When the teeth and jaws are oriented orthogonally with the head and neck, then there is positive feedback to the vestibular nucleus and the complex motor responses of turning the body, head, neck, and jaw towards or away from the target are physiologically optimal and geared towards the animal's survival.

It is only after eruption of the teeth that the infant develops chewing movements. Concomitantly, the mandibular and occipital condyles develop and have the same shape. Nodding movements only occur at the atlanto-occipital joint while the atlantoaxial joint permits head and jaw rotation around the odontoid process of the axis. The

odontoid process is the body of the atlas and arises from the body of the axis. Its total height has the same measurement as the distance from the cervical margins of the occluding maxillary and mandibular incisors and is therefore a measure of the vertical index, which in the ideal occlusion is the Golden Vertical.

In the ideal, the occlusal plane bisects the odontoid process at the atlantoaxial joint. The length of the Dens from its origin to its apex is equivalent to the Golden Vertical (GV), which Dr. William G. Dickerson (founder of LVI Global) designated as the ideal distance between the cervical margins of the maxillary and mandibular incisors when the teeth are in occlusion. Without this

important measurement, which is based on the golden proportion extant throughout nature, it would be virtually impossible to produce the ideal functional occlusal reconstruction. The GV ratio of the height of the maxillary incisor to mandibular cervical margin is equal to $1.29 \times 1.618 \times$ the width of the maxillary central incisor (also the width of the odontoid process).



The plane through the base of the occipital condyle and the base of the maxilla at the hamular notches and incisal canal form important bony reference points in occlusal reconstruction. These define the anterior aspect of the occipital condyle (OCb), the hamular notches (H) and incisal papilla (IP) are covered by similar thickness of mucoperiosteum and therefore serve as the HIP plane for mounting the maxillary cast to the articulator. HIP is used for the diagnosis and correction of the occlusion as in Full Mouth reconstruction, orthodontics, and removable prosthetics. Since Camper's plane connecting the tragic of the ears with the alar of the nose conforms to HIP, this is often used for confirmation of HIP in cases where there may be pathology of the hamulus

such as bursitis of the palatopharyngeal ligament in the hamular notch.

In clinical practice, the Fox Plane set to the tragal/alar line corresponds with Camper's plane and presents a facial confirmation for the intra-oral HIP plane. Thus, we have several methods of confirming the ideal occlusal plane (e.g., imaging either by Cephalometry or CAT scan, intraoral HIP and extra-oral Fox Plane).

The Fox Plane consists of a centered occlusal arch form joined in front to a central transverse arm to which two parallel side arms are attached. The side arms are sagittally arranged to conform to the cranial base HIP plane and Camper's line. The transverse arm is aligned with the bipupillary and otic planes which are horizontal to the cranial base in the frontal plane. A Symmetry plane sets the midline of the face perpendicular to the occlusal plane. There are, therefore, many confirmatory aligning procedures for developing the ideal occlusal plane.

It is of interest that all the spinal vertebrae, except for the atlas, have tripod support from the adjacent vertebrae consisting of the bilateral articular processes posteriorly and the vertebral bodies anteriorly. In the case of the atlas, the anterior support is provided by the occlusion, which when deficient leads to a collapse of the upper cervical complex. This is designated as a descending bite anomaly, while the ascendant condition describes a de-



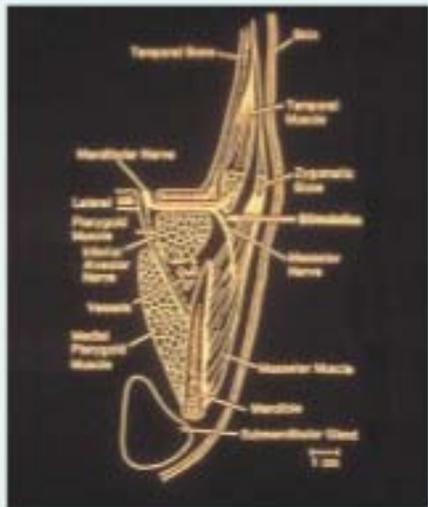
Neuromuscular Occlusion requires analysis of the electrical activity of the jaw muscles. Here the patient has myoelectrodes (duotrodes) placed over the temporalis, masseter, and digastric muscles and the Electromyograms (EMG's) are relayed to the oscilloscope via a pre-amplifier.



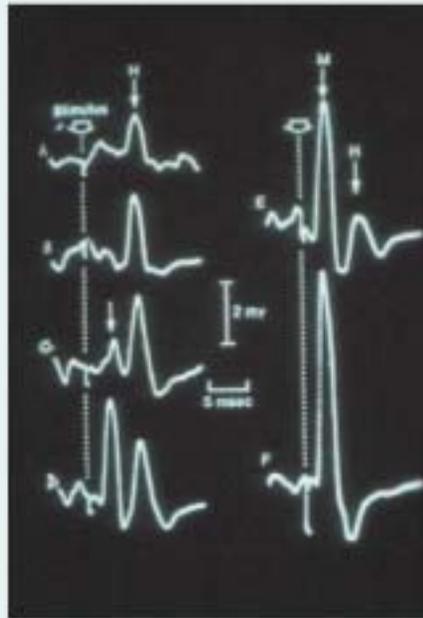
Transcutaneous Electroneural Stimulation (Tens) of the trigeminal and facial nerves is applied at the pre-auricular region overlying the coronoid notch.



Dissection of the coronoid notch shows the motor division of the trigeminal nerve (in red) giving off branches to the jaw muscle.



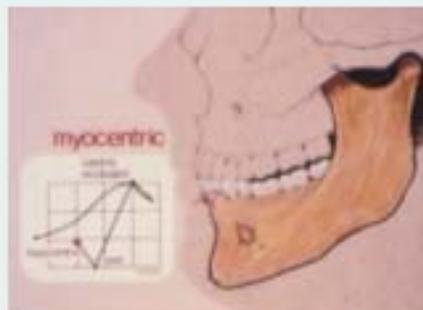
Subcutaneous diagrammatic view of the mandibular nerve efferents supplying the jaw muscles and also conveying afferent impulses from the muscles and periodontium to the central nervous system.



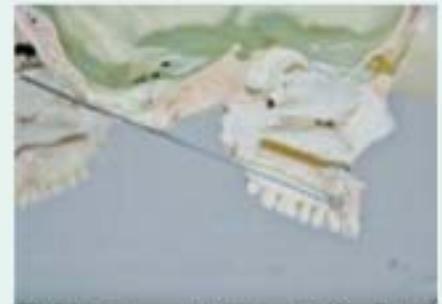
The electrical response in the muscle (EMG) following Tens stimulation with the time progression from A to E. M wave is the effect of direct stimulation of the motor nerve to the jaw muscles. H wave is the reflex effects of the afferent stimulation to the motor nerve in the brainstem and the response in the muscle. Note: the direct wave increases. H wave decreases due to the blocking of the motoneurone by antidromic (against normal physiologic flow) of motor nerve producing hyperpolarisation and hence refraction of the nerve.



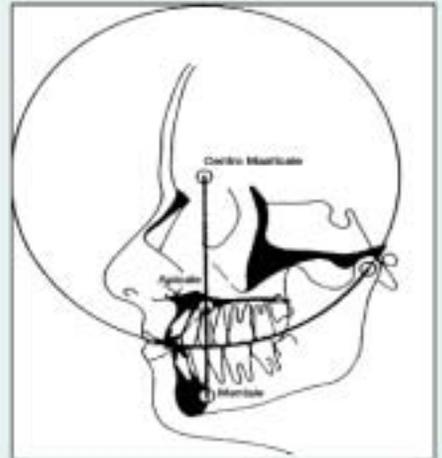
The patient has a small magnet attached to the labial surface of the mandibular teeth. The movement of the jaw, either voluntary or involuntary, from Tens results in a magnetic pulse, which is recorded by the sensor array and relayed to an oscilloscope.



Diagrammatic portrayal of oscilloscope deflections of jaw movement pre- and post-Tens. Note: mandible relaxes downwards and forwards to true rest from which extends a myotrajectory to myocentric or Neuromuscular bite.



HIP is the plane extending from the Occipital Condyle (OC), Hamular Notch (H) and Incisal canal beneath incisal papilla



Comparison of Frankfurt, Camper extra oral planes against HIP and occlusal planes. Note: Curve of Spee has two tangents: anterior is the occlusal plane horizontal to the HIP and posterior along Camper plane through jaw joint condyle and tragus of the ear.



Occlusal registration taken of the Neuromuscular or myocentric position



Coronoplasty of the orthotic produced by contacts of the occlusion by Tens.

ficient occlusion arising from abnormal body posture, which will also have effects on the alignment of the atlas and axis. Either way, the physiology of the total organism will be dysfunctional.

In deriving the neuromuscular occlusion, TENS is applied at the coronoid notch at threshold levels (i.e., the minimal amplitude necessary to activate the elevator muscles causing a palpable upward motion of the patient's chin). The intensity of the TENS is repeatedly adjusted to avoid over stimulation as muscular relaxation occurs. Full relaxation to True mandibular REST is identified by reduction to balanced and low resting masticatory EMGs from the pre-TENS condition of scan 9 to the post-TENS condition of scan 10.

Electronic mandibular tracking on an oscilloscope screen is used to locate the post-TENS rest position of the mandible. The intensity of the TENS was increased to cause the mandible to rise by 1-2mm. This was taken as the NEUROMUSCULAR OCCLUSAL POSITION. An intra-oral registration is made of that position (Sapphire, H.J. Bosworth Co, Skokie, IL). A therapeutic appliance is then constructed to the neuromuscular occlusal registration. An EMG scan at the new occlusion shows that with gentle closure to the bite called Myocentric occlusion, the EMGs are balanced and are at minimum levels in contrast to the pre-treated centric occlusion or centric relation.

With a brief time interval, patients generally report alleviation of their TMD symptoms, which had proved recalcitrant to procedures in vogue at

Faculties of Dentistry throughout the world. Remodeling of muscle sarcomeres occurs within thirty days, while connective tissue such as the mandibular condyle and glenoid fossa may take as long as five to ten years.

The remodeling process simply supports the reconstructed occlusion, which remains stable from the time of reconstruction, which has reached well over twenty years following treatment.

The above description conforms to the basic LVI protocol. Ultimate long-lasting stability depends upon equilibration of the occlusion according to the original Jankelson Class I, II, and III occlusal concepts of delineating occlusal forces along the long axes of the teeth and identified as occlusal fine-tuning or coronoplasty.

Norman Thomas graduated as a Doctor of Dental Surgery with honors and double Gold Medals in 1957. Dr. Thomas was awarded a Nuffield Fellowship (Oxford) to complete an honors degree in medical sciences in 1960. Between 1960 and 1974, he pursued residency and research programs at the Bristol Royal Infirmary, The Royal College of Surgeons of England, the Medical College of Virginia, and the University of Alberta, where he is now Professor Emeritus.

From 1970 to 2002, Dr. Thomas served on the Medical Research Council of Canada, the National Institute of Health, USA, and the Canadian Dental Association, gaining a Certificate of Merit from the latter and several Fellowships in medical sciences and dentistry. He is a Life Member of the Alberta Dental Association and retired from dental practice in 2002. In 1998, he was appointed Chancellor of the International College of Head and Neck Orthopedics and, in that capacity, has lectured in the U.S., Europe, Australia, and Asia. He was awarded a Ph.D. degree in Oral Medicine for research on the process and mechanism of tooth eruption.

2006 LVI Courses featuring Norman Thomas include:

- Neuromuscular Dentures
- Anatomy and Physiology
 - Occlusion I
 - Occlusion II TMD
- Scan Interpretation

LIFE-CHANGING THOUGHT #21

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PASSION

ARROWS

patients



AND YOU!

MATT BYNUM, DDS



Caught your attention, didn't I? Why is that? Why are four unrelated words able to spark an interest and a feeling to those of us who read them? For years now I have sat and tried to explain to people I meet, in dentistry and out, what got me so excited about dentistry and the way I practice and what that has meant for my patients. But it's virtually impossible to do in words, unless you are able to capture feelings and emotions and bottle them up for all to see.

For me it was LVI. So here is my humble attempt at describing what happens to those of us who walk in the front doors and into the rotunda of LVI, stare up at the ceiling and feel a sense of arriving home. Perhaps you can find it on your own. Perhaps you will find it somewhere else. The critical thing is that you FIND IT!

Passion. Webster's defines it as "boundless enthusiasm". I describe it differently for many things in life, but they all center on an emotion that is strong enough to infect those who come in contact with it. This incredible affinity for that which you love or strive to love, brings out emotion in everyone. In some it brings anger, hatred, disgust and dislike and then the arrows fly. Why? Realizing that one simply does not have the same feeling or fire toward another person or thing, can only bring emotion of inadequacy. It is here that lines are drawn and alliances and enemies are formed, and for what? Realize that arrows from others are their way of expressing

their jealousy or inadequacy. Slinging arrows is always easier than working harder to achieve the same success. Trying to destroy someone else's achievements is easier than building your own. I will detail those proverbial arrows in the next issue.

For me, the walls that make up the LVI campus are magic! As you walk through them that sense of feeling comes over you and floods your heart and your brain with endorphins that immediately make you smile and stand upright with your shoulders back and your head held high. And the magic is contagious because as you shake hands or exchange hugs with friends, whom most of your family and loved ones have never met, they too begin to smile and stand upright. Then throughout the course of your stay, you are assured and re-assured that you are indeed "that good", and the passion for what you do and how you do it begins to build. For you, it may be somewhere else. If you have found such a place, consider yourself lucky.

Passion is infectious. Do you have someone to show you what the pursuit of **passion** is? Have you ever met Bill Dickerson? I know you may have talked to him or shook his hand, but have you ever really met Bill Dickerson? I have, and if I was in charge of putting faces in the dictionary next to words that are directly associated with them, I would place his face next to the word **passion**. I have never in all of my life, met a man with such raw emotion for what he is and what he stands for than Bill Dickerson. Because of what he felt so strongly about and has fought so hard to protect and preserve, I am here writing this today. Do you have "that" kind of **passion** in your life? If so, who was it that brought it to your life?

Hopefully you know where you got it or how it got there, but once it is there what do you do with it? This, for most, is where the fires are extinguished. **Passion** is conviction, confidence, and emotion all wrapped up together into one tightly wound package and when opened springs

out like a Jack-in-the-box and makes those around it fill with emotion as well. **Passion** must touch on three levels of development for it to truly be effective in life: Personal, professional and financial.

I have said it before and will say it again: "Success doesn't just happen; success is a choice!" You choose your own destiny. So you leave LVI or someplace else, fired up and confident that you are indeed one of the best damned dentists out there. You can prep and temp full arches or mouths in time unimaginable to most, and you can make grown adults cry in the very chair they sit in out of happiness. Then you come home filled with excitement and newfound fervor for this incredible profession and the future that now awaits your decisions and you are met at the door with crying kids, a spouse who is frustrated at your being gone for days on end, and life just seems to hit you in the face with a brick! Remember, you have a choice! Most just stop, drop and roll here, and the flames start to die out on the front steps of home.

Understand that not everyone knows what you know or feels what you feel! There is another side of passion that scares people, but when harnessed and used correctly, it can indeed propel you forward. Also remember that passion for something else in your life, takes away from those who are immediately and intimately in touch with you. Instead of sharing this passion with just your

team, share it with your family. Enthusiasm is contagious! I am so excited when I return from anything at LVI that I'm jumping out of my seat like one of my three boys. One of the first things you have to do is to thank your spouse or significant other and your family for letting you pursue your **passion**. Acknowledge that life exists outside of dentistry and that



**Success doesn't
just happen;
success is a choice!**

you appreciate them for just being them. Your focus of why you do what you do for a living is right there in front of you. For me, those little eyes say it all.

Share with them what you have just learned and what it may potentially mean for you and for your family if allowed to pursue the path and direction. Detail the shortcomings of such a pursuit and what it will require time-wise in an effort to reach success, but highlight the positives while attaining such success. Infect

those around you and they too will become passionate about your pursuit. Watch as enthusiasm grows with you as opposed to against you. Understand that you do not want to supplement your loved ones with your **passion**, but that you want to compliment their feelings for you by making what you do more enjoyable. After all, when everyone is happy, everyone is happy!

Alright, so you're fired up and ready to make some serious changes in your personal life and now you want to do the same in your practice life. Easy, right? Here's what normally happens: Doctor comes back from this course, excited and spouting what is going to be changed and which new product needs to be bought, and who needs to be let go and who needs to be hired, and just an ongoing list of exciting changes. As the staff (team) sits and listens, pretending to be excited as well, they wait until the doctor says, "Now let's go out there and get 'em!" At which point he/she walks out of the room while everyone stares at each other in what will assuredly be marked down as "just another CE course high". One of them speaks up and says: "Just give it two weeks and it will all go away, just like it has before." And guess what? It usually does go away! Does this sound familiar?

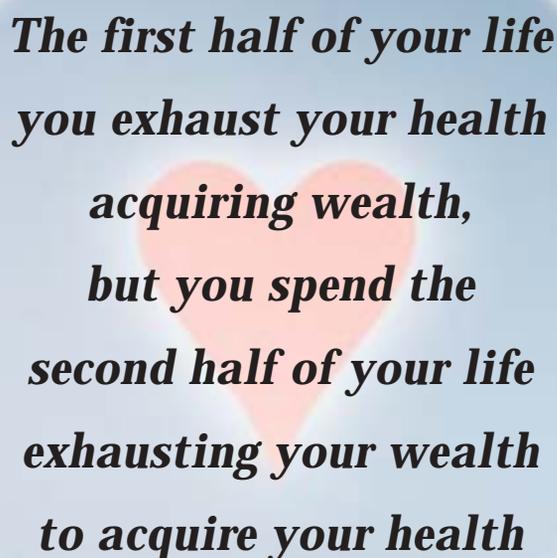
Why is it that information such as this that has the potential to propel the entire office forward goes without

merit? Because of the lack of enthusiasm on the part of the team! I have said before that passion is infectious; it's contagious and needs to be spread to all who will come into contact with your newfound ideals. It is pertinent that you spread this to your team. First off, I would suggest making yourself a promise that whenever you attend a course pertaining to your dental practice that you take your team. And yes I mean all of them! If there is one thing I know from experience, it is that you cannot teach your team as effectively as someone else can. Ask me how I know.

Passion for what we do has a tendency to dwindle, just as anything we truly care about. What we need is that spark to ignite that fire all over again. For LVI alumni, that is what the "LVI fix" is about isn't it? Now imagine having no less than four other individuals thinking like you, excited like you, and ready to move in a highly positive direction just like you. When that fire begins to dwindle in one person, another is there to re-ignite the flame or take the torch and run for everyone until their own fatigue sets in. This is the concept of team. This is the concept of numbers and how powerful they really can be if used properly.

So where are we? You and your team are now on board and are full steam ahead with excitement and energy. What's missing? The patients. In "Achieving Extreme Success" at LVI, we teach the concepts centered on passion and enthusiasm. With en-

thusiasm, it is impossible to fail. Remember that people will buy more because you are enthused than they are. Have you ever walked into a small boutique clothing store where the service and friendliness is unrivaled? And while at that store, was the enthusiasm by the salesperson above and beyond what you normally receive? And when they brought clothing to you



***The first half of your life
you exhaust your health
acquiring wealth,
but you spend the
second half of your life
exhausting your wealth
to acquire your health***

to try on and said you looked amazing in them and seemed to gather their emotion for your sampling of clothing, did your excitement build as well? Of course! People buy on emotion more than they do anything else. Again, ask me how I know.

What you and your team do from this point is entirely up to you. All I can say is that this passion and excitement must be passed from the team and the doctor to the patient. The energy that fills the room as they

enter into the office should be enough to begin the separation process. Most people are drawn to an atmosphere where others are enjoying themselves. By taking this energy and emotion and passing it onto the patient in the form of surroundings, enthusiasm, and attitude, success is inevitable.

When returning from the magical walls of a place like LVI, plan a meeting where everyone can sit down and discuss all aspects of what was learned and what the perceived value is for the practice at large. Discuss how to implement change so it is positive and what the desired results and effects on everyone will be. Details must be discussed as to who and what will be done and when. Most importantly is how these changes will impact them personally, professionally and financially as well. There has to be benefit for people to want to attempt change. Since babies are the only real people who want and enjoy change, it is the responsibility of the dentist to move the team with this passion. Create those "lamplighters" we have all learned about inside of your practice and watch what begins to happen!

Financial passion has a condescending hidden meaning behind it, but when looked at with open eyes, the reality of what it is makes it fine. I'm not talking about having money drive you and be the only thing which

makes decisions for you in your life. What I am talking about is the end which justifies the means. All of the hard work, all of the time committed, and all of the sacrifice should, in fact, result in increased income. For the sake of your family and your loved ones who also deserve to share in your success, we must address the financial aspect of what we take home from courses we attend.

They say that money can't buy you happiness, but you surely can be miserable in a lot of nice places! Dr. Art Mowery addresses a concept in the "Achieving Extreme Success" course which I find happening all the time. He states that "The first half of your life you exhaust your health acquiring wealth, but you spend the second half of your life exhausting your wealth to acquire your health". Now stop and think about that. Can we not all recall our parents or even close family friends who chased the dream to retirement, only to be faced with declining health to have never enjoyed what they worked so hard to set out to do? That is the point of financial **passion**. Energy is placed into concepts that have been proven and performed consistently by those who have set the tone for what is now LVI. Without re-inventing the wheel we can all borrow the information, mold it around ourselves and our concepts and philosophies, and make it successful. The end result is increased income with the increased success and increased patient satisfaction all at the same time..

So how does that really impact the family? In one easy answer: time. The biggest luxury we all have in our

busy lives is time. Remember that the objective is to enjoy life! My motto is: Work hard, play hard! Through continued success and increased income we can then begin to mold our practices around the concept and luxury of time. We can begin to move from 4 and 5 day work weeks to 3, where together as a family we can travel and enjoy each other while we still can. I understand the sacrifice early on, and as we have explained it is done with good intention which should result in increased time.

How does financial passion translate for my practice or my patients? Simple. With increased income through the practice, the availability of better materials and equipment begins to surface. Inevitably the result is increased or improved product and quality. Who benefits from better quality? The patient! Atmospheres change and environments change to accommodate this newfound fire for practice and philosophy and the next thing you know you have re-invested your increased income back into the practice and the patients. The old adage comes to mind as the #1 rule in business: "You have to spend money to make money!" From here the cycle just continues to revolve.

So friends, take this passion, this fire and emotion for who you are, what you do, and where you do it and bottle it up tight. Others will wonder what it is you have that they don't, but for those of us who understand the magic we know. **Passion** is all around us and it is our responsibility to educate and inform those we impact what it is possible of doing for

everyone. Yet, as we all begin to understand this power of emotion and energy, there are those who stand to contradict and oppose the force. Some call this balance, while others call them arrows. Next issue we will discuss those "arrows" and what they mean to us, our patients, and our practice. Until then, "Love what you do, love who you do it with, and love who you do it for. Anything else is just compromise!"

Dr. Matt Bynum is a 1995 graduate of the University of Iowa, College of Dentistry. He lectures internationally on various aspects of aesthetic and reconstructive dentistry, practice management, personal and practice motivation, and team building; and has published numerous articles on these subjects. Dr. Bynum is a member of the South Carolina Dental Association, American Dental Association (ADA), the American Academy of Cosmetic Dentistry (AACD), and the IACA. Dr. Bynum is a clinical instructor and featured speaker at the Las Vegas Institute for Advanced Dental Studies. Dr. Bynum is currently Co-Director and Co-Founder of the "Achieving Extreme Success" lecture series. He is a consultant to a number of dental manufacturers and laboratories in the area of new product development and clinical testing of materials, and serves as a coach/consultant to dentists and dental offices across the United States in practice development and success. Dr. Matt Bynum maintains a full-time private practice in Simpsonville, South Carolina emphasizing aesthetic and restorative dentistry.

**2006 LVI Courses featuring
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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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- Advanced Functional Aesthetics
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 - Full Mouth Reconstruction



PRODUCT REVIEWS

An Easier Way To Level Your Cases And Make Them Shine

Once again, we'll concentrate on two items you should have in your office. They are not big ticket items, and they can help every case, especially the big ones. The cases where you want everything to go right. The first is from Clinician's Choice and is an improvement over the traditional stick bite. The second will save you time placing a shine on your temporary restorations in no time. Both are items I use on just about every case I do.

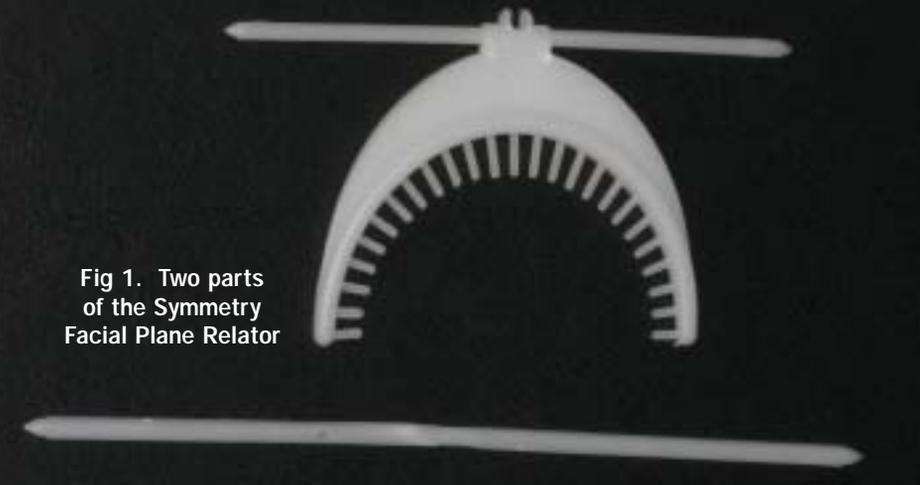
Clinician's Choice Symmetry Facial Plane Relator

When working in the anterior area of the mouth it is a necessity that the final restorative work appears level when the patient smiles, but this is often easier said than done. Let's assume you've done six beautiful veneer preparations from upper canine to canine. You take the perfect impression and the lab pours the perfect model. Now they mount the maxillary arch orienting it to what? Leveling the maxillary cast with the preparations may not render the correct horizontal occlusal plane. Now this is important because how they orient the preparations horizontally will most likely determine how level the incisal edges of the final maxillary restorations are. For years it's been advocated to take a 'stick bite' where one places some stick parallel to the ground oriented to the maxillary arch. The lab then mounts the stick parallel to their bench top and if this is all correct the final restorations



Fig 2. Alignment with the face

Fig 1. Two parts
of the Symmetry
Facial Plane Relator



are fabricated level to the bench top hopefully giving the correct horizontal occlusal plane. Okay, so it sounds easy. But wait, you notice your patient is having difficulties holding their head upright, and one eye is ever so slightly higher than the other and their ears are not much better what do you orient that horizontal 'stick bite' too?

Not being one to bring up a problem without offering a solution here it is...we have Clinician's Choice Symmetry Facial Plane Relator. Made of plastic it comes in two pieces. One piece has small arch fingers to embed in the bite registration material and the second piece is a vertical alignment bar which snaps into the horizontal Symmetry arch which is attached to a horizontal stick. At LVI the vertical stick is the key. Line the vertical stick up along the vertical axis of the midline of the face and you have your horizontal plane. Doesn't matter if the eyes are off, if the ears are off or even if the head isn't straight. As long as the vertical stick is bisecting the face you're okay. The lab pours the model and mounts it with the Symmetry Facial Plane Relator so that it is parallel to their bench top they are ready to go.

Let me offer some important points to remember when using the Symmetry Facial Plane Relator. If the case is being

built to the existing occlusion place the bite registration material and instruct the patient to bite normally, place additional bite registration material over the facial/buccal surfaces of the teeth in the anterior sextant and then place the fingers of the horizontal Symmetry arch into the added material and orient the vertical stick so that it bisects the face. The plastic fingers should not be placed between the teeth unless a separate bite registration is being used. At LVI if we are changing the bite we use a separate bite registration stent so the plastic fingers can be placed between the teeth and again the vertical stick is oriented vertically bisecting the face.

When the lab mounts the case they are not concerned with the vertical stick, but with the horizontal stick.

I always take a Symmetry 'bite' at my initial patient visit so that I can evaluate the horizontal plane of the patient's maxillary arch from a set of diagnostic casts.



Fig 3. Mounting of the model

All Dental Prodx QuikGlaze

Imagine, it's the end of that veneer appointment now and you've fabricated your temporary veneers out of a self-curing resin material. You're tired, your patient is tired and you still have to make the temps shine. One option is polishing the temps with the various cups, disks and points in your composite armamentarium or another more appealing option is placing a light-cured glaze over the top of temporaries and light curing leaving you with a shiny smooth surface free of the sticky oxygen inhibited layer. The temporaries not only look amazingly smooth, but are more stain resistant. This process is fast and easy.

The list of ingredients lists 'multifunctional acrylates' which enables you to use this material as a bonding agent when repairing or adding to provisional materials. Just roughen the surface to be repaired, apply a layer of QuikGlaze, then cure the material and place the repair material on top. After curing you have bonded the layers together.

So this versatile glaze material is a light-cured methyl methacrylate varnish that can be used in the following situations:

- *Repair of provisional resin materials*
- *Seals surfaces of temporary resin materials*
- *Eliminates time consuming polishing of resin temporaries*

Try it as that final step to provide your patients with that great 'wet' look in just a minutes worth of work.

In this issue I've discussed two more products that are proved performers at LVI. With the hundreds of doctors we train each year these two products have proven their worth in the clinic. An almost idiot proof stick bite and a fast glazing agent that will save you valuable minutes while providing your patients with knock-out smiles while in their temporaries.



Fig 4. How temporaries often look after we have cleaned them up. They appear rough.



Fig 5. Painting on QuikGlaze

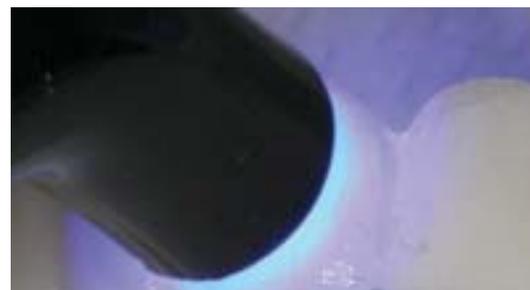
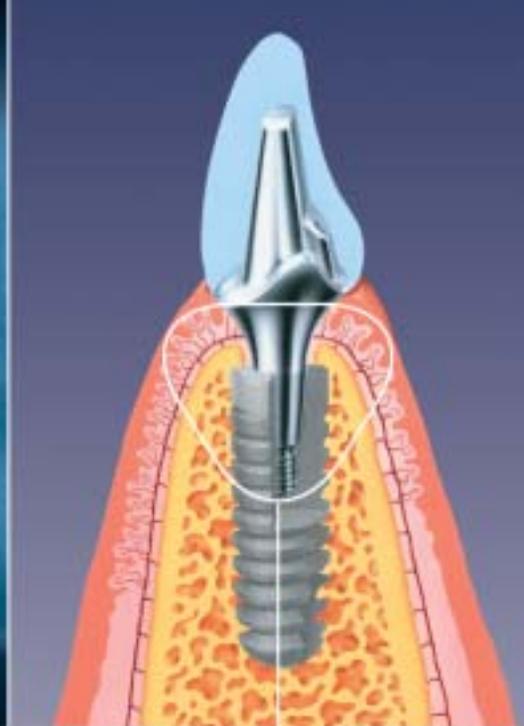


Fig 6. Light curing the QuikGlaze material



Fig 7. Right central with QuikGlaze

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@livilive.com



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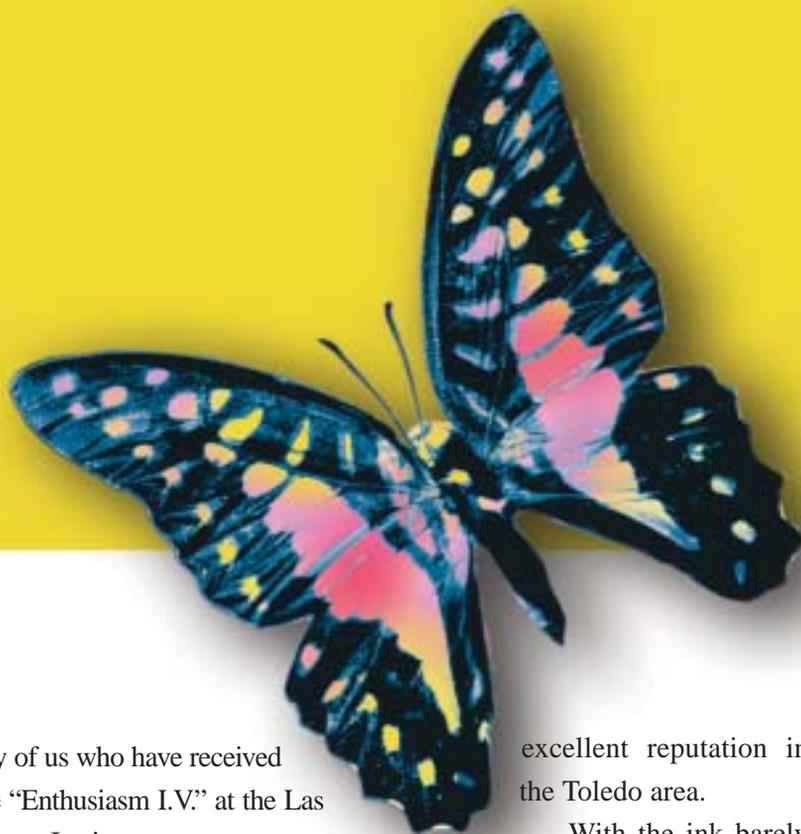
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Meta



Many of us who have received the “Enthusiasm I.V.” at the Las Vegas Institute, return to our communities, practices and study clubs only to encounter colleagues who, when hearing the term, “LVI”, seem nervous, upset or even hostile. Admittedly, I was one of the latter, and in a dramatic fashion, --but a funny thing happened in the suburbs of Vegas.

Although my L.V.I. journey actually began in 1995, a thorough introduction will best clarify the original paradigm that I held so dearly. I finished dental school in 1983, and after a one-year hospital-based dental residency at Geisinger Medical Center in Pennsylvania. , I joined a group practice in Toledo, Ohio where my personal dentist, Dr. Robert Weisenburger was a partner. I was invited to join as an associate and felt it a great privilege and opportunity. The two senior partners were both trained gnathologists, and enjoyed an

excellent reputation in the Toledo area.

With the ink barely dry on my license, I was packed off to Ohio State University for post-graduate training in the art and science of gnathology--just as they had done years before. The five month program for general dentists was

taught by Drs. John Regenos and Dick Huffman, who were wonderful mentors and excellent teachers. John told an emotional story of a pain patient he had tried to treat conventionally as a young dentist. He failed, and she ended her own life. As a result, he vowed he would find a treatment philosophy that would allow him to truly help similar cases in the future. At that time, he had finished hundreds of full mouth cases using strict gnathologic principles. As a dental youngster, I absorbed every word, applied myself and studied hard. Finally, I had a philosophy of my own! Surrounded by Stuart Articulators and pantographic tracings, and in the midst of our fervor, I recall fleeting references to Dr. Bernard Jenkelson and his followers. John was a truly humble man, so there was no overt name calling, but after all, for us condylar position was the dental “Holy Grail”. It was



Richard G. Thomas, D.D.S.

morphosis

meta•mor•pho•sis n. change of shape, substance, character, or transformation

repeatable and verifiable – even standing on one’s head! We knew that all parameters of treatment must find their home there. We also knew that we were part of the “One True Dental Faith”. Indeed, in our minds, gnathology had no equal.

My other senior partner Dr. Ray Otto, taught part time for a number of years in a local hospital-based general practice dental residency program. The Medical University of Ohio in Toledo typically admitted six to eight dental graduates each year. In 1991, I was offered the opportunity to take over his teaching position, and have enjoyed this aspect of my profession immensely. Nothing crystallizes your beliefs faster than teaching, and I drilled my residents year after year in the gnathology mantra. Slowly, and on my partner’s coattails, I became a TMD referral destination in my community, and felt increasingly justi-

fied in my convictions. After all, most of the time, the patients did improve. In hindsight, I think the act of opening the bite with acrylic and adding a flat occlusal plane, allowed the patient to move out of centric relation, decompressing the joints, and was the likely cause of healing, not centric relation per se - but I digress.

One of my favorite study groups at that time had been the Western Ohio Academy of Dental Practice Administration. Our small group of 60 doctors consistently invited the best and brightest speakers. In 1995, we spent a remarkable day and a half with Dr. Bill Dickerson. The academy membership was rather stoic, but the younger members sometimes enjoyed inviting speakers who were a little out of the box. Bill captivated many of us. Happily, he agreed to go to dinner with just my partners and I, and we all enjoyed his thoughts and unusual insights. We returned to our

office on Monday and literally stopped doing amalgams. This was my first exposure to Bill--and he had left an indelible impression.

Let’s fast-forward to 2000. The Toledo Dental Society held their quarterly, all day conference. Dr. Bill Dickerson was the speaker – Cool! I fondly remembered 1995 and immediately signed up ready to be motivated once again. With his usual wit and conviction, we learned of the evils of dental insurance and managed care, and how foolish we’ve all been as an organized profession. After lunch, it was the main attraction: slide after slide of full mouth rehabilitation done, well, “neuromuscularly”. Bill was not well received. I was totally intrigued, but also upset. I wanted to think he was using this philosophy to open bites in order to justify full mouth rehabs, but the patients seemed very, very pleased based on their testimonials.

I began to realize that all of my objections to neuromuscular dentistry were misunderstandings, misconceptions and ignorance on my part.

The struggle began in my heart on that day. I told my wife I was going to LVI, but then thought better of it. My gnathology paradigm was too strong. Ironically, I wasn't happy with my profession anymore. I had given up on doing bigger cases gnathologically, because the patients "couldn't afford it" and I was less than enthusiastic. I was bored with dentistry and slid into a comfortable tooth and quadrant style of practice. I still tried to do excellent work, but the passion was gone. I began thinking of retirement and whether I could coast for another ten years or so!

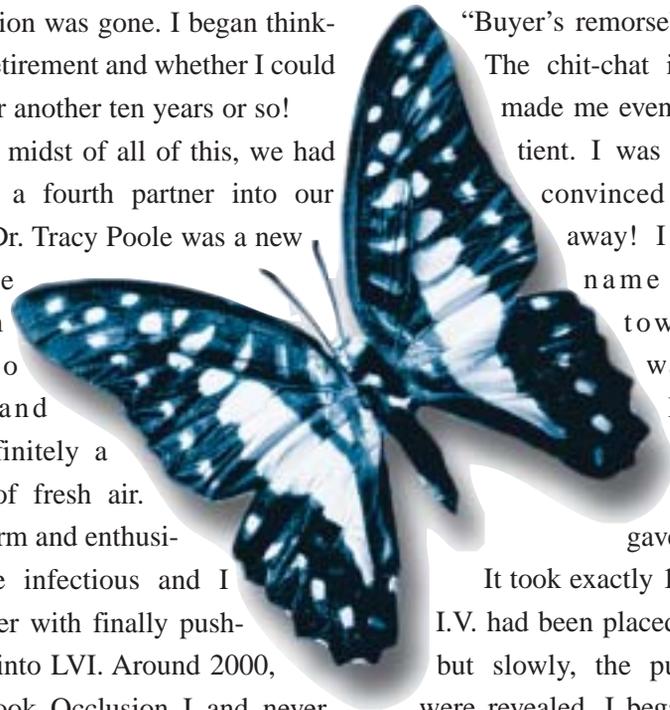
In the midst of all of this, we had brought a fourth partner into our group. Dr. Tracy Poole was a new graduate from Ohio State and was definitely a breath of fresh air. Her charm and enthusiasm are infectious and I credit her with finally pushing me into LVI. Around 2000, Tracy took Occlusion I and never looked back. She returned to work rejuvenated and so excited that it was impossible to ignore, but I did my best. I had become an SUV stuck in the mud. LVI was pulling on me, but it wasn't until Tracy put on her boots and pushed from behind, that I moved. After completing her CARP patient, I knew she was mentally absent and soon would likely leave our practice, new philosophy and all. I very reluctantly agreed to go. I was not happy about it and let her know. I would take Occlusion I, going in

with an open mind, but they (LVI) would have to convince me. My course registration, room, flight and car rental were arranged and paid for by Tracy within one hour, I'm certain. Now I was committed, but still resistant.

I remember starting my first class Wednesday morning. Heidi Dickerson asked us to stand, introduce ourselves and relate where we were from. Everyone seemed quite pleased to be there. I was not.

"Buyer's remorse" had set in. The chit-chat introductions made me even more impatient. I was ready to be convinced and right away! I barked my name and hometown when it was my turn. I'll never forget the look Heidi gave me.

It took exactly 1.5 days. The I.V. had been placed and it hurt, but slowly, the puzzle pieces were revealed. I began to realize that all of my objections to neuromuscular dentistry were misunderstandings, misconceptions and ignorance on my part. I was one of the guys who "didn't know what he didn't know". I was vehemently criticizing something I did not understand, nor did I want to! The final I.V. push came from Dr. Clayton Chan. I immediately related to Clayton as a fellow gnathologist. He skillfully persuaded us that neuromuscular treatment was sound and efficacious and backed this up with very ratio-



nally thinking with some good science. Now it was lunchtime of Day Two and I was very excited. My paradigm had finally shifted. I made a point to apologize to Heidi a few months later at my Advanced Anterior Esthetics course. I did not want my own foolish behavior to be an impediment to learning all that I could, and I had come to realize that every instructor at LVI was there for a reason. In one year I finished Occlusion I, Advanced Anterior Esthetics, Occlusion II and the Comprehensive Asthetics Reconstruction Program. After my first trip, I purchased a J5 Myomonitor, and my assistant and I began treating our TMD referrals and existing TMD patients with a neuromuscular approach. The protocols were already in place, so all that was needed was to try the new philosophy.

We TENSed and placed removable appliances in twenty patients and every one improved. Some had dramatic headache histories of up to eight years. One young woman had seen a multitude of medical specialists. The last prescribed antidepressants. She said, "I'm not depressed, I have headaches!" What a thrill, when we, a dental team, with a novice neuromuscular dentist, completely eliminated years of pain with a piece of plastic! A friend of the family, the former police chief of a local rural town, came to us with a history of debilitating head, neck and joint pain. His wife related that for 15 years he took daily doses of Fiorinal and would be found sitting in his "chair of tranquility", as he called it, alone for hours. With the public nature of his work, he had

historically enjoyed the company of many friends. Now he often sat isolated. Feeling ever more confident, I presented the treatment to him and he reluctantly agreed. After years of conventional treatment by another local TMD specialist, including TMJ levages and continuous centric relation appliance therapy, the neuromuscular approach worked. The patient's wife reported a dramatic change in her husband's energy levels. I could see the absence of pain in his eyes just weeks later.

With CARP behind us, my assistant, coordinator and I are slowly moving our large office toward a neuromuscular model. We are "loading the pipeline" as Kim Miller of J.P. Institute taught us so well. I'm telling my existing patients what we can do for them and working up new patients who have obvious occlusal disease. On my cabinet door is a small typed quote from Mike Miyasaki: "Offer them the best and let them decide". I even slipped some neuromuscular Powerpoint presentations into my resident's lecture menu. They've responded very positively. Enthusiasm begets enthusiasm.

On the plane ride home last month it occurred to me in a quiet moment that once we've learned this philosophy, we've tried it and we've seen that it works; we really have a moral obligation to offer it to our patients. So many people suffer from the symptoms of occlusal disease that to not "offer them the best" would simply be a terrible disservice to those we propose to treat.

I truly feel as though I'm starting over in my profession--and I look forward to the challenges and satisfaction of completing more comprehensive treatment as my knowledge deepens and skills improve. I also look forward to returning for full mouth reconstruction and slowly but surely incorporating more of what I have learned into my own unique situation.

Although I first went to LVI with very focused prejudices born out of ignorance, I did sincerely go with an open mind. That is the critical ingredient we must encourage in our peers. If they are willing to do this, to just give it a try, their paradigms will shift to a place where the world of dental care looks very bright.

Richard G. Thomas, D.D.S.

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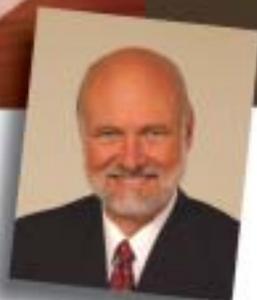
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THE WEATHERS' REPORT

IDEAL ENDO ACCESS PART 1



Arthur "Kit" Weathers, Jr. DDS

In the previous issue of *Visions*, I mentioned that obtaining proper access is an essential step in eliminating rotary file breakage. In this article, I will further explain why I believe unimpeded, straight-line access is the “single most important step in eliminating rotary instrument separation.” Then, I will present a step-by-step technique for quickly and easily creating the perfect endodontic access.

A great access preparation is one of the most important, and at the same time, most misunderstood aspects of root canal therapy. Proper access improves visibility, facilitates canal location, and simplifies irrigation, preparation, and obturation. Most importantly, good access greatly reduces the possibility of instrument separation. In fact, I believe that poor access is the leading cause of rotary instrument breakage.

When the access opening is too small, rotary instruments must bend

just to enter the canals, placing them under constant stress as they rotate at the point where they bend. It is similar to bending a coat hanger back and forth – sooner or later breakage is inevitable. We used to be able to get away with small access openings when we were using nothing but hand files and reamers, but with rotary instruments, the rules have changed.

The ideal access cavity should have no undercuts, allow instruments to slide straight into the

canals, and provide good visibility with minimal possibilities for perforation. To verify that your access is adequate, close one eye and try to visualize all three canal openings. If you have to move your head or the mirror to see any of the canal openings, the access is too small.

There are just about as many different instruments and techniques for access preparation as there are dentists, but I would like to share a simple system for obtaining efficient, straight-line access.

LIFE-CHANGING THOUGHT #4

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an increase in their net incomes.”

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*Strategic Dental Marketing is a nationally-recognized research firm used by many of the top companies in the dental industry.



Figure 1 – Typical under-sized access preparation provides poor visibility and necessitates bending of rotary files to insert them into the canal openings.

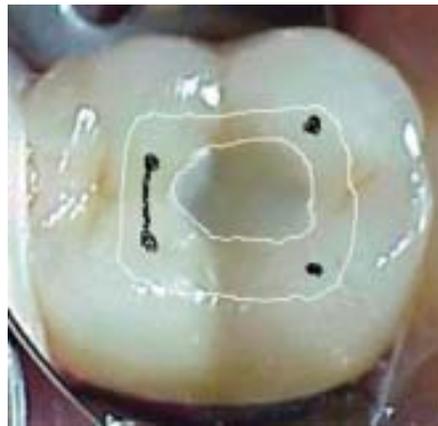


Figure 2 – Black dots illustrate where canals are typically located and the amount of additional reduction required for straight-line access into the canals.

REDUCE OCCLUSION PRIOR TO ACCESS

If you are planning to restore the tooth with complete cuspal coverage, I recommend completing the occlusal reduction prior to entering the pulp chamber. Cutting two or three millimeters off the occlusal surface improves visibility, provides flat reference points for your rubber stops and eliminates any possibility of hyper-occlusion between appointments. And the best part is the patient never changes his mind and decides not to get the necessary crown following the completion of the root canal.

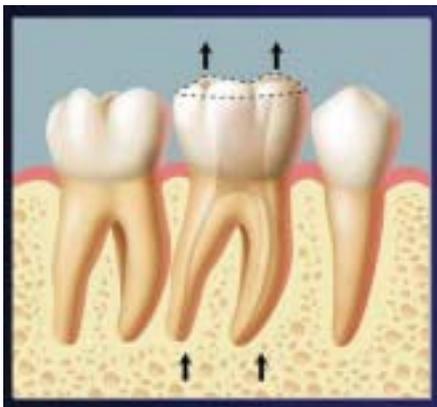


Figure 3 – If the tooth will be restored with complete cuspal coverage, reduce the occlusal surface 2 or 3 millimeters prior to making the access opening.

ACCESS PRIOR TO RUBBER DAM

I also recommend making the initial access into the pulp chamber prior to placing the rubber dam, especially if you are opening a tooth that looks a lot like the adjacent tooth. It would be very embarrassing to numb the lower left central and open the lower right central because you accidentally placed the dam on the wrong tooth. Not only would the right central not be numb, you would wind up doing an unnecessary root canal on a healthy tooth.

There are two additional reasons for accessing the tooth prior to placing the rubber dam. First, if the patient isn't completely numb, it's much easier to add additional anesthetic if you don't have to deal with the dam. Second, and more importantly, if you have to make an access through a tooth that has been crowned, the angulation of the restoration may not line up with the root, thus increasing the possibility of perforation. Without the rubber dam, it is much easier to visualize the location of the pulp chamber and root canals.

THREE SIMPLE STEPS FOR IDEAL ACCESS

Step One – Examine the pre-op x-ray to verify that the pulp chamber is deeper than the diameter of a #4 round bur. (If the distance from the roof to the floor of the chamber is less than the diameter of the round bur used for initial access, you will not feel the bur “drop into” the chamber.) Enter the pulp chamber using a #4 round bur for molars or a #2 round bur for anteriors and premolars, and be careful to avoid the chamber floor with the round bur. (There are natural depressions in the pulp chamber floor, and if you obliterate this anatomy, it will make locating the canals much more difficult.)

Seven millimeters of penetration will be adequate to drop through the roof of most pulp chambers. Going much deeper than seven or eight millimeters initially isn't necessary and should be avoided. There is even a special PulpOut Bur available with a fixed “stop” at seven millimeters to prevent going too deep into the canal.

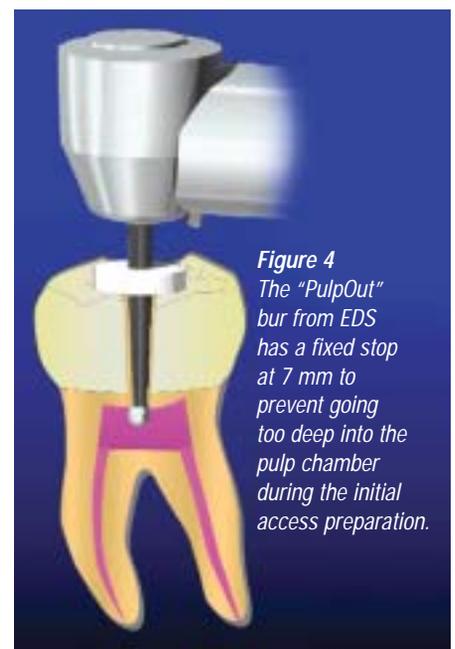


Figure 4
The “PulpOut” bur from EDS has a fixed stop at 7 mm to prevent going too deep into the pulp chamber during the initial access preparation.



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Dr. Ron Jackson, DDS, FAGD, FAACD

Dr. Jackson is LVI's new Director of Adhesive Dentistry programs...a title befitting a man of his talents. He has published many articles on aesthetic, adhesive dentistry, and has presented his theories and their resultant successes on four continents, including our own. A Fellow in both the American Academy of Cosmetic Dentistry, and the Academy of General Dentistry. A wonderful speaker. Incredible motivator. And now, exclusively at LVI.

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These three gentlemen are ICONS in our industry, and now they are ICONS at LVI. Sign up for their courses, and discover for yourself exactly why.

Dr. "Kit" Weathers, Jr., DDS

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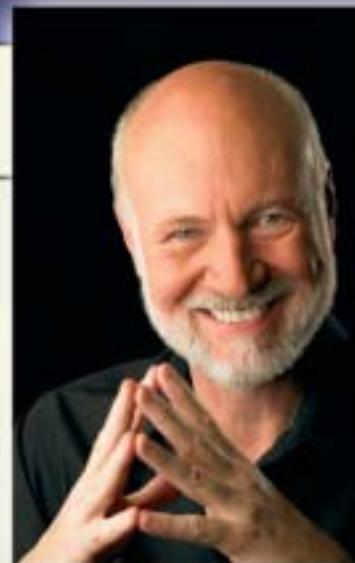
September 8-9 (Griffin, GA)

October 13-14

November 3-4 (Griffin, GA)

December 4-5

After working for 30 years lecturing worldwide on technologies, products, and processes designed to perfect the practice of endodontics, Dr. Weathers is bringing that talent and experience home to LVI, as our newly-appointed Director of Endodontics. The developer of a wide range of dental products, he pioneered the EndoMagic! nickel titanium file system for general dentists determined to improve the quality and the economics of their endodontic services. He integrates an academically-grounded approach to this subject with humor, magic acts, and mnemonics to enable his students to recall his well-accepted techniques.



"The combination of all the teachers on staff at LVI, and the doctor students it attracts, has now drawn me here. Such a rich group of people will broaden my reach, and add to my already enormous love and appreciation for our profession. The dentists who come to LVI are of such a high calibre, are so uplifting themselves as they strive for perfection, that I consider it my honor to grow as they grow, learn as they learn. I can't wait!"

The seven millimeter stop only works if you do not reduce the occlusion, however, and in that case you could simply mark the shank of a round bur at the proper depth.

Step Two – Use a safe-ended instrument (I like the LA Axxess diamond) to enlarge the access cavity without fear of damaging the pulp floor. After locating the canal openings, if the tip of the access bur doesn't engage the canal openings, use a file or stiff endo explorer (Stewart Probe) to slightly enlarge the coronal two millimeters to accept the "guide" tip of the LA Axxess diamond.

Step Three – Place the pilot tip of the LA Axxess diamond into each canal and straighten it up against the wall of the pulp chamber, thereby cutting a small groove in the pulp



Figure 5 – The LA Axxess diamond bur has a small, non-cutting pilot tip to guide it into the canal without damaging the floor of the pulp chamber. The LA Axxess diamond bur and the PulpOut bur shown in Figure 4 are available from EndoSolutions (800) 215-4245.

chamber wall. This groove will guide all subsequent files into the canal and will facilitate placement of paper points and gutta-percha cones straight in to the canals.

Uncovering the MB2 canal on maxillary molars presents its own unique set of problems, and will be covered in part two of this series.

ARTHUR "KIT" WEATHERS, JR. DDS

For more than thirty years, Dr. Kit Weathers has lectured and published papers on technologies, products and processes designed to simplify the practice of endodontics. Dr. Weathers pioneered a simplified system of nickel titanium files to enhance patient comfort with a single visit endodontic procedure. His popular Endo Root Camps presented at the Las Vegas Institute and at the C.E. Magic! Multi-media learning center in Griffin, Georgia, offer multi-day, hands-on training to improve dental techniques while explaining the theory of "Endonomics", the economics of endodontic case management. Dr. Weathers is the Director of Endodontics at the Las Vegas Institute, and he may be reached at:

702 -341-0987

or by e-mail, at

kweathers@lviglobal.com

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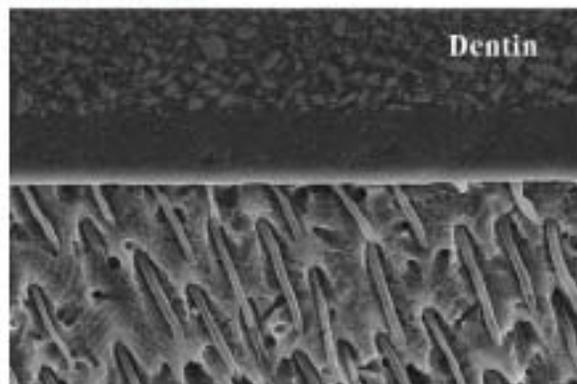
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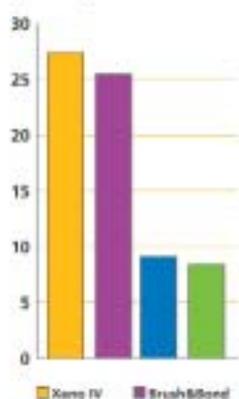
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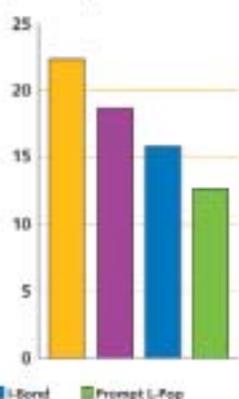


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CREATING AN AESTHETIC

NICHE

DENTAL PRACTICE

Joseph M Barton DMD, LVIM
Center for Aesthetic Dentistry of Jacksonville

In our fast-paced society, instant gratification is no longer an occasional occurrence, but rather an expected way of life. It wasn't that long ago we actually WALKED over to the television to change the channel. Imagine that! With today's technology of Picture in Picture, Tivo, and On Demand our televisions have become processors of instant information and entertainment.

iTunes, Email, Blogs, and Bluetooth have quickly replaced HiFi, letters, conference calls, and cord phones. The fact that I am writing this article on paper prior to typing it in the computer is archaic.

However, in dentistry, the challenge of providing individualized personal care with attention to detail makes for an interesting dilemma.

This is what has
created our niche
in our community
and within our
profession.

This is what
sets us apart
from everyone else.

Because of our advances in dentistry, admittedly there is instant satisfaction when I can immediately see the changes we provide and deliver to our guests. But are we being forced to speed up the time line--while desperately holding on to the Art of the Process? In creating a practice dedicated to the Art of the Smile with a neuromuscular approach to occlusal harmony, I have transitioned from a high volume patient practice to one that is smaller in volume of comprehensively--restored guests.

In order to create this “niche”, and still satisfy the consumer’s desire for instant gratification, is where the challenge begins. Having a sense of genuine interest in a person and their well-being will quickly relieve the haste to get to the end result. By conveying the necessity of attention to detail through continued communication is the key to instilling the importance of time and how it translates to quality.

How to get to this level can depend on a number of factors:

- Do you yourself have the patience (quality of guests vs. quantity of guests) to allow the process to proceed?
- Do you and your team have the communication skills to listen to your guests and identify their wants and desires?
- Do you have the skills to translate those wants and desires into incredible results?

Having these skills is where my team shines! This is what has created our niche in our community and within our profession. This is what sets us apart from everyone else.

So how did we begin to create our

niche? I began with empowering my team to help me in the transformation. To do that involved educating and training to get the team up to my level of knowledge and expertise. I wanted my team to know as much about the procedures and services as I do. At our team meetings, this involves putting on practical demonstrations to teach everyone the technical and theoretical information concerning our practice. While some of team members are not directly involved in providing certain services, they can still answer questions and move our guests forward on recommended care. Rewards serve as a great motivator for my team--catered dinners, spa days, cruises, and, of course, ownership in the practice.

Since the philosophy of care for the practice was changing, the necessary skills were mandatory. Because I had completed the advanced anterior and posterior courses, I knew that my team would need additional education and instruction. Initially, we began by fine-tuning our skills in the area of restorative aesthetics, hygiene diagnosis and therapy. We enrolled in several technical courses, one especially for my hygienists. JP Hygiene Consultants empowered my hygiene department to become health care providers and not just teeth cleaners. Personality profiling and communication skills were paramount. These skills would then vali-

date the changes we wanted to make. This elevated and empowered the entire team's attitude to a new level of quality care.

We began educating our guests on the new techniques and knowledge we had acquired, and how we were implanting this into our practice. At this point we informed our guests, one at a time at each hygiene visit, that we were no longer receiving their benefit from



their insurance company, but would gladly file it for their reimbursement. Educating them as to why this was such a benefit for them was a critical component. In essence, our personality profiling and communication skills developed our patients into guests.

Once the concept of the fee for service was fully implemented, I focused again on furthering my education. The LVI core curriculum including: Advanced Functional Aesthetics, CARP, Occlusion I-IV, and

Neuromuscular Full Mouth Reconstruction, was completed over the next few years. After each course, I would return, hold a team meeting to discuss how we were going to implement our new skills into the practice.

Our next task was to establish a framework of systems. This framework was introduced to us by the Dental Concierge duo - Gwen and Bob. Systems that include cycle of care, identifying motivators and inhibitors for care, and communication skills to close on recommended care. We continue to work with JP Hygiene Consultants and Dental Concierge to stay current on the new material and information applicable to the entire office. An important additional fact to remember is that our society wants "instant gratification"--"give me what you've got now"--we had to work on our efficiency in being able to deliver excellent quality care in

a timely method and technique.

Our marketing shifted from internal to external, and we started with our specialists. Our goal was to inform the specialists of our areas of expertise and also as to the type of guest we wanted from them. Having our specialists referring to us is an interesting concept. I had narrowed our focus and practice by eliminating endodontics, pediatrics, oral and periodontal surgery from our offered services. We now needed to let our

referring specialists know this as we shifted from being a family dental practice to becoming a total health neuromuscular aesthetic practice. We were able to accomplish this through our educational lunch-and-learns.

A complete change in image from a new logo to new office confirmed our commitment and soon The Center for Aesthetic Dentistry of Jacksonville was a reality.

Our most recent marketing methods have been in the external target arena. The LVI branding campaign has been a great success with our office as well as the neuromuscular campaign. From here we have utilized the internet, print ads, and TV to target and reach our target market. Our biggest success by far has been our MakeOver Jacksonville – a show produced on a local health and beauty channel. This show gives people a chance to see instant results and hear

actual testimonials as to how their lives have been changed.

The niche we have created is patterned after my own motivator – health. For our guests, we want to provide the same--therefore we have a strong emphasis on total health in our approach to dental care. While the primary focus is on aesthetics and neuromuscular occlusion, we discuss their overall health with our guest. Some of the adjunctive services we provide are nutritional counseling, vitamin therapy, designing wellness programs, blood pressure screenings, and referrals to alternative healthcare providers. To name a few, some of these alternative providers include Neuromuscular Massage Therapist, Chiropractors, Naturopaths, Women's Physicians with alternative medicines,

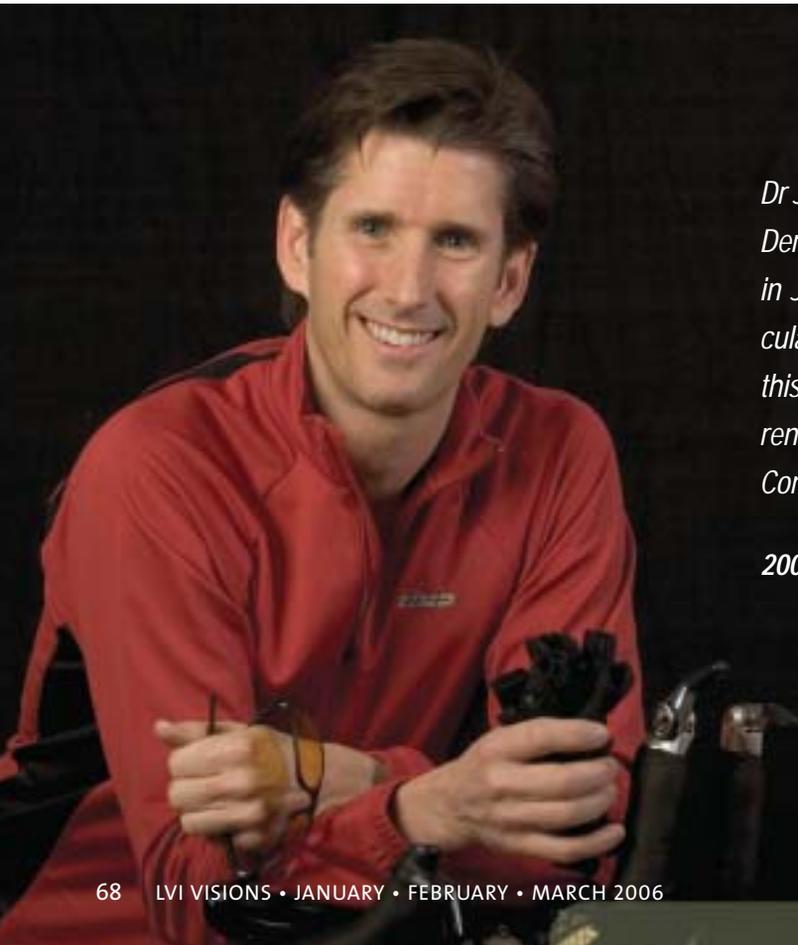
It is important for our guest to know in addition to providing them with exceptional aesthetics, we are

concerned about their overall health. This is the single most important thing that sets our niche apart from the other aesthetic practices.

I can't tell you the number of times a new guest has said how surprised they are that someone (and that includes myself) sat down with them in a non-clinical environment and actually listened to them. And I don't mean just a nod of the head in agreement. I mean they were asked questions and interpreted their concerns, health, past experiences, and present desires.

Can you provide individualized personal care with attention to detail in today's fast paced society? Is it realistic? You have to make that call. Based on your level of expertise, your team's level of efficiency, training, and your technicians' artistry - that question will be answered.

Got to go now--my Treo is summoning me.



Dr Joseph M Barton a 1986 University of Florida College of Dentistry Graduate currently maintains a private practice in Jacksonville Florida dedicated to aesthetic neuromuscular dentistry. Dr Barton is a clinical instructor at LVI and this year obtained his LVI Mastership Award. He is currently the President of the International Association of Comprehensive Aesthetics (IACA).

2006 LVI Courses featuring Dr. Joseph M. Barton include:

- Advanced Functional Esthetics
- Full Mouth Reconstruction
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*But clearly, some of the joy is gone.
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but it turns out your practice runs you.
And some days, some nights,
you wonder where all the glory went.*

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FEEDBACK

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SHERRY BLAIR, CDA

Imagine your spouse says, “I Love you.” This statement should stand on its own. If it was spoken honestly, it should not require reciprocation. In reality, you know your spouse expects you to respond with “I love you, too,” because human beings need feedback and validation. Your dental team is no different. Giving them a pat on the back, or random verbal acknowledgment of good performance is insufficient. Team members need formal feedback just as people do in all relationships. Feedback does not have to be positive or negative all the time. It does have to be helpful, which is the difference between criticism and constructive criticism. It is also the difference between constructive praise and fluff.

When asked during LVI’s Dynamic Team Course, most team members stated that they would welcome honest and even critical feedback, because they understand it will help them improve and get better. The issue most people have is not with the feedback itself, but rather with the environment in which the feedback is presented and how that feedback is delivered. As a leader, it is your responsibility to help establish a safe and respectful workplace for giving and receiving feedback of all kinds. The entire process should be about coaching and developing people, not judging, criticizing, and demeaning team members. The goal should never be to prod team members to become the best worker on the team. Rather, the goal should be to encourage all workers to continually grow, evolve, and improve them-

Continued on Page 80

selves a step at a time and with a plan to map out a way to do it.

There is nothing like fast feedback when there is a performance issue brewing. Feedback is best when it is frequent and immediate. Everything humans learn to do well, or improve upon, they learn by receiving feedback from someone. When a leader takes time to give someone on-the-spot feedback, he/she is sending a powerful message that says, “I care about you and I want to help you to

improve and to be your best.” Feedback is not like a fine wine – it does not get better with time. It is best to let team members know when they are doing a good job shortly after they complete the job. It’s also important that we tell team members if they are performing poorly as soon as possible because you don’t want them continuing down a path that perpetuates their mistakes. Here are five basic steps to delivering feedback phrases.

1. Be Frequent and Sincere with Your Feedback.

- Susie, I know this isn’t easy, but you can speed this process up by doing the following things first. Let’s talk about how that might work.
- Betty, if you will write these steps down now, you are more likely to remember them later. Trust me; there are too many details to remember.

2. Make Feedback Fast and Action-Packed

- Hold everything, John. I like your enthusiasm, but you are moving way too fast for the team. If you slow down a bit, we’ll be able to keep up.
- Lois, I thought you would appreciate knowing that you can actually skip this one step and still have the same results. I’ve learned it’s a real time saver.

3. Let Your Feedback Be Helpful and Corrective

- Mary, I don’t think you realize how you are affecting others. You really need to think before you speak, to avoid hurting others. Did you notice the look on Sally’s face this morning when you addressed her in front of the others?

4. Be Empathetic and Sensitive to Others’ Feelings

- I care about your learning this correctly, Martha. Let’s plan to meet once a week for the next month to go over your progress.
- James, this may or may not apply to you, but I am going to share this with you anyway. What do you think? Am I missing anything?

5. Use Critical Feedback Phrases for Starters

- Tell me how you would like to receive helpful feedback from me.
- Share with me areas where you might be having difficulty or areas in which you would most like to receive feedback.

S U C C E S S F U L

PULP CAPPING



DR. S DAVID BUCK

There still exists much confusion and controversy about the preferred method to pulp cap, and the success rates of various methods. The technique presented in this article is the method used by and large at LVI Global. The success of this technique has been observed by LVI instructors and faculty in numerous cases treated in LVI live patient clinical courses.

an essential key to pulpal healing was the complete elimination of microbes from possible contamination and subsequent invasion of the pulp chamber

The current technique taught at LVI is largely the result of research done in the early 1990's by Dr. Charles Cox when he utilized in-vivo methods to re-evaluate the traditional method taught by dental schools--which continue to this day to advocate the use of calcium hydroxide (Dycal) for pulp capping. Dr. Cox found that acid etching and the application of dentin bonding agents produced a favorable environment for pulpal healing. Earlier studies by Branstromm and Cox revealed that an essential key to pulpal healing was the complete elimination of microbes from possible contamination and subsequent invasion of the pulp chamber. This concept of a microbe-free environment has wide acceptance within the profession, although there still is strong belief in the use of calcium hydroxide.

Even more recent studies done by Cox published in Quintessence Int. 2003 Jan, and Int. Endod J. in Feb 2003 with in-vivo methods confirm that pulp capping with dentin bonding agents and composite allow for a high success rate. The basis of success in these studies for composite and dentin bonding agents over calcium hydroxide and other agents is the lack of bac-

terial contamination after placement. In fact, a correlation was found between degree of bacterial contamination and resulting pulpal inflammation. Thus the *materials that had the least microleakage produced the least subsequent pulpal inflammation. This is a fundamental and essential component to success in pulp capping.*

Conversely, other current studies reviewing the use of calcium hydroxide in in-vivo methods suggest that tertiary dentin bridging stimulated by CaOH is key to success, and further that direct application of etch and dentin bonding agents are inflammatory stimulating events to the pulp and denting bonding agents do not produce dentin bridging. The experience of many clinicians and the many cases treated at LVI substantiate the success of direct etch and placement of denting bonding agents to pulp exposures, and LVI does not advocate the use of calcium hydroxide (Dycal) in pulp capping.

The key technical aspects of pulp capping will be presented here. The first and foremost concept aforementioned is the elimination of microbes from the immediate area of operation and the subsequent prevention of any re-introduction of bacteria after

restorative treatment. Fifth generation bonding agents such as Optibond Solo Plus (OSP) allow for very substantial linkage to dentin--both mechanically by penetration into opened dentinal tubules after acid etching, and intermingling with the collagen matrix of dentin producing the so-called hybrid layer. This bond to dentin produces a complete hermetic seal and thus prevents any micro-contamination of bacteria in to the pulp exposed area, which is key to suppressing post-operative pulpal inflammation. Calcium hydroxide does not bond to tooth structure and even in the situation where a bonded composite is placed over a layer of Dycal there is not any inherent sealing with this method. More importantly, the more current studies done to demonstrate that dentin bonding agents produced varying degrees of pulpal inflammation and thus contraindicated, were all done without application of antiseptic agents prior to hybridization, meaning the operating field likely had microbial contamination when dentin bonding agents were applied, and it is the opinion of the author that this was the likely source of pulpal inflammation and not a reaction to either the etch or the denting bonding agent.

an essential key to pulpal healing was the complete elimination of microbes from possible contamination and subsequent invasion of the pulp chamber



Initial presentation - Isolation with rubber dam important for control of microbial contamination.



Cariou exposure found - Preparation includes use of caries detector to confirm location and extent of caries and removal progress. Tactile caries removal also utilized to determine final caries removal and carious exposure found .5mmx.5mm.

Additionally, no mention of whether a rubber dam was used in these studies. It is critical if at all possible to use a rubber dam to control the operating field, and LVI advocates the use of the rubber dam for all bonding procedures. Thus, the second key in the LVI protocol is that antiseptic agents be used, especially after ortho phosphoric acid etching and prior to dentin bonding agent application. Research done By Cox demonstrated that application of 3% sodium hypochlorite to control hemorrhage and prior to adhesive application resulted in normal healing response in 86% of pulps.

Other agents used successfully at LVI are Tublicid, Ultracid and Gluma. The above mentioned research also leads to the third key in successful pulp capping. Hemorrhage control must be accomplished prior to dentin hybridization with OSP or other dentin bonding agents. This step is essential in order for proper bond/seal to occur and it is also critical to assess the relative vitality of the pulp prior to pulp capping. The clinician should scrutinize whether there is evidence of partial necrosis at the exposure site. Slight bleeding is a very positive sign that normal cellular function and vitality is present within the pulp tissue. Any degree of necrosis present in carious exposures will mean endodontic treatment will be required. In Mechanical exposures that are small to moderate size, hemostasis is usually attainable. Larger mechanical exposures will be proportionately more difficult to control bleeding and thus will likely require endodontic treatment. Complete verification that bleeding has stopped is necessary prior to proceeding. Use of 2-3% sodium hypochlorite applied to the bleeding site for 2-4 minutes can produce hemostasis and disinfection. Ferric sulfate (Viscostat, Astringent) can be used to control bleeding as well as long as antiseptic application is also added after etching.

Finally it is important to ensure that the clinician maximizes the strength of the bond interface between the composite and dentin. All composites are subject to polymerization shrinkage, and if this is not carefully controlled a micro gap will occur and greatly diminish the success of the pulp cap procedure. Another potential fault of the above mentioned studies criticizing the use of adhesive pulp capping, is the apparent use of highly filled body type composites immediately after dentin hybridization. It is likely that even with careful incremental placement this



Micro etching of dentinal surface - Author prefers to enhance surface with 50um AIO microetching of dentin surface



Pulpa vitality confirmed - Pulpal vitality is confirmed by active bleeding in exposure and subsequent use of hemostatic agent is utilized prior to chemical etching.



Hemostasis Achieved - Ferric Sulfate (Astringent, Viscostat) used to stop bleeding (2.5% sodium hypochlorite can also be used). Note, it is imperative that all bleeding must be stopped prior to dentin bonding as any hemorrhage will inhibit sealing of dentin with dentinal adhesive and significantly lower success rate.



Phosphoric etching of dentin - 37% orthophosphoric etching of entire dentin surface to allow hybridization and sealing with fifth generation dentin bonding agent. Author prefers to seal all of dentin to allow maximum pulpal protection and protection. A thin layer of flowable composite is applied to dentin after priming and then cured to fully seal the dentin. Prior to temporization, an alcohol wipe is used to remove the tack layer and inhibit bonding of temporary to prep.



Final disinfection of dentin - After etching and removal of smear layer and opening of dentinal tubules, another application of an antiseptic is used to sterilize the dentin and tubules. The author prefers Gluma, but tublicid or ultracid can be used.





Surface preparation at seat appointment - At seat appointment the dentin that has been sealed with composite is reactivated by micro-etching prior to chemical etching and placement of OSP bonding agent.



Onlay bonded to place - Placement of the onlay with light curable resin cement and light curing after proper surface activation of the restoration and dentin/enamel surface of the prep.



Hybridized dentin surface - It is important to verify that the pulp exposure maintains no bleeding and the dentin is adequately hybridized by visualizing the shiny surface of the hybridized dentin.

will result in microgaps at the critical pulp exposure site. LVI and many other clinicians have advocated the placement of a thin flowable composite layer to come in contact with the dentin interface prior to the placement of incremental layers of more heavily filled body composites. This technique insures a complete and intact seal with the composite to the hybrid layer and maximizes the seal at the critical exposure site.

To summarize, the key steps to pulp capping success are:

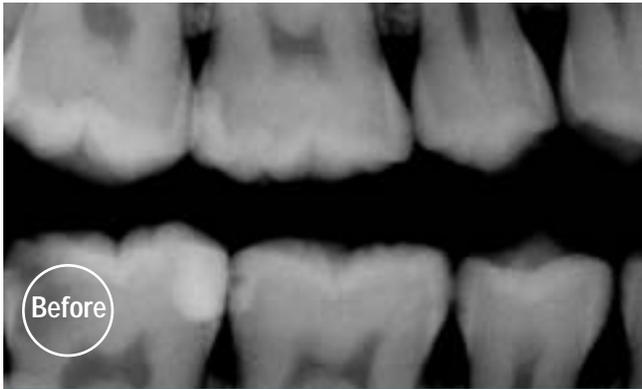
1. Elimination of microbes in the operating field, use of rubber dam, placement of antiseptic agents prior to adhesive application.
2. Prevention of any re-introduction of microbes into the area and thus use of state of the art dentin bonding agents to create a hermetic seal to dentin.
3. Complete control of hemorrhage prior to dentin hybridization is critical.
4. Placement of flowable composites as a first layer to the dentin to maximize bond strength and seal of composite over the exposure area.

¹Koloniou-Koumpia E, J Dent 2005 Sep;33(8):639-47. Accorinte M, Oper Dent. 2005 Mar-Apr; (30): 147-55. Subay RK, J Endo. 2005 Mar; 31(3):201-4

²Hafez AA, Cox CF, Quintessence Int. 2002 Apr;33(4): 261-72



Initial application of flowable composite - A first thin layer of flowable composite is placed directly over the pulp exposure and cured.



Radiographic presentation - Radiographic caries presentation showing pulp involvement likely to be caries rather than mechanical exposure.



Post-op xray - Radiographic immediate post-op after seating ceramiconlay

Dr. S David Buck graduated from University of Washington in 1988. He maintains a private practice in Seattle, WA focused on neuromuscular TMJ treatment and esthetic NM restorative rehabilitation. Dr. Buck has participated and lead study clubs in the Northwest and studied extensively under Drs. Kois and Spear in the early 1990's. Dr. Buck started his training at LVI in 1999 and has been a clinical instructor at LVI since 2003.

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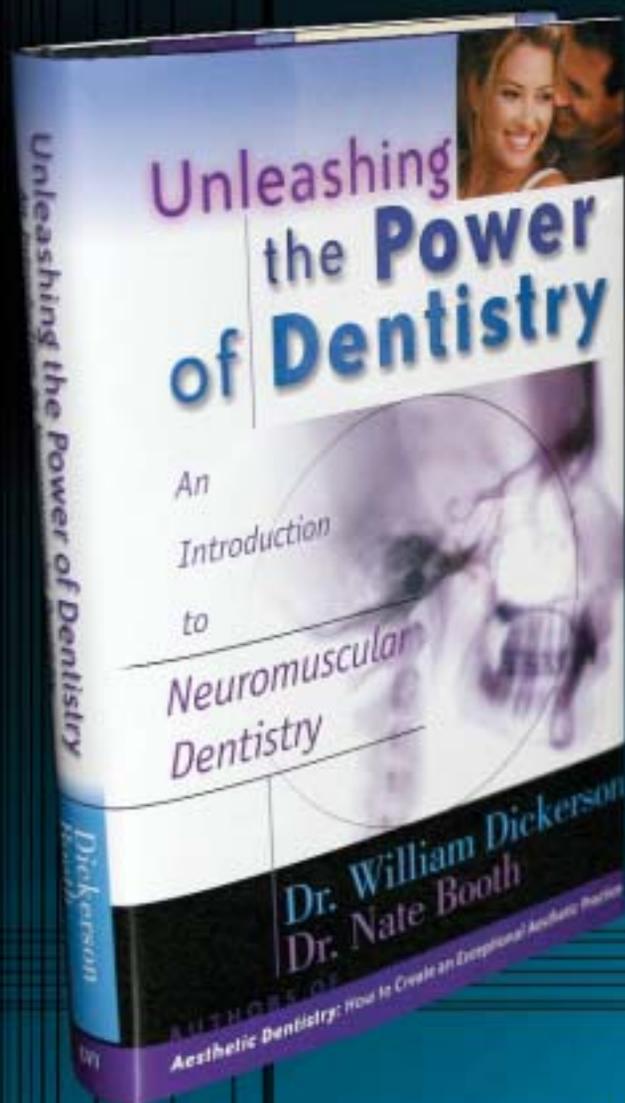
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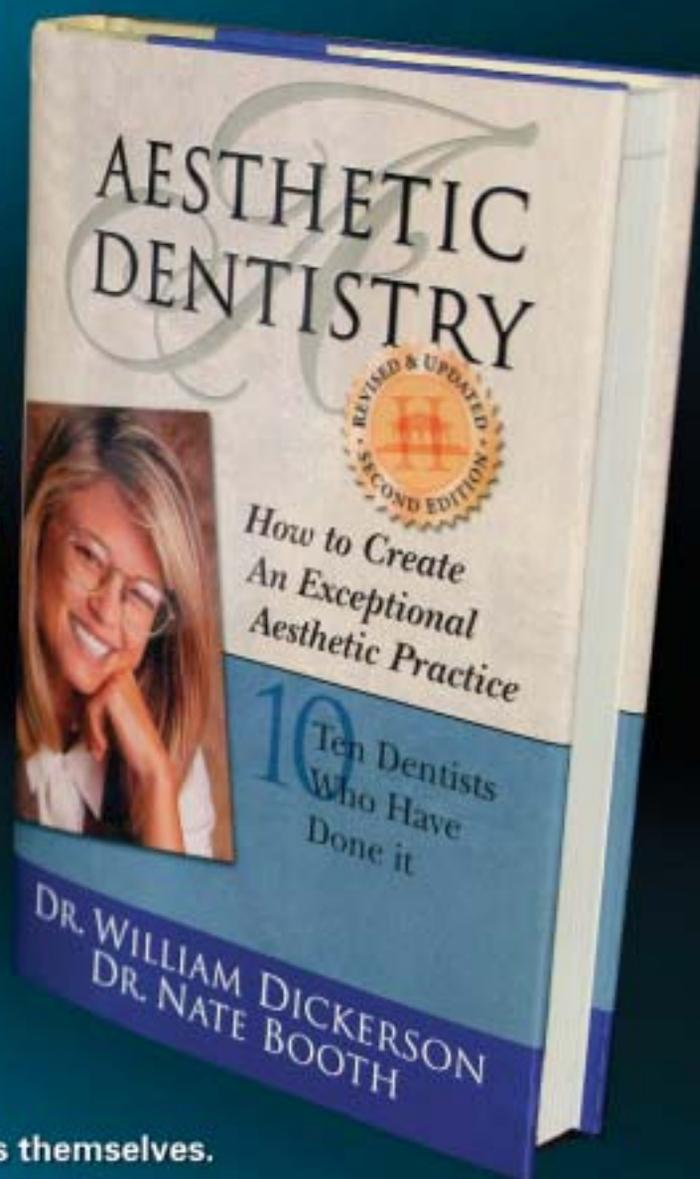
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MANAGING YOUR DEBT

DAVID P.G. KEATOR
THE KEATOR GROUP OF WACHOVIA SECURITIES

Many investors track their assets closely — checking the Dow, following certain companies and consulting with a financial advisor. But what about the often overlooked liabilities side of the balance sheet? There are lots of pieces to the “balance sheet” puzzle. Amazing value can be brought by addressing the debt side of an individual’s personal balance sheet. It’s just as important as the investment side.

Smart Debt Management

Affluent investors, in particular, have access to a wide variety of creative lending options — the home equity line of credit and collateralized securities are considered to be chief among them.

What one often finds is that clients don't necessarily have too much debt; it's just organized poorly. People are not taking advantage of more appropriate borrowing options. There's debt — and then there's debt.

Consumption vs. Conservation

The difference between debt types is generally a matter of consumption versus conservation. "Borrowing for consumption is usually not a good idea," says Mary Sexton, Director of Lending Services of Wachovia Securities. "You're using a home equity line of credit to buy shoes? You're accessing leverage to maintain a lifestyle you can't currently afford? That's borrowing for consumption. We want our clients to learn you should not borrow for consumptive purposes."

Debt can be used most wisely for conservation purposes. "These are larger expenses you just can't fund from current cash flow, like a big tuition bill," Sexton says. "It's critical when thinking of incurring debt to consider how it will impact your investment decisions." With that college tuition bill, for example, it wouldn't make sense to disrupt your long-term investment plan for a short-term need. Instead, Sexton advises, you could consider a home equity line of credit, or you may elect to borrow against your securities.

To work with debt strategically, first, clearly identify your overall goals and establish priorities. Then look at all your assets and liabilities and figure out your cash needs going forward.

It's also important to determine your suitability for borrowing and, just as with investing, set your risk tolerance level.

When you acquire debt using an adjustable interest rate, you must think about interest-rate risk. If you are borrowing in a rising-interest-rate environment using adjustable rates and the prime goes up 500 basis points (5 percent), would you have the ability to pay off the loan to reduce your risk? You need to consider the implications of borrowing. At the end of the day, you need to be able to sleep at night.

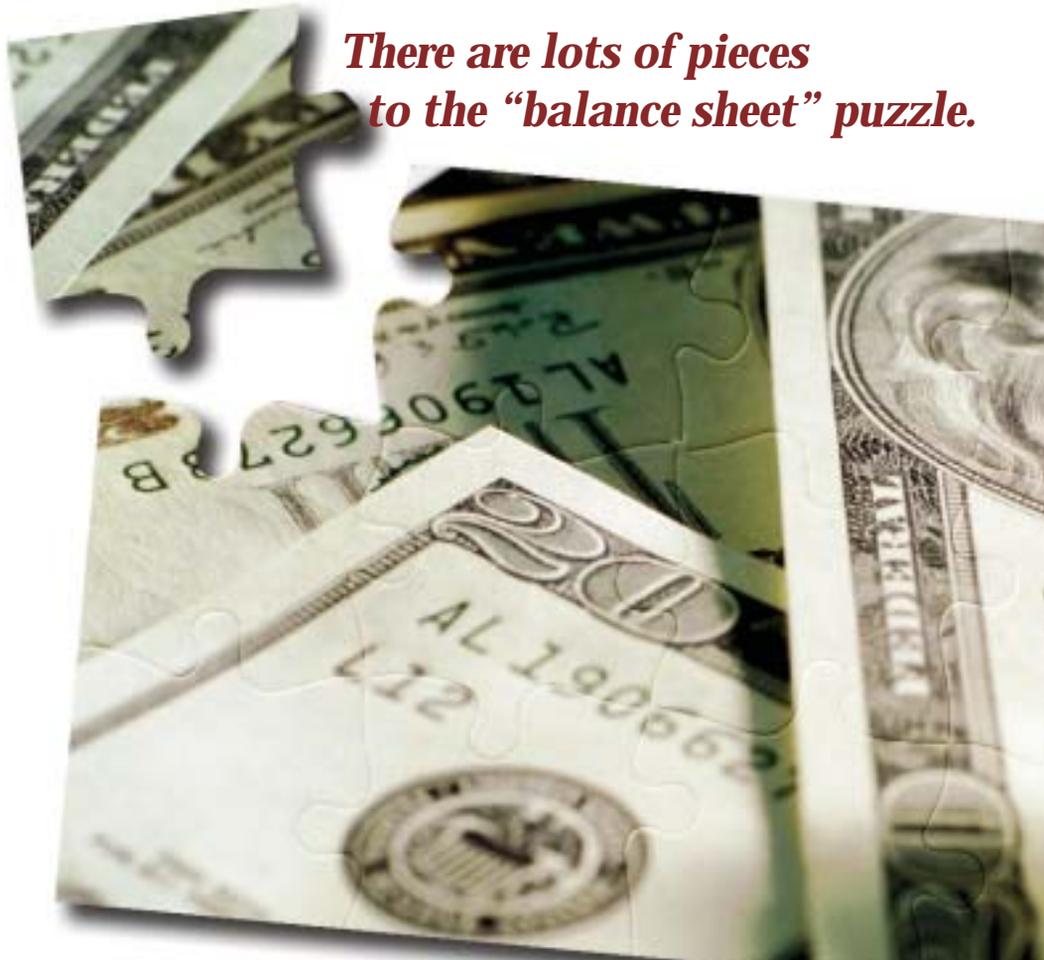
Of course, basic principles of money management hold true when

dealing with interest rates — whether you are working with good debt or bad debt: You want to earn more money than you pay out. The key is to borrow at the lowest available rate while maximizing your investment returns. You wouldn't want to borrow on a credit card charging a double-digit interest rate while investing in a money-market fund paying below 5 percent, for example.

Selecting a borrowing method is key to smart debt management. Consider these possibilities:

- Credit cards are okay, but only if you pay off the balance. There are highly sophisticated, affluent investors who are carrying \$40,000 credit-card balances and don't have a home equity line of credit. That may not be the best thing to do, depending on your situation.

There are lots of pieces to the "balance sheet" puzzle.



- A home equity line of credit works well for investors who need immediate liquidity — and even those who don't. A home equity line is flexible; you only draw on it as you need it during the draw period. It can offer relatively low risk, may be priced at a currently low prime rate or prime plus or minus a margin(1), and may be tax-deductible.(2) It could be one of the best borrowing options available if you take into consideration your short-term, long-term and interim cash flow needs. And you never know when you're going to need liquidity — you want the ability to access it in life-altering events. There could be a medical emergency, a divorce, widowhood. You want that line in place beforehand.

- Borrowing against securities is another option.(3) This strategy provides low-rate financing, prime or prime plus or minus a margin, by using the client's stocks, bonds and even savings accounts and certificates of deposit as collateral. Investors can continue to trade their securities and earn on their investments while they are collateralized.

The Bottom Line: Consult a qualified financial advisor to help you make sure you're considering all the borrowing options available to you. It could make a dramatic difference in your future financial life.

[Disclosure]
All loans and lines of credit are generally subject to credit approval, verification and collateral evaluation in accordance with the lender's underwriting standards. Not all products are available in all states. Other restrictions may apply.

(1) Most home equity lines of credit are variable-rate forms of credit, meaning that the APR may increase or decrease after consummation based on changes to the index (in this example, the Prime Rate as published in The Wall Street Journal, Eastern Edition, currently 6.75 percent as of 10/31/2005) and in accordance with the terms of the Home Equity Line of Credit Agreement. The borrower may have to pay closing costs. Adequate homeowner's insurance is usually required, and flood hazard insurance may be required. If the borrower chooses an interest-only repayment option in a state where that option is available, a balloon repayment will result.

(2) Please consult your tax advisor regarding tax deductibility.

(3) Margin borrowing adds risk to your investments and is not suitable for all investors. If the market value of the eligible securities in your margin account declines, you may be required to deposit more money or eligible securities in order to maintain your line of credit, or we may be forced to sell securities held in your account.

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FEEDBACK • Continued From Page 66

Feedback is a two way street. Leaders need to welcome feedback also. It is the best measuring tool leaders have to determining their effectiveness. When a team member expresses their opinion or view on how leaders could have done something better, or points out something leaders may have neglected to do, it can be human nature to become defensive. But it's all about how you respond, not how you react, to that feedback that makes all the difference. Periodically give your team an Employee Satisfaction Survey. Some of the questions might focus on the following:

- Does your leader maintain open communication?**
- Does your leader provide satisfactory feedback?**
- Does your leader provide needed support?**
- Does your leader fairly evaluate performance?**
- Does your leader welcome suggestions and ideas?**

We can all benefit from feedback. Team members and Leaders alike will become empowered with the freedom to choose how they respond to feedback. We can immediately benefit from others' perspectives and perceptions.

Think of feedback as a gift. When we choose to learn from the feedback we receive, whether it's positive or corrective, we can use the gift we've been given to improve the overall performance of the practice. And who will benefit the most? Our Patients!

Sherry Blair, CDA

As a veteran of the dental field with over 33 years of experience, Sherry has managed each and every system in the dental office. Over these years she has gone through numerous practice management groups. Pankey Institute, Pride Institute, Dental Boot Kamp, Pinnacle, Levin, LVI, PMSI, JP Consultants. Sherry has combined all this acquired knowledge and personal experience to create an inspired, effective, and motivational curriculum that refines the Team's systems surrounding optimizing the patient's total experience with a dental practice. In her present position as the Team Director of the Dynamic Team Course and Consultant at the Las Vegas Institute, she travels internationally conducting in-office consultations focusing on Customized Team Support.

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