ON BEING AN ORTHODONTIST

The other day, I was sitting in the doctor's lounge at the hospital having a cup of coffee before clinic was scheduled to start. There on the table was an issue of the *Bulletin of the American College of Surgeons* Vol. 100:5, pgs. 54-56; (May 2015). Flipping through the pages, I found an article by a surgeon, Dr. Henry Buchwald, discussing 10 principles that have guided his professional life. While reading the piece, I was struck by the analogies that could be made between surgery and orthodontics. He stated that he has been in practice for almost 50 years and during his academic career has mentored hundreds of residents in terms of surgical care, techniques, and the attributes of practice that govern the discipline of surgery.

To me, what he was saying ran the gamut from risk management to practice management to patient management and finally to personal management. It started me thinking that, in the end, all of the above might just be merely a reflection of how we manage ourselves. Some of us are footloose and fancy free regarding what we do and how we do whatever it is in both our personal and professional lives. Others are of a more conservative nature and eschew risk in all forms to whatever extent possible. Whatever our bent, we then go in to our offices and develop policies and protocols that are in essence nothing more than mirror images of who and what we are; our professional gestalt if you will. I have analogized his musings to orthodontics and wish to share them with you. I do so with the idea that if we were able to more closely adopt and then reflect on some if not all of his guiding principles we would all be better at not only managing our practices but managing ourselves as well.

1. It's Always Your Fault

Dr. Buchwald noted that we have to accept responsibility for all that happens in our practices. He believed that as doctors, we have to anticipate exigencies and attempt to thwart untoward events. We either were taught or, via the school of hard knocks we have learned, about things that can go wrong during orthodontic treatment. Based on this acquired knowledge we have an obligation to look for these potential missteps. We have to be aware of the subtle clinical and or radiographic findings that indicate an untoward occurrence is right around the corner. It requires us to assume the mindset that if something can go wrong, it will. Not a very happy thought, but a very protective one for the patient.

He also stated that we have to accept that we all, at one time or another, will make a bad decision; even if at the time, our actions seemed quite rational and based on what we thought was sound reasoning for having made those decisions. It doesn't matter that we thought we were doing the right thing. There is a long standing axiom that the road to hell is paved with good intentions. Usually this occurs when we fail to take a long enough view of a chosen treatment plan, when we ignore a viable alternative treatment plan because of personal or professional bias, or when we didn't see the potential negatives associated with using a particular mechanotherapeutic approach.

His final admonition was that we have to recognize and accept the fact that bad outcomes happen; idiopathically, iatrogenically, and through no fault of our own. Sure, we have lots of successes; but on the flip side, not every case works out the way we want it to. Not every treatment is successful. There are factors at play that are out of our control, but the bottom line is that this is still our patient, we diagnosed the problem, created a treatment plan, treated the patient, and retained the results. However, due to such things as excessive growth or a lack thereof; physiologic and anatomic limitations;

environmental, habitual, and systemic influences; along with a myriad of cooperation shortcomings; every now and then we become the proud owners of a failure of one type or another. We need to own every result we produce and deal with whatever the issue is with the best interest of the patient in mind.

2. Post treatment complications or shortcomings can often be addressed before or during treatment.

Cases should be treated in your mind before they are ever treated in the patient's mouth. With a little practice it is easy to "be the wire / be the tooth". Look at the mechanotherapy you have set up. You should be able to know with relative exactitude how the hard and soft tissues will respond to the wires you have placed and the forces you initiated. When a patient returns and something doesn't look right, or it doesn't look the way you expected it to look, take the time to find out why. If you need to repair, replace or reposition something, just do it – then and there. Yes it might upset your schedule but this particular patient needs your skill and expertise right now. At the end of a case, if the result is not what you had anticipated, go back over the case, step by step, visit by visit, chart entry by chart entry. Try to figure out how and when the predicted outcomes morphed into something else. It might be too late for this patient but it's not too late for the next one.

3. Gentleness not speed is the cardinal virtue.

Paraphrasing a 15th century English Proverb, Dr. Buchwald wrote that a doctor should have the eye of an eagle, the heart of a lion, and the hands of a woman. Today, we need to have a keen eye in order to make not just a diagnosis, but a differential diagnosis. For instance, not all Class II malocclusions are cut from the same cloth. There are at least 4 different and distinct types of Class II presentations. Discerning one

from the other is the key to choosing the most appropriate mechanotherapeutic approach. Today, it takes a brave heart indeed to face today's helicopter parents; non cooperative, over indulged and pseudo-entitled children; internet enlightened and unreasonably demanding patients and parents; as well as pushy orthodontic vendors who are promoting specious claims concerning the never ending revolving door of the newest and best gizmos and widgets. We have all been taught that dentoalveolar hard and soft tissues respond exceedingly well to very light continuous forces. Having a heavy hand has almost no place in contemporary orthodontic therapy.

4. Learning curves take time but shouldn't take lives

Fortunately, we have very little if any mortality associated with orthodontic therapy; but there is plenty of morbidity to go around. We can, and do, injure patients. Whether by acts of commission or omission, we can cause or contribute to an increase in caries, periodontal compromise, unfavorable crown to root ratios, loss of tooth vitality, missed or unrecognized pathology, traumatic injury, and the list goes on. In our zeal to learn and employ the latest and greatest whatever, our dojo is often the school of hard knocks. We must always remember that there is a patient at the receiving end of everything we do. When we are trying things for the first time, we should endeavor to treat slowly and immerse ourselves in the water inch by inch instead of diving right into the deep end. We should embrace new technology but not to the extent that it envelops us and blinds us from using common sense.

5. Venerate Life

Dr. Buchwald was literally to referring to life versus death decision-making. In our sphere of influence, we need to think about what role we can play to best help preserve the patient's dentition, occlusion, function, and esthetics through the provision

of orthodontic services. For example, during the adolescence of orthodontics, we hotly debated extraction versus non-extraction therapy. Now, more than three quarters of a century later, we are still having issues with this concern. A stronger consideration for today's practitioner is the role that limited treatment plays in the orthodontic healthcare arena. One big question we must answer is to what extent can we allow autonomous patients to dictate accepting only limited forms of treatment when we know that there are other orthodontic concerns that are not being addressed? Another issue is, can we acquiesce to a patient's demand that a specific appliance be used when using a different one might be more within our comfort zone? Yet another issue might concern the touting and or use of invasive modalities to accelerate treatment or provide anchorage when less invasive ones exist? In other words how should we balance any number of and degrees of co-morbidities that may be associated with treatment, especially if it is questionable as to whether or not they enhance the orthodontic trilogy of occlusion, function and esthetics?

6. Be proud of your craft

Dr. Buchwald recited a story wherein the surgical aspect of a patient's care was sandwiched in between the ministrations of the internist and the cardiologist, reducing his role to essentially what one could consider doing nothing more than practicing prescription surgery. He strongly believed that surgeons were physicians first and surgeons second. He also opined that a surgeon was one who could independently assess the medical needs of the patient and then address them through surgical intervention if such was required. He concluded that possessing a high degree of manual dexterity did not preclude him from being able to think. We are faced with the same thing. The primary care practitioner, be it the general or family practitioner or pediatric dentist, with natural extensions to the restorative dentist or prosthodontist, often

sees the orthodontist as nothing more than a tooth jockey who moves teeth from one spot to another in preparation for the rehabilitative aspects of a given case.

While this may be true in certain cases, I have always taken the position that we are physicians who have chosen to specialize in dentistry, and then purse a sub-specialty in orthodontics. As an orthodontist I have been a dermatologist who has picked up certain diseases of the skin and made an appropriate referral; I have been an otolaryngologist who has discerned certain breathing impairments and managed the patient appropriately; I have been a surgeon removing excess soft tissue when it was required; I have been a pathologist having detected oral cancer; I have been a radiologist detecting hard and soft tissue pathologies and managing them appropriately; I have been an orthopedist changing the shape and size of facial bones; I have been an internist diagnosing certain communicable diseases and managing them via referral; and I have been a psychiatrist having to deal with parents and patients regarding the child's chronic affluenza. Oh yea, I move teeth too.

I have never liked the fact that in many orthodontic educational venues, the discipline of orthodontics was pigeonholed into the division of growth and development merely because the bulk of our patients were adolescents. If anything, when one examines what we really do, one can't help but conclude we belong under the umbrella of oral rehabilitation. We change faces, we change occlusion, we change perioral esthetics, we change personalities, we change lives, we really do make a difference.

I'm very proud of my craft, as was my father and grandfather; both of them, like myself, Board Certified Orthodontists.

7. Think creatively

I can remember as a child listening to Lou Costello explain to Bud Abbot how a loaf of bread was the mother or an airplane since bread is a necessity and an airplane an invention and we all know that necessity is the mother of invention. Let me quote what Dr. Buchwald had to say about this.

> Laboratory or clinical research leads to invention, and invention is the product of imagination. The imaginative process can be stunted by over-reading or over-analyzing at the beginning of the process. An idea should be dissected, contemplated, and relished by its originator before it is subjected to critical examination. …[T]hink first, then read, then think again, but don't read voluminously at first, for that may inhibit a good thought.

Orthodontists are a creative ilk. Everyone with an idea, an ego, and a soap box has an appliance, cephalometric analysis, bracket prescription, or technique named after him. We utilize implants, on-plants, transplants and other forms of horticulture as we go about attempting to modify dentoalveolar proceeses; and we jump at the opportunity to adapt all new forms of technology to facilitate our ministrations both clinically and administratively. My concern, somewhat facetiously, is that if we are not careful, we may become so technologically dependant that we invent ourselves out of a job. In the end, we must not embrace technology to the point of being perceived as mere professional technicians but rather as the enlightened technological professionals that we actually are.

8. Be of Service to the community

Orthodontists are fortunate to be members of a very exclusive club. The membership fee is a few hundred thousand dollars of educational debt accrued over about 10 years and paid back in about the same time, give or take a little. Membership confers the opportunity to make a great living, be a respected member of the community, and a role model for many. At some point we all need to consider giving back to the community that afforded us this lifestyle. Community activities, service organizations, public service or supporting educational endeavors, charitable giving and of course pro bono care to those in need are but a few ways of giving back to those who have given us the privilege to be privileged.

9. Know where we are in our professional time line continuum

As a profession we started at the mechanical level. We then progressed to mastering diagnostics. We then reverted back to mechanics. We forayed into growth prediction and fell back into our mechanical safety net. We are now exploring gene therapy and other biologic interventions. As we progress it will all come back to moving teeth until we find a way to not allow them to get displaced in the first place. Continuing education is the only way to stay relatively current within one's field of endeavor. We must all fulfill the promise that we made at the beginning of our careers, that we would maintain the status of being a lifelong student.

10. Joy is in the Process

The true joy of orthodontics lies not in achieving great outcomes every now and then; not in being financially successful, although it doesn't hurt; and not in winning awards or accolades. The true satisfaction comes from treating and bettering the lives of our patients. It comes from looking at every case and although many look the same,

upon closer examination, you come to realize the differences between them. It comes from identifying these subtle discrepancies and then discerning different ways to differentially deal with them. It comes from finding new ways to address clinical problems; from having access to the vast array of various widgets and gizmos at our disposal, and from drawing on our creativity to solve mechanotherapeutic challenges. The joy comes from being able to best unpredictability when it comes knocking.

You will be spending the majority of your adult life practicing orthodontics. If it ever becomes mundane, tiresome, boring, or worse, something you no longer want to face on a daily basis, it may be time to hang up your spurs. Orthodontics itself is the joy. I was recently asked by a high school senior, who was trying to find out what he wanted to do with his life, what it was that drew me and kept me in orthodontics for the last 40 years. The answer was so simple. I looked him straight in the eye and said: “”I can take teeth and move them from one place to another, without damaging them, put them in a position to function properly, and at the same time produce a great looking smile. How cool is that!”