Editorial

The State of Our Specialty

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Today's orthodontists have a multitude of treatment pathways from which to choose. One-phase or two-phase; extraction, expansion, or fixed distalization; functional, fixed or both appliances; nonsurgical or surgical; space closure or implants, ''this-bracket'' or ''that-bracket'': these are but a few of the choices we may face routinely.

The scientific and professional literature today is packed with more reports than an active specialist in orthodontics can possibly read. For each treatment approach, articles can probably be found that would validate or invalidate the method, depending on one's point-of-view. So where can one turn for sound, unbiased direction? The bad news is that good clinical advice is harder than ever to find. Even presentations at meetings are becoming somewhat deceptive and exploitive.

Think again when you view the next polished PowerPoint presentation at an educational course or meeting. Many of these shows are designed to persuade or entertain, rather than to educate. For example, don't be deluded by shows offering the secrets of ''smile beauty.'' That is largely about romance, not science. What most orthodontic patients and their parents really seek are straight, white teeth. Most adolescents have little interest in the position of their facial profile or smile line. An orthodontist's primary obligation is still to straighten teeth and adjust jaws so they will be in the best functional, stable relationships. That should continue to give us more than enough contentment and challenge.

We need to apply critical thinking when commercial interests try to foist substandard methods on us. In highly developed markets like North America and Western Europe, demand for orthodontics has escalated so much that treatment is often sought for very mild malocclusions. With minor discrepancies, almost anything works, including methods with serious biomechanical limitations, such as the proprietary Invisalign system. If a shallow treatment approach gains a sizable following, we risk bringing down our high orthodontic outcome standards. Orthodontists know that there are rarely shortcuts to quality treatment.

We must be sensitive to the delicate position of contemporary orthodontics within the university context. It took several hundred years for dentistry to advance from an itinerant trade to a learned profession. If a typical orthodontic treatment plan is perceived as the self-insertion of a series of laboratory-fabricated plastic templates in order to achieve smile beauty, then universities may reconsider our present role there as a biologically based healthcare service. If we practice as *de facto* cosmetologists, we eventually may be voted off the hallowed ''island'' of healthcare. We must take all measures to prevent this demotion from ever happening.

Is it *déjà vu*, or are we seeing an entirely new generation of nonextractionists rationalizing their methods anew? Nonextraction doctrines are being heavily promoted by many orthodontists and generalists today, sympathetically playing on the chords of parents and patients, as they did nearly a century ago. With gently expanding nickel-titanium (NiTi) wires and new distalizing mechanisms, Wolff's Law is being put to the test again to force the dental arches to fit the teeth. Orthodontic extraction frequencies of near-zero are being reported for some North American and European practices, although we know epidemiologically that 15% to 25% of these populations display severe arch-length/tooth-size discrepancies. Even in Japan, where approximately 70% to 80% of orthodontic patients present with significant dental crowding, there is a thriving group of militant nonextractionists. We must remember that it takes much more skill and patience to control an extraction treatment than to round out a nonextraction approach. That's the sad news: orthodontic skill and patience seem to be in short supply.

Lest the orthodontic picture today appear too dark, many developments are enlightening and empowering our wonderful specialty to new levels of achievement. Rapid palatal expansion in our growing patients is probably one of the greatest orthodontic advances of the last century. Interdisciplinary treatment approaches with help from surgeons, periodontists and prosthodontists have extended our therapeutic boundaries. New materials for fixed appliances and super-elastic wires have softened considerably the biological and psychological shocks to our patients. Digital imaging, and Internet-based communication and research have given us diagnostic accuracy and versatility unimaginable just a few years ago. With the miracles of modern electronics and online publishing, information exchange has never been easier between orthodontists separated by thousands of miles. We have become indeed a global community of specialists, sharing the same evidence base, the same patient-centered values, and, yes, the same worrisome vulnerabilities.