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THE EDITOR'S CORNER

Adult Treatment in the 21st Century

When I was in dental school back in the '70s, the amount of our DDS curriculum devoted to clinical orthodontics was exactly one class, for one credit hour. In that class, we received a general overview of facial growth and development, a bit of instruction on space maintainers, a lecture on mixed-dentition space analysis, and precious little training in actual orthodontic treatment procedures. One thing I remember well from this limited introduction is the professor's insistence that orthodontics was mainly for 11-to-14-year-olds. Treatment before that age was limited to serial extractions, correction of developmentally detrimental crossbites, and space maintenance. The few adult cases usually involved a handicapping Class II or Class III malocclusion (I vividly recall his referring to these Class IIIs as "Hapsburg chins", in reference to the Austrian ruling family known for its pronounced mandibular overgrowths), which was dealt with in conjunction with orthognathic surgery. My old professor went on to point out that a small number of patients, whom he considered unreasonably vain, did seek out conventional orthodontic care, and that a few orthodontists-presumably the lunatic fringe, to his way of thinking-would actually treat these prima donnas. We students, in all of our academic innocence, accepted his sage wisdom: Orthodontics was for kids.

Jump ahead 30 years: I am now in charge of the largest orthodontic training program on the West Coast. I doubt that any of my current students could be considered "innocent", but they still seem willing to accept most of what their old professors have to say. One thing that we emphatically do *not* say any more is that orthodontics is strictly for kids. The last time I checked, about 75% of my patients-three out of four-were adults. This is a far cry from the percentages in my early years, when adults made up only 5-10% of my practice. At the USC Department of Orthodontics, we were recently forced to make a decision that would have seemed unthinkable just a few years ago: We had to limit the number of adult cases accepted for treatment by our residents, so they would be able to gain

the experience they need in managing mixed dentitions and growing mandibles.

Why the turnaround? One explanation is economic. In the early years of dental insurance, many policies simply did not cover adult orthodontics. At USC, most of our adult patients are employees of the university, and their dental insurance covers a portion of orthodontic treatment costs up to a lifetime maximum. This accounts for the disproportionate percentage of adult patients in both our graduate clinic and faculty practice.

Another influential factor is the demand for an attractive smile and face in today's competitive social environment. A massive amount of research in the social psychology journals verifies the importance of facial esthetics; in fact, other than the socioeconomic status of the family into which a person is born, there is no more crucial influence on a life's trajectory than facial appearance. That same body of literature points out that the teeth and smile are second only to the eyes in significance of psychological impressions formed on the basis of facial appearance. Adult orthodontics can make a decisive contribution to facial attractiveness.

Thirty years ago, the options available for adult treatment were basically the same as those available for the treatment of adolescents. If adults wanted orthodontics, they had to put up with the same "railroad tracks" that were used on their kids. Things have changed so much today that the sheer variety of treatment methods makes it difficult to keep up with what is actually available. The revolution began with direct bonding, which made it possible to eliminate bands on most teeth. This was rapidly followed by the development of "esthetic brackets"-first plastic, then ceramic, then sapphire, as well as the hybrids and miniaturized metal brackets-to the point that labial appliances virtually disappeared. It was only a short step from there to "invisible braces". Lingual brackets made their first appearance in the late '70s and have been evolving ever since, especially in Asia, where they remain popular. The other "invisible" approach is the Invisalign technique. Now that most of the initial bugs have been worked out of this system, it is truly amazing what it can accomplish. Some 85-90% of my prospective patients ask about the possibility of using Invisalign, and over the last three years, my confidence in saying "yes" to their inquiries has skyrocketed.

This issue of JCO is devoted to adult orthodontic treatment. We present some rather astounding results, at least to my eye, using approaches that would not even have been considered until recently. We also examine the aspects of treatment financing and management that are unique to the adult patient.

Several years ago, I wrote a column on the "New Golden Age" of orthodontics. It may well be that the myriad opportunities and treatment possibilities for adult orthodontics are the hallmarks of that new era. My thanks to the authors for this remarkable update.

RGK