

## THE EDITOR'S CORNER

### The Fascination of the Class II

The Class II malocclusion, in all its permutations, seems to hold a special interest for orthodontists, whether they are in private practice or academics. It is a rare month when we at JCO do not receive at least one paper dealing with some innovative way to treat Class IIs. Class III malocclusions certainly present an equally challenging diagnostic dilemma for the practicing orthodontist to ponder and overcome, yet very little appears in print about them compared to Class IIs. Class I malocclusions offer nearly as much variety as Class IIs—they can come in high- or low-angle faces, they can be crowded or spaced, and they can present with bilateral, unilateral, buccal or lingual crossbites, just like Class IIs—and if we consider a subdivision case to be a unilateral Class II, nine times out of 10 the other side is a unilateral Class I. Even though most studies, both formal and informal, show that Class I crowded situations account for the majority of orthodontic cases, the articles on Class II far outnumber those on Class I. Why is that?

American orthodontists don't treat that many Class III malocclusions, and our treatment options for them are somewhat limited. Whereas even a rather significant Class II can be treated non-surgically, once a Class III gets past the "moderate" classification, our choices are pretty much limited to one- or two-jaw surgery. Perhaps Class I cases are somewhat boring because their correction generally involves only space management, vertical control, and transverse issues. Class IIs, on the other hand, present the dilemma of sagittal correction. Remember that the sagittal difference between the typical Class I and the typical Class II (if there is such a thing) is only about 2-4mm. Still, it seems to make all the difference in the world with regard to orthodontic creativity and ingenuity. Again, I ask, why is that?

If I were to hazard a guess, I would say it is because Class IIs lend themselves to the pursuit of gadgetry. Most orthodontists I know are true aficionados of gadgets. Any new invention in orthodontics is met with as much acute interest as guarded skepticism. New inventions fascinate

us. Furthermore, it seems to me that genius and inventiveness go hand in hand. Giants of our profession such as Angle, Begg, Steiner, Downs, and Ricketts, while relatively unknown to the general public, are held in the same regard within the specialty as da Vinci, Edison, and Goddard. It is reasonable to assume that the malocclusion that offers the most diagnostic challenges and treatment options would hold the most appeal for such people. Hence, the great interest in the Class II.

Dealing with that 2-4mm of sagittal correction presents the creative orthodontic inventor with a myriad of possibilities. Where does the discrepancy come from? Is the mandible too far back? If so, can I devise an appliance that will bring it forward permanently? Is the mandible too short? If so, can I devise an appliance that will make it longer? Is the lower dentition too far back? Is the maxilla itself too far forward? Is the maxillary dentition too far forward? When you throw in the dynamics of patient growth, the numerous vertical considerations, and the ubiquitous problem of patient compliance, the potential for invention is boundless.

Indeed, orthodontists the world over have planted this fertile ground for more than 150 years. Devices and techniques have been introduced to address every conceivable etiology of a Class II relationship: extraoral appliances for maxillary anchorage, intraoral appliances for maxillary anchorage, functional appliances to "stimulate" mandibular growth, not-so-functional appliances to stimulate mandibular growth, appliances that are totally dependent on patient compliance, appliances that are almost independent of patient compliance. The list goes on and

on. Concomitantly, there have been a number of efforts over the years to bring some order to the apparent chaos of the world literature describing these Class II appliances. Given the high level of inventiveness in our specialty, this a never-ending effort. Nevertheless, it would seem helpful to adopt the old battle adage of "divide and conquer", partitioning the available information into smaller, more digestible chunks.

To that end, JCO has commissioned two Overview articles on the subject of Class II correction. In this issue, Dr. Cheryl Berkman and I survey the literature on intra-arch maxillary molar distalization appliances. While Dr. Berkman was one of the hardest-working and most intellectually gifted graduate students I have been fortunate enough to work with, and while she devoted a considerable amount of time and effort to our literature search, it should by no means be considered an exhaustive treatise on the subject. I would not be surprised if several new papers have appeared since we conducted our review. What we hope we have done is to present an article that will be of assistance to the practicing orthodontist who wants to compare the pros and cons of the more popular molar distalizers. I apologize to any ortho-inventors whose devices we may have missed, and I extend an invitation to them to submit papers on their respective appliances. In a future issue, another team of co-authors will present an Overview of the interarch Class II devices. I welcome feedback from our readers on this approach to taming the somewhat intimidating literature on Class II correction, and I also welcome suggestions for other, similar overviews.

RGK