What’s with the Long Face?

Long-face syndrome has been a vexing problem for orthodontists, oral surgeons, and otorhinolaryngologists for some time now. I have heard it debated whether this particular constellation of clinical signs and symptoms—dolichocephalic facial skeletal pattern, high mandibular plane angle, anterior open-bite tendency, high-arched palatal vault, and malar insufficiency—is indeed a true syndrome in the strict sense of the word. Still, the mere fact that a patient may walk into our office with such manifestations justifies our investigation of the subject.

Over the years, a number of articles have appeared in JCO dealing with the diagnosis and treatment of long-face syndrome. In 1977, Schulhof proposed a visualized surgical treatment objective that would compensate for perceived deficiencies in the available cephalometric analyses.1 In 1979, Rutkowski, Sanders, and Wolk addressed the topic in a JCO interview on surgical orthodontics.2 In 1980, the renowned duo of Epker and Fish dealt with presurgical planning for the long-face patient.3 Unfortunately, this preponderant association of long-face syndrome with orthognathic surgery, which can also be noted in other journals, might lead the clinician to conclude that surgical intervention is the only choice for long-face patients. Given that many patients refuse to consider surgery, it would seem that the orthodontist is frequently left with few options.

Actually, the literature is not completely devoid of papers on the non-surgical management of long-face syndrome. One portion of a 1982 JCO Roundtable on the Begg technique, moderated by Barrer, described how the syndrome is managed in that doctrine.4 In 1979, Rutkowski, Sanders, and Wolk addressed the topic in a JCO interview on surgical orthodontics.5 In 1980, the renowned duo of Epker and Fish dealt with presurgical planning for the long-face patient.6 Unfortunately, this preponderant association of long-face syndrome with orthognathic surgery, which can also be noted in other journals, might lead the clinician to conclude that surgical intervention is the only choice for long-face patients. Given that many patients refuse to consider surgery, it would seem that the orthodontist is frequently left with few options.

Actually, the literature is not completely devoid of papers on the non-surgical management of long-face syndrome. One portion of a 1982 JCO Roundtable on the Begg technique, moderated by Barrer, described how the syndrome is managed in that doctrine.4 In 1985, Mizrahi introduced his “positive intermaxillary pressure appliance” specifically for long-face patients.5 Also in 1985, Owen developed a modified Fränkel appliance for cases of vertical maxillary excess.6

Most of the non-surgical approaches involve extractions, which are used in these patients not only to address the typical indications—crowding, incisor flaring, and bimaxillary protrusion—but also to allow forward move-
moment of the posterior teeth (“burning anchorage”), thus closing the maxillomandibular angle and reducing anterior facial height. In the classic Tweed-Merrifield approach, the bite closure is achieved with J-hook headgear and Class II elastics. Having spent a number of years on the faculty of the Department of Orthodontics at the University of Tennessee School of Dentistry, a stalwart bastion of the Tweed Philosophy, I saw the dramatic improvement in facial appearance, occlusion, and respiratory function that can be achieved with this technique. Nowadays, however, it seems to be more and more difficult to get adolescent patients to actually wear the headgear and elastics.

In this issue of JCO, John DeVincenzo, who has long been a highly creative orthodontic inventor, introduces a non-surgical approach that does not require special patient compliance. Dr. DeVincenzo is one of the pioneers of intraosseous anchorage: he was using skeletal pins as temporary anchorage devices years before the current explosion in the popularity of mini-screws. Although a number of authors have demonstrated the ability of skeletal anchorage to facilitate intrusion of single teeth or segments of teeth, the present two-part series is the first published demonstration of the simultaneous intrusion of an entire dental arch.

Dr. DeVincenzo showed me his Vertical Adjustable Corrector at last year’s AAO annual session in San Francisco. When I found him at his booth, he smiled impishly and said, in his typically modest fashion, “Take a look at this.” He produced a photo album about the size of those my wife has assembled over the years, one for each of our four children. The pride in his eyes was the same as my wife’s when she displays those photos of our kids. Dr. DeVincenzo’s album, however, contained clear photographic documentation of an impressive number of long-face patients he has treated in recent years, using intraosseous anchorage, an auxiliary bar applied superior to the upper arch, and intrusion elastics. You can examine some of these results in our March and April issues.

I have to say I am always a tough sell on new gadgets and procedures. It took me several years in each case before I bought into direct bonding, photocured adhesives, “braceless” orthodontics, and, now, mini-screws. But Dr. DeVincenzo’s technique has already made me a convert, and it has likewise impressed a number of audiences of both surgeons and orthodontists here on the West Coast. After one meeting of a group of oral and maxillofacial surgeons, an attendee remarked, “This is really a paradigm shift in the management of vertical maxillary excess. We may be out of that business!” While that comment may be a bit premature, Dr. DeVincenzo’s results are undeniable. See if you don’t agree.

RGK

REFERENCES