

ART WOOL, DDS 1928-2013

Thank you to Dr. Art Wool, DDS, for his contributions to the orthodontic field and Modern Arch.

Easily Treating Severe Bimaxillary Protrusion with Profound Facial Distortion Art Wool, DDS, Reading, Pa

ould it not be a wonderful state of affairs if when a severe bimaxillary protrusion with profound facial distortion showed up at your office for treatment, a smile comes to your face because you know how easy it will be to treat the case? This also includes severe singular maxillary protrusion.

I have found a way to arrive at this blissful state as well as to treat such cases with nothing but arches and elastics. That is right; you will never have to reach for anchorage aids to assist you in maintaining the posterior dentition, and that includes lingual arches and struts, sectionals, palatal bars or buttons, face bows, and, yes, even TADs. You will be able to easily hold the posterior segments in place as the anteriors are reduced, when, normally, this would involve four first bicuspid extractions.

It is important to be able to start treatment as soon after the extractions, as teeth are going to start to drift and this would include the posteriors coming ahead. In certain cases it might be prudent to have all teeth banded and ready to go prior to the extractions.

Aligning should be done as quickly as possible, with crimp stops placed against the mesial of all second bicuspids to minimize posteriors coming ahead. If protrusion exists in both jaws, round reverse curve arches should be placed in both jaws as soon as possible. This will essentially stop posterior mesial drift due to the action of the reverse curve arch action upon the molars. The R/C arches should display an upward curvature in the upper jaw and a downward curvature in the lower jaw. A bit of all arch ends should protrude beyond the buccal tubes so as to preclude the arch ends from becoming caught in the buccal tubes.

The inclined planes that are produced by the end portion of the R/C arches and the end of the buccal tubes will induce a distal creep of the R/C arches, with the ends moving bit by bit out of the buccal tubes. This is of minimal force, but it will not only stop any posterior mesial drift, but it will also induce a slight retractive force upon the anterior teeth.

If this set of mechanics is left intact for a sufficiently







long period of time, you would actually close all extraction spaces and reduce the protrusions. However, the anterior reduction is too slow for total dependence upon this form of retraction, so a combination of Class I and Class II (if indicated) elastics are employed to speed up the end result. The R/C action is such that it allows for greatly reduced elastic force, and seldom, if ever, will elastic force be needed that is greater than 11/2 ounces. This elastic force can be added to the R/C arches by the attachment of

crimpable hooks to the arch.

This allows you to spare your patient a lot of unnecessary hardware being placed in the mouth as well as a very substantial reduction in total force applied during the treatment months. Heavier and dimensional arches can be employed to effect any torque corrections needed.

In the end, you have done the patient a magnificent service, spared yourself a lot of work, and reduced the chances of the loss of posterior anchorage as well as maximized the esthetic improvement.