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THE EDITOR'S CORNER

Taking Adequate Records

I guess all of us have our heroes as we go through life. Most of mine have been the simple, straightforward, no-nonsense types. When I began my specialty training in orthodontics, there were many giants of the profession—Angle, Steiner, Moss, Ricketts, and others—but to me, one stood out as a personal hero. The very name of Charles H. Tweed still brings a swell of admiration in me when I hear it. His refinement of Angle's edgewise appliance, his development of the diagnostic triangle, and his revolutionary application of bicuspid extractions and extraoral traction to redirect facial growth, all combined with his step-by-step approach to basic treatment mechanics, allowed him to do things with facial esthetics and the correction of malocclusions that were considered nearly impossible for his time. While his strict approach to diagnosis, treatment planning, and treatment biomechanics may strike some practitioners nowadays as overly tedious and dogmatic, there can be no denying the quality of results he produced.

Tweed was highly systematic in all aspects of orthodontics, but he was most demanding in the area of treatment records. His reasoning was that if you did not have impeccable starting records, you could not make an impeccable diagnosis. Likewise, without adequate interim records, you could not tell where you were relative to your treatment goals, and without adequate debanding and post-retention records, you could not adequately assess your outcomes and learn from each of your cases. Simple. Straightforward. No nonsense.

Most practitioners today have a less dogmatic approach to record taking than Tweed taught. Perhaps because preprogrammed appliances allow us to achieve clinical results close to what Tweed produced with much less effort, there seems to be an increasing tendency toward inadequate or improper orthodontic treatment records. In conversations with several current and past examiners from the American Board of Orthodontics, I learned that a large proportion of the failures on Part III of the certification examination every year are due to

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poor or missing records. While a doctor's treatment of a particular case may well have been very good, that doctor was unable to document exemplary treatment.

Every month, JCO receives a number of case reports submitted for publication. Like the ABO, we have to reject many of them due to inadequate records. Our technical standards for both analog and digital records are clearly spelled out in the "Guide for Contributors" (see p. 106 of this issue). What we do not address in our guidelines, however, is what constitutes an adequate number of illustrations. Many potential authors submit illustrations of treatment records that are technically adequate in quality but are lacking in quantity. It is particularly frustrating for an editor to receive a well-written paper containing information that would be of benefit to our readers, only to have to turn it down because the author did not take appropriate interim or post-treatment records. We frequently see articles extolling the virtues of a new appliance or treatment approach that we have to decline because the author does not have photos of the appliance "in action", or fails to produce post-treatment photos illustrating a well-finished case or clear treatment effect.

Tweed's recommendations on good records are as valid today as they were in 1950. Always take high-quality pretreatment photos, including facials with and without smiles and right profiles, as well as intraoral upper and lower occlusal shots and frontal, right, and left buccal shots in centric occlusion. "High-quality" implies that the subjects are in focus and that the object-to-film distance is such that we can clearly see from the Adam's apple to the crown of the head in facial photos, from distal molar to cuspid in buccal shots, and from cuspid to cuspid in frontal shots. The intraorals should be taken at a right angle to the facial surface of the middle tooth in the field of view. Occlusal shots should be taken at a right angle to the occlusal plane and should cover from molar to molar while clearly showing the incisors' occlusal edges. Cephalograms should display the soft-tissue profile from the upper third of the forehead to the Adam's apple vertically and from the tip of the nose to an area at least 3mm posterior to opisthion horizontally. All cephalometric landmarks should be clearly visible and in focus. Panoramic radiographs should extend from an area posterior to the left condyle to a similar area posterior to the right condyle. Any other radiographs submitted should meet the common-sense tests of both clarity of focus and clarity of purpose. All case reports should include pretreatment, debonding, and at least one-year post-treatment records. Interim records should be used to illustrate case progress and particular treatment effects if the paper is being submitted to introduce a new appliance or approach. There is no rule of thumb as to when interim records should be taken, but the idea is to take them when they would best illustrate the concepts the author has in mind.

Few cases are started with the intent of publishing the outcome. What generally happens is that at some point in treatment, the doctor realizes that this particular case has some feature that would be of interest to all orthodontists. At that point, the orthodontist begins the search for records to illustrate the intended case report. All too often, those records were never taken or were taken poorly. I am as guilty as the next guy. There is a simple, straightforward, no-nonsense solution to this problem—just like Charlie Tweed's. Take high-quality records in sufficient quantity for each and every case. If the urge to publish arises, the necessary illustrations will already be in hand. If not, the case will be adequately documented and will help improve treatment of future patients. RGK