PATHOPHYSIOLOGY AND PHARMACOLOGIC CONTROL OF OSSEOUS MANDIBULAR CONDYLAR RESORPTION

To the Editor—Although Gunson et al1 are careful to admit that their pharmacologic recommendations are not evidence based (“Basic clinical investigations and randomized clinical trials are still required”), one must be concerned that some readers will interpret publication by the Journal of Oral and Maxillofacial Surgery as a tacit acceptance of those recommendations. This clinical article actually should be a research proposal. The authors have developed several interesting hypotheses regarding the etiology and treatment of condylar resorption. However, science and good clinical practice demand that they subject their hypotheses to clinical investigation before starting drug therapy in their patients. As logical as the hypothesis may appear, it is simply wrong to move directly from hypothesis to treatment. Although I believe this is their first publication in a refereed surgical journal, these ideas have been published in the orthodontic literature since the mid-1990s. There has certainly been sufficient time to run a clinical trial or, at the very least, to perform a retrospective analysis of patients managed according to their protocols.

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Reference

http://dx.doi.org/10.1016/j.joms.2012.08.033

RESPONSE TO DR SCHWARTZ

To the Editor—We thank Dr Schwartz for commenting on our article. It is a leap of logic for Dr Schwartz to quote our request that our profession perform “basic clinical investigations and randomized clinical trials” in regard to condylar resorption and then state that the use of medications to control joint resorption is “not evidence based.”

Our article is rife with systematic reviews, clinical trials, case reports, and animal research that support the use of pharmacotherapeutics to control joint destruction in the face of inflammation. Any dosing regimen that is listed in our article is taken from the specific trial in which it was used or from the Food and Drug Administration’s approved and recommended dosage. For example, in the section entitled “Cytokine Control,” we discuss the use of etanercept and adalimumab, which are tumor necrosis factor-α inhibitors. Etanercept and adalimumab are medications approved by the Food and Drug Administration for the “signs and symptoms of severely active rheumatoid arthritis.” Mandibular condylar resorption is a known sign of rheumatoid arthritis. Another example from our article is in the section called “MMP Inactivation by Tetracyclines.” We cite the systematic review of 10 clinical trials that successfully used tetracyclines to control joint erosions and symptoms. Systematic reviews and meta-analysis are found at the top of the hierarchy of evidence. Also, in the section entitled “Inhibition of Prostanoids and Leukotrienes by Omega-3 Fatty Acids,” we cite 3 clinical trials using ω-3 fatty acids for controlling the effects of inflammatory arthritis on joints.

Dr Schwartz says: “these ideas have been published in the orthodontic literature since the mid-1990s.” If this quote refers to the use of medications to alter articular bone loss, we would contend these articles do not exist.

As for performing clinical trials or retrospective analyses on our own protocols, we reported (abstracts have been published) at the International Association of Oral and Maxillofacial Surgeons’ meeting in Santiago, Chile on the status of 2 on-going studies.1,2 Recent publications have reported decreases in orthopedic surgeries in patients with inflammatory arthritis. They attributed the decrease to the advent of more effective erosive-preventing nonsurgical therapies.3,4 If the use of medications to control joint erosions were not evidence based, the field of rheumatology would have difficulty justifying its existence.

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http://dx.doi.org/10.1016/j.joms.2012.09.003