

## Authors' response

Dr. Mintz states in his letter that a major point of difference between our article and his is the fact that we studied patients with chronic symptoms while he reported on patients with acute symptoms.

However, in his article, on page 353, Dr. Mintz stated that his procedure "may be applied to acute or chronic TMJ conditions" and to "painful, spastic or trismus muscles of mastication". His article also begins with a case report of a 17-year-old female who had two chief complaints: (1) "non painful clenching in the right TMJ" and (2) "persistent slight to moderate headaches in the midfrontal area for the past year". Pain complaints such as the latter are generally considered chronic when their duration exceeds 6 months.

Since many acute temporomandibular disorders (TMD) are self-limiting over time, it was our expressed intent to study the more intractable pain and bruxism in the chronic myofascial pain-dysfunction (MPD) patient. Dr. Mintz's letter incorrectly states that we studied "TMJ" patients. Our study was based upon an assessment of a sample of chronic (>1 year) bruxers who were concomitantly suffering from chronic (>6 months) myofascial pain symptoms but did not have TM joint pain. We recruited a patient sample with chronic disorders because we believe that chronic problems are less likely than acute ones to regress to the mean of normalcy on their own. That is, almost any type of

treatment may initially be effective because of: placebo effects; psychological reaction to doctor-patient interaction; or because some patients are on the 'down-side' of the pain-relief-pain cycle (regression to the mean). So improvement of pain, bruxism or any other symptoms may be coincidental. Without controls and objective measures, a clinical evaluation is subject to many possible biases that could seriously affect the reliability and validity of the conclusions.

Mintz states that our study was less than sensitive. If he is referring to reliability and validity, our study used objective measures and a control group. It would appear that Dr. Mintz's study was based on the results of the report of a single case. There is an inference made that, "The procedure described here has proven to be a simple and effective method for alleviating pain for many TMJ patients" (page 353), however no empirical data are provided to support his statement.

We do agree with Dr. Mintz that the results from our study should not suggest that future studies are not warranted. However, our findings provided no evidence to suggest that buccal separator elastics are an effective means of eliminating chronic bruxism or chronic MPD symptoms in bruxing patients.

James M. Abraham, DMD, MDS

Calvin J. Pierce, DMD, PhD

Donald J. Rinchuse, DMD, MS, MDS, PhD

Thomas G. Zullo, PhD

Pittsburgh, Penn.

I appreciate that we may now agree on the warranted values of future studies on separators for acute TMD/TMJ related pain and symptoms.

Pittsburgh conducted the first scientific study of my separator technique discovery for pain alleviation. For this effort, and for their sensitive clarification of their study's research implications, gratitude is felt.

Separators target acute pain symptoms and acute episodes (freeway space altered patients' responses are not predictable). They may be employed on or under a variety of presenting conditions, and they

may be used before, during, or after orthodontic treatment; however, they function most effectively for acute pain abatement.

Separators' amelioration of acute pain is usually immediate and dramatic. Researching the underlying principles therein, given the exigencies of acute pain, can only bear fruit.

I was pleased when *The Angle Orthodontist* first disseminated my separator technique discovery in 1988 and I appreciate the additional opportunity to share my current views.

Dr. Alan H. Mintz