TO THE EDITOR

I write to you in regard of the article “Prevalence of temporomandibular disorders in relation to some occlusal parameters,” by Dr. L. A. Al-Hadi (J Prosthodont Dent 1993;70:345-50).

This article claims to establish the prevalence of temporomandibular disorders in a sample of 600 asymptomatic subjects. In a group of asymptomatic subjects, the prevalence of temporomandibular disorders is zero by definition. If the symptoms are not there, why would one want to study the prevalence?

The work makes the flawed assumption that signs are an expression of disease in each and every case. However, signs can be an expression of normality, can represent a pre-clinical feature, or truly be the reflection of an ongoing disease process. If signs are linked to a disease process, there is a great likelihood for symptoms to be associated with it. However, this possibility was excluded in the design of this study by limiting case selection to asymptomatic subjects.

The employed case definition of using signs as an indicator of temporomandibular disorders is extremely sensitive; however, it lacks specificity to be meaningful. This questions the validity of the study. For this reason, no conclusions should be drawn from this work.

CHRISTIAN S. STOHLER, DMD, DR MED DENT
Professor, Department of Cardiology and General Dentistry
Research Scientist, Center for Human Growth and Development
The University of Michigan
School of Dentistry
Ann Arbor, Mich.

Reply

TO THE EDITOR

I would like to thank Dr. Christian Stohler for his scientific dialogue on my article, “Prevalence of temporomandibular disorders in relation to some occlusal parameters.” I would hope that my response will be an introduction to more comprehensive bilateral cooperation in the field of occlusion and temporomandibular disorders.

Asymptomatic subjects do not mean zero disorders (as mentioned in the comments), because the subjects may have signs of TM disorders instead of symptoms. The epidemiologic studies on a given disease or syndrome are performed on asymptomatic subjects to reveal the exact occurrence and distribution in the population. Another consideration is that generally individuals do not seek medical help until they experience abnormality or pain, which is always the case in TMD. In this situation the individual will be symptomatic and the signs can be associated with symptoms. The word sign means any objective evidence of disease (noticed by the practitioner); therefore, signs cannot be used in any way to describe the normality.

The symptom is a subjective phenomenon or manifestation of disease (noticed by the patient). In the design of this study, horizontal accumulation of data in regard to the signs of TMD in relation to the types of eccentric occlusion were used as guides to assess the best type of occlusion to be generated during occlusal rehabilitation and the effect of abnormal occlusal parameters in TMD generation. In other words, the zero signs of abnormality reveal the more healthy occlusion. The conclusions drawn from our study are important and conclusive. They are strongly supported by the electromyographic studies and are the most successful treatment methods in TMD.

LAITH ABD AL-HADI, BDS, DSO
P.O. Box 777
Mosul
Iraq