of that relationship are understood, and that joint disorders other than internal derangements occasionally occur.

The difficulty I have is that the physician-dentist community at large is not united in its approach to TMJ problems. This stems in part from the diversity of specialists and generalists who involve themselves in this area of medicine; the TMJ has been claimed by everyone but not really by anyone. It also comes about because ignoring the TMJ in medical and dental curricula causes inadequate education about the TMJ. A third reason is the quagmire of literature that mixes fact and fancy. How do you get such a diverse group to begin a methodologic approach to dealing objectively with this population of patients? If you consider that this is not our concern as radiologists, then you take the position of cheapening your value as a consultant. Will you encourage referrals only from doctors that you think are qualified to treat patients who have TMJ disorders? Will you perform expensive tests even though you know that the information gained will be of no benefit, or even to the detriment, of your patient? How do you determine an algorithm for imaging when the management philosophy most probably is flawed? This is the point I was trying to make in "Imaging of the Temporomandibular Joint, 1989."

Again, I wish to say that collaborative research with the aid of special imaging will help improve our understanding of the etiology, functional pathology, natural history, and proper treatment of TMJ disorders. However, perhaps I am obliged to add that educating ourselves and our colleagues who refer patients to us (and this is after all once again emphasizing the basic role of the radiologist as a teacher) certainly will help get diagnosis and treatment of TMJ disorders on a rational, scientific footing.

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## Terminology for Herniation of Intervertebral Disks

I read with interest Dr. Taveras's editorial entitled "Herniation Intervertebral Disk: A Plea for a More Uniform Terminology [1]. I agree that radiologists must develop a standard terminology. However, I propose a different approach from that of Dr. Taveras. Rather than use "disk protrusion" as a synonym for "disk bulging," as Dr. Taveras suggests, I recommend we use the term disk protrusion as a generic expression to refer to any abnormality in which disk material projects into the spinal canal. This would include true nuclear herniation as well as what now is termed disk bulging. This would make it possible to use the expression disk protrusion the same way the word "osteopenia" is used in conventional spinal radiology.

My reasons for these suggestions are as follows: (1) In many cases, I find it difficult to decide if herniation of the nucleus pulposus is present; (2) actual herniation may not be the only clinically significant disk abnormality (i.e., anular protrusion may be clinically significant); and (3) the meaning of the word protrusion is ideal for the use I propose. Also, it does not have the benign connotation of the term disk bulging (a consequence of years of reports on CT scans).

It is not my intention to have radiologists avoid making a decision by using a term such as disk protrusion. Certainly, in many instances, they can be sure that a herniated nucleus pulposus is present. It is just that we need an expression that allows us the flexibility of describing a significant extradural disk abnormality independent of whether we think the abnormality is a herniated nucleus pulposus. I think that the term disk protrusion serves this purpose.

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1. Taveras JM. Herniated intervertebral disk: a plea for a more uniform terminology. *AJNR* **1989**;10:1283–1284

*Reply*

I fear that Dr. Horowitz's simplification is exactly the thing that we should avoid. I agree that a disk that goes beyond its margins is, by definition, a protruding disk. However, the protrusion may be "generalized," which denotes a degenerative process but does not necessarily imply that a lesion is or is not clinically significant. Also, the protrusion may be "focal," which by definition would be a herniation of the intervertebral disk. This does not indicate whether the lesion is clinically significant. The herniation could lie between the roots in the midline without compressing any root, or it could be so small that it does not displace or compress the roots. The conclusion that a generalized protrusion of the intervertebral disk is present should be followed immediately by the statement, "This most likely is due to disk degeneration," to make the interpretation clear.

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