Correspondence

The Editors will be pleased to receive and consider for publication correspondence containing information of interest to physicians or commenting on issues of the day. Letters ordinarily should not exceed 600 words and must be typewritten, double-spaced, and submitted in duplicate (the original typescript and one copy). Authors will be given the opportunity to review the editing of their correspondence before publication.

The Suffering of Dying Doctors

To THE EDITOR: In the January issue of the journal, Dr Bortz reported that a group of physicians in Palo Alto, California, follow good health care practices.[1]

These findings play an interesting counterpoint to informal observations I have been making during the 22 years since my internship, when I first noticed that physicians seemed to be notably underrepresented in the ranks of the slowly and painfully dying.

In the intervening years, I have made it a practice to ask health care providers of all disciplines if they have known physicians to die slowly and painfully, using large numbers of interventions such as surgery, chemotherapy, or radiation in the meantime. The responses have uniformly been in the negative.

Having tested "solid hunches" many times, I am painfully aware of their frailty against hard data, but it does occur to me that a systematic survey of physicians concerning their plans to facilitate their own death in the event of the early findings of chronic serious illness may be in order. If the findings confirmed my hypothesis that physicians commonly implement such plans and avoid the agony that we often facilitate for others, we would be in a position to speak somewhat more frankly to the nonmedical public concerning our views on chronic illness, suffering, and death.

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REFERENCE

1. Bortz WM II: Health behavior and experiences of physicians—Results of a survey of Palo Alto Medical Clinic physicians. West J Med 1992 Jan; 156:50-51

Magnetic Resonance Imaging for Marrow-Infiltrating Neoplasms

To THE EDITOR: A recent report in the journal, "The Numb Chin in Metastatic Cancer,"[1] is an important contribution documenting the great sensitivity of magnetic resonance imaging (MRI) for marrow-infiltrating neoplasms. The article, however, contains an error. Also, the discussion of MRI technique, and particularly the use of gadolinium-diethylenetriamine penta-acetic acid (DTPA), is incorrect.

Figure 1 was described as a T2-weighted image after gadolinium-DTPA administration; the low signal intensity of the cerebrospinal fluid and the very high intensity of fat on that image, however, indicate that it is not T2-weighted but, rather, a T1-weighted (short TR, short TE) image. T2-weighted images are rarely indicated or used after gadolinium enhancement, particularly for assessing the bone marrow. T2-weighted images are time consuming and do not show bone marrow tumors well. Contrast enhancement does not produce diagnostically useful changes on T2-weighted images of bone marrow disease.

It is important to note that for detecting marrow infiltration, unenhanced T1-weighted images always should be obtained first.[2] They may be all that is required. Gadolinium enhancement may obscure tumor in the bone marrow because enhancing malignant lesions often become isointense (of equal brightness) to adjacent normal marrow. Enhancement may be helpful to confirm that an abnormality is more likely malignant than benign, but it is certainly not the preferred or initial approach. In Figure 1 of the article by Drs Harris and Baringer, the marrow-infiltrating process depicted is most notable for its relative *lack* of enhancement. This is usually seen with metastases that are predominantly osteoblastic.

For marrow-based or spinal malignant tumors, we recommend a combination of short TR-short TE (T1-weighted spin-echo) and STIR (short TI inversion recovery) images.[2,3] Gadolinium-enhanced T1-weighted images are selectively indicated, such as when symptoms suggest possible involvement of the spinal cord or intradural or epidural spaces, and then only after noncontrast T1-weighted images have been obtained.

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1. Harris CP, Baringer JR: The numb chin in metastatic cancer. West J Med 1991 Nov; 155:528-531

2. Stimac GK, Porter BA, Olson DO, Gerlach R, Genton M: Gadolinium-DTPA-enhanced MR imaging of spinal neoplasms: Preliminary investigation and comparison with unenhanced spin-echo and STIR sequences. AJNR 1988; 9:839-846

3. Hoane BR, Shields AF, Porter BA, Shulman HM: Detection of lymphomatous bone marrow involvement with magnetic resonance imaging. Blood 1991; 78:728-738

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Drs Harris and Baringer Respond

To THE EDITOR: Drs Porter, Smith, and Stimac are correct in identifying the image reproduced in "The Numb Chin in Metastatic Cancer" as being a T1-weighted gadolinium-enhanced magnetic resonance imaging scan. We designated the photograph as a T2-weighted image and apologize for the error.

Because this patient was evaluated for a cranial mononeuropathy, gadolinium was selectively used to assess for trigeminal nerve enhancement along the nerve's entire course. The presence of a bone marrow lesion was not known at the time the scan was done. We did not mean to imply that gadolinium was required in the image reproduced and agree with the respondents' comments regarding the use of T1-weighted scans and the administration of gadolinium.

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