

We will try to publish authors' responses in the same edition with readers' comments. Time constraints may prevent this in some cases. The problem is compounded in the case of a bimonthly journal where continuity of comment and redress is difficult to achieve. When the redress appears 2 months after the comment, 4 months will have passed since the original article was published. Therefore, we would suggest to our readers that their correspondence about published papers be submitted as soon as possible after the article appears.

## Drug Treatment of Hypercholesterolemia

*To the Editor:* In a recent issue of the *Journal*, Grumbach<sup>1</sup> and Neighbor<sup>2</sup> provide valuable discussions of the uses of various measures of effect in clinical trials. A statement in Neighbor's editorial regarding the interpretation of a confidence interval, however, needs to be clarified. Neighbor writes, "... while the number needed to be treated is 16, we are 95 percent confident that the true value could be as low as 10 or as high as 36 to prevent one death over 15 years." The problematic word in this statement is "true." The ability of a study to detect the true value is affected both by random error and systematic error (bias).<sup>3</sup> The confidence interval provides information only about random error. The confidence interval does not assist with the management of systematic error, nor does it provide any information about the presence or absence of various types of systematic error.<sup>3</sup> Thus, a confidence interval provides information about a "true" measure of effect only when all sources of bias have been avoided or at least minimized. The determination of whether bias has been avoided or minimized depends on a critical analysis of the study design and methods. Few point estimates of associations of interventions with outcomes are free of bias.

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## Advanced Directives for Homebound Patients

*To the Editor:* I read with interest the article "Advance Directives among Patients in a House Call Pro-

gram" by Daly, et al.<sup>1</sup> It was encouraging that they were able to persuade such a large percentage of homebound patients to establish advance directives for medical care.

I would like to bring up a problem with advance directives in homebound patients that we have experienced in our own home care program and to ask the authors and other readers of the *Journal* whether they have experienced a similar problem. This pertains to the response of emergency medical services (EMS) to advance directives. I will use a recent case to illustrate the issue.

A 3rd-year resident in family medicine had a close working relationship with a 90-year-old woman patient during a period of 2 years. Initially she would come to the office to see him, but as she became more frail, he arranged to visit her at home. Her main medical problems were chronic renal failure and congestive heart failure. She had a large extended family, who were very involved with her care and were devoted to her. The resident discussed advance directives with the patient and her family, and they decided that they did not want cardiopulmonary resuscitation (CPR) or artificial ventilation to be provided in the event of an acute exacerbation of her illness. She was admitted to the hospital some time after this discussion, and at that time this determination was noted in her medical record. It was also noted in her discharge orders.

Two days after discharge the resident received a call from the visiting nurse who was seeing the patient at home. She indicated that the patient was in some respiratory distress, had a lot of secretions in her upper airway, and might benefit from suctioning. No equipment was available to be used in the home, so it was arranged for her to be transferred to the emergency department for this purpose. An ambulance service was called to transfer the patient, and the attending emergency department physician at the destination hospital was notified by the resident of the care desired and the do not resuscitate (DNR) status.

Shortly after this call was placed, the patient died. There were 7 adult family members present, and they began to mourn the loss of their loved one. The EMS crew then arrived. On being told that the patient had died, they said they were obliged to attempt to resuscitate her. They were informed that the family had decided previously on a DNR status. Despite this, CPR was begun, and a team of paramedics was called to assist. On their arrival the family was becoming increasingly agitated, and one of them began to physically prevent further resuscitation efforts. He was restrained by the EMS personnel, and the body was removed from the house so that the attempt at

resuscitation could be continued. The visiting nurse presented the discharge orders from the hospital indicating the DNR order signed by a physician, but this document was not deemed valid by the EMS crew. Frantically the resident was called to try to convince them to stop, but the EMS crew would not talk to him because they said they could not recognize a verbal order from this physician.

The patient's body was transported to a different hospital from that initially intended because of her "critical status," and the attempt at resuscitation was continued in that emergency department. The family followed and were prevented by hospital security from seeing the patient. Resuscitation efforts were stopped only when the resident was able to reach the emergency department physician by telephone, explain the situation, and ask for resuscitative efforts to be stopped.

Some states including Maryland have guidelines to try to ensure that situations such as the one described here do not occur. The policies of individual states in this regard are outlined in a paper by Sachs, et al.<sup>2</sup> following a survey of state EMS offices. Emergency services are also becoming increasingly aware of the problem.<sup>3</sup> The new Patient Self-Determination Act, which has recently been put into effect, even though it pertains only to institutionalized patients, should also increase awareness of this important issue.

I would be surprised if others among your readers have not encountered similar difficulties, and I would encourage dialogue with local EMS offices to try to ensure resolution of the problem.

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#### Diagnosis of Multiple Myeloma

*To the Editor:* The recent *Journal* article by Keenan, et al.<sup>1</sup> highlights several pitfalls in the diagnostic use of bone scans. Another important weakness of the bone scan is its inability to detect multiple myeloma. Reliance on the bone scan to exclude boney involvement by myeloma can lead to the disastrous complication of spinal cord compression, which can occur in 15 percent of patients with myeloma and often happens early in the course of the disease.<sup>2</sup>

Bone pain is the most common symptom in multiple myeloma,<sup>3</sup> and the patient's family physician might use a bone scan as part of the evaluation. The

technetium 99 used in many bone scans is taken up by the osteoblasts but not the osteoclasts. Most destructive lesions of bone are associated with osteoblastic attempts at repair, but the bone lesions in myeloma are lytic and rarely associated with new bone formation.

Unfortunately, plain radiographs also are not 100 percent sensitive for myeloma. In perhaps one-quarter of myeloma patients, circumscribed defects can be absent, and in some patients the plain films can be essentially normal.<sup>4</sup> Magnetic resonance imaging (MRI) might provide greater detail on myelomatous abnormality in the vertebral column than conventional radiographs.<sup>2</sup>

The common occurrence of low back pain in primary care precludes the casual use of an expensive and cumbersome procedure such as spinal MRI, but for optimal patient care, the family physician should continue to consider such uncommon illnesses as vertebral osteomyelitis and multiple myeloma in back pain patients.

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#### Nursing Home Patients

*To the Editor:* Dr. Richard Waltman<sup>1</sup> of Tacoma, Washington, provided readers with a poignant editorial in the January-February issue of *JABFP*. He upbraided family physicians — especially young ones — for declining to see patients in nursing homes.

Dr. Waltman compared the exercise of this freedom with possibly declining to see patients of certain ethnic or racial origins, suggesting that such a decision should "cost the physician his or her medical license."

Obviously there is no comparison here. To have privileges in a nursing home, a physician must comply with rules of attendance, record-keeping, making rounds, and other specific regulations. In fact, the nursing home or a regulatory body can prohibit a physician from attending patients in a nursing home for failure to adhere to strictly imposed regulations.

It seems reasonable for any physician to decline to enter this regulatory morass. In his editorial, Dr. Waltman points out the reasoning for this: "Reimbursement is poor, demands are substantial, and the