

a loop or ligature around it. Also, a rigid plastic sleeve cannot dilate to allow removal of a thrombus that is captured in a folded position as is possible within the vein. There would also be a tendency for the sheath to shear off the thrombus or dislodge it from the cup. In addition, the sheath has the potential disadvantage, when introduced from the jugular vein, of allowing air embolism to occur.

In the report of Timsit et al, mention is made of inability to perform catheter embolectomy in one patient because of the configuration of the inferior vena cava; yet, their most common access was from the jugular vein which always should remain an alternative access should problems occur from the femoral route. Although hemodynamic data in the report are limited, the authors did observe a favorable reduction in mean pulmonary artery pressure and an increase in cardiac output immediately following embolectomy, as has been our experience. In fact, it is not necessary to remove all of the emboli to observe a dramatic increase in cardiac output with the ability to reduce or eliminate inotropic support. They appropriately point out the need for Greenfield filter insertion following the procedure since these patients are susceptible to recurrent embolism.

The increase in favorable experience with this approach has led to suggestions at our institution that it be used for patients with major pulmonary embolism and sufficient compromise of gas exchange to require ventilator support, but without hemodynamic compromise. The rationale for this approach is to allow them to be weaned rapidly from the respirator. Although we have had success with this approach, it remains to be determined whether such an expansion of the indications is appropriate. The immediate availability of the technique, however, makes it particularly attractive for application in the angiography suite to a deteriorating patient once the diagnosis has been confirmed. Collaboration between the vascular surgeon and radiologist helps to ensure success, but there are obvious advantages to a rehearsal of the technique in the experimental laboratory prior to opening night in a critically ill patient.

*Lazar J. Greenfield, M.D., F.C.C.P.  
Ann Arbor*

Chairman, Department of Surgery, University of Michigan.

#### REFERENCES

- 1 Meade RH. A history of thoracic surgery. Springfield, Il: Charles C Thomas 1961, 324
- 2 Greenfield LJ, Kimmell GO, McCurdy WC. Transvenous removal of pulmonary emboli by vacuum-cup catheter technique. *J Surg Res* 1969; 9:347-52
- 3 Greenfield LJ, McCurdy JR, Brown PP, Elkins RC. A new intracaval filter permitting continued flow and resolution of emboli. *Surgery* 1973; 73:599-606
- 4 Greenfield LJ. Invited editorial comment. Moore JH Jr, Koolpe

HA, Carabasi RA, Yang SL, Jarrell BE. Transvenous catheter embolectomy for life-threatening pulmonary thromboembolism. *Inf in Surg* 1986; 5:694

5 Jones TK, Barnes RW, Greenfield LJ. Greenfield vena caval filter rationale and current indications. *Ann Thorac Surg* 1986; 42:S48-S55

## The Electric Guitar, Eardrums, and Medical Meetings

A man was seen kneeling and wailing at a grave site. He cried, "How could you do this to me? Why did you leave me?" His hysteria prompted a passer-by to ask solicitously, "I see from the grave inscription that your wife is buried here. Please take heart. Surely some day in the future another fine woman will be your helpmate and share your home." "You do not understand" the distraught mourner replied. "I did marry again. This is the grave of my first wife!"

One is reminded of this mourner when hearing the news of the recent death of the inventor of the amplified electric guitar. Thousands of otologists may have mourned the loss of a man who presumably had the capacity to invent additional musical instruments capable of even greater amplification than current models.

We hear of a "generation gap" in clothing styles and sexual mores. A dramatic example of cultural differences that separate the generations is today's teenagers' insistence upon loud music. Loosen the guitar strings and turn up the volume! Characteristically, the young ignore totally the warnings of the older generation (anyone over 35) that modern music is indeed adversely affecting their hearing.

Perhaps we cannot change our childrens' musical taste. However, why should we be forced to endure this auditory torture at banquets, weddings, and other social events? Consider the traditional medical convention reception or dinner dance. A blast of music assails us as we enter the reception hall. The event is labeled a "mixer" or social function designed to let us meet old acquaintances and make new friends. Ha! Anyone daring to attempt conversation of more than one syllable risks acute laryngitis.

Ah, but perhaps we can dine in relative peace during the meal? Heaven forbid that we should be forced to engage in conversation with those seated at our table. We cannot be trusted to entertain ourselves for even brief periods without the intervention of a shrieking vocalist and a tympany beat of earsplitting proportions. There is no escape on the dance floor since the musicians apparently know what is best for us, and that means that 93 percent of the dance tunes are aimed at a population of those in the eleventh grade or lower.

There are a few voices crying from the wilderness.

I applaud the admonitions of James Breeling<sup>1</sup> and Bill Nelligan.<sup>2</sup> Why are the rest of us silent? Let us rise in wrath and refuse to countenance this international attack upon gracious social conversation. One word of warning. Do not expect to effect a change in the level of noise by waiting until the evening of the performance to speak to the band leader. They simply refuse to respond to the pleas of officers, executive directors, or meeting managers.

A hotel manager recently explained to me a technique which always succeeds, at least for him. One must meet with the musicians at the time of signing the contract, well in advance of the time of the medical meeting. You then point out that "I am the employer and in this instance you are the employee. If you do not wish to follow my recommendations, then we will not sign a contract."

Good luck and good listening.

Alfred Soffer, M.D., F.C.C.P.  
Northbrook, Illinois

#### REFERENCES

- 1 Breeling JL. Cocktail receptions and the art of lip reading: A curmudgeonly complaint. *Convence* 1990; 5:33-5
- 2 Nelligan WD. Letter to the editor (untitled). *Convence* 1991; 6:35

## Helping Patients Choose Treatments

### An Important Role for Administrative Health Care Databases

Physicians whose elderly patients develop potentially resectable bronchogenic carcinoma face a difficult task. Our responsibility is to describe the possible outcomes of alternative treatments so that patients may reach decisions consistent with their own attitudes toward short- and long-term benefits and risks.<sup>1</sup> Even for this common major surgical procedure, little useful information about outcomes in the elderly is currently available. What is wrong with the current medical literature?

To provide valid information on prognosis for clinical decision-making, studies should meet certain standards of evidence.<sup>2</sup> Briefly summarized, these are: (1) adequate description of how the cohort was assembled—*Do outcomes represent those of the highly selected patients at a referral center, of a single institution reporting better than average results or of the population in general?* (2) Proper definition of a clinically homogeneous inception cohort—*Did all patients have newly diagnosed lung cancer for which they were receiving potentially curative treatment?* (3) Documentation of complete follow-up—*If cases were lost and had worse outcomes, would your interpretation of the findings change?* (4) Objective outcome criteria, reliably recorded—*Could the investigators' bias have*

*influenced their reporting of outcomes?* (5) Sufficient sample size and analysis to characterize precisely the impact on outcomes of relevant prognostic factors—*How is the risk modified by age, sex, pulmonary function and the scope of the planned resection?*

The first criterion allows us to judge the applicability of findings to our practice, the second through fourth allow us to determine whether we can believe the reported results, and the fifth helps us apply the findings to an individual patient. No recent case-series reporting operative mortality following pulmonary resection for bronchogenic carcinoma satisfies all these criteria. All are difficult to interpret because of possible bias in their assembly of the study cohort.<sup>3-7</sup> We have no way of knowing whether their reported outcomes are applicable to the general population. In this issue, Whittle and colleagues (see page 729) thus provide an important substantive contribution to our understanding of the operative risk faced by patients undergoing pulmonary resection for lung cancer. For one of their endpoints (operative mortality), their paper satisfies all five of the methodologic criteria required to assess prognosis. The authors used Medicare claims data to identify a 5 percent random sample of beneficiaries over age 65 who underwent pulmonary resection for lung cancer between 1981 and 1983; their findings can therefore be readily interpreted as representing "average" clinical practice in the United States (criterion 1). Repeat resections should make up only a very small proportion of their cases and our own analysis of data from the National DRG Validation Study<sup>8</sup> indicates that both lung cancer and major surgical procedures are coded with over 90 percent accuracy. Outcomes in the erroneously included or excluded cases would have to differ very substantially to alter their findings (criterion 2). Mortality is an objective endpoint with virtually complete ascertainment in Medicare data (criteria 3 and 4).<sup>9</sup> Finally, for short-term mortality they had sufficient sample size to analyze and report operative mortality rates for several major relevant subgroups (criterion 5).

Operative mortality was lowest, between 2 and 3 percent, in women age 66 to 69 who underwent lobectomy or lesser procedures. Based on logistic regression, they found that operative risk approximately doubled with the addition of each of the following risk factors: age over 75, male sex, and pneumonectomy. Although we would like to see this "clinical prediction rule" validated,<sup>10</sup> their findings nevertheless represent the best current information on average outcomes among the elderly for this procedure. Particularly important is the relatively high risk found for elderly patients undergoing pneumonectomy compared to the recent report of the Lung Cancer Study Group.<sup>4</sup> Given patients' relative aversion to immediate risks,<sup>1</sup> those contemplating possible