Physician Risk Preferences and Patient Care

Any observer of the modern health-care scene is aware that individual physicians have very different views on how aggressively to administer life-prolonging treatment to seriously ill patients. In this issue (see page 684), Nightingale and Grant present evidence suggesting that physicians’ psychological attitudes toward risk-taking may account at least partially for this phenomenon. In their study, they found that physicians who were more willing to accept risk in a hypothetical patient-care situation were also more willing to treat a hypothetical patient aggressively, and to spend a longer time resuscitating actual patients in the hospital.

In our view, the study raises interesting methodologic and ethical issues. As is the case with any innovative study, this one points to areas in which future investigations might be refined to obtain improved data. For example, how the authors’ questionnaire was constructed or administered is uncertain. Did harassed houseofficers in a public clinic interpret this exercise as a graded departmental exam, or as a trivial exercise to appease members of the staff? Would a different setting be more likely to elicit more thoughtful responses from the participants?

Additional questions are raised by the resuscitation data. Statistically, less than two resuscitation efforts were recorded for each physician studied. Many factors, including the patient’s age, underlying illness, metabolic response, and prior expressed wishes, strongly influence the length of a resuscitation effort. Furthermore, although personal attitudes may affect a person’s behavior, social pressures also consistently work to modify that behavior. For example, housestaff practicing in public hospitals would be expected to hold negative attitudes toward many of the recalcitrant substance-abusing patients they treat. Yet, the surprising empiric evidence is that medically appropriate and even aggressive care is usually provided to those patients.

The major ethical issue the Nightingale and Grant data raise concerns the effect that physicians’ risk preferences may have on patient care. Over the last 15 years, an ethical and legal consensus has emerged that competent patients, and the relatives or guardians of incompetent patients, have the primary authority to decide how aggressively to treat critical and terminal illness. Such decisions incorporate not only individual risk preferences, but also personal values on what constitutes an acceptable quality of life and a dignified and humane death.

Physicians retain an important role in decision-making about life-sustaining treatment, however, which often causes them to have at least an indirect effect on patient care. Patients and families often seek the physician’s recommendations as one basis for their own choices. Some patients and families go further and reject their freedom to decide, instead asking the physician to choose on their behalf.

As Nightingale and Grant point out, differing attitudes toward risk-taking may explain some of the conflicts that arise between physicians and patients or their families about the level of care a seriously ill patient is to receive. When such conflicts are openly stated, the source of the differences is discoverable, and an agreement can be reached.

More troubling are the cases in which no direct conflict emerges. In those cases, the physician’s risk-taking preferences influence patient care without the knowledge of the patient, family, and perhaps even the physician. Unspoken choices are made, and care simply proceeds in an aggressive or unaggressive fashion, depending on the individual physician’s attitude.

It is disturbing that patients can receive very different levels of treatment in these situations without a clear understanding of the source of the treatment approach. For this reason, we believe physicians should try to be aware of their own risk preferences and inform their patients of them. Patients and their families ought to know when they are being served by a physician who prefers to “go all out,” or conversely, to opt for comfort and other treatment goals over prolonged survival. They should also have the freedom to choose another physician whose risk preferences more closely resemble their own.

The data assembled by Nightingale and Grant constitute an important first step in investigating the effect of physicians’ risk preferences on patient care. The data may also point to the need for a broadened concept of the informed consent doctrine to include disclosure to patients and their families of the physi-
Conventional Chest Films Can Identify Airflow Obstruction

Dr. Phillip Pratt wrote an important editorial in the July, 1987, issue of *Chest* discussing his simultaneous article in the *American Journal of Medicine,* which dealt with the role of chest roentgenograms in the diagnosis of emphysema. In the editorial, Pratt re-emphasized certain points which it is important for chest physicians and radiologists alike to remember. However, it is also important to remember that Pratt is concerned with relating lung structure to the chest roentgenogram, and one must disagree with the impression given by Pratt that the chest roentgenogram does not, even indirectly, reflect function, specifically the presence or absence of airflow obstruction.

There have been a large number of studies attempting to quantify roentgenographic findings with function. The pioneer in this field was the late Dr. George Simon and his colleagues at the Brompton Hospital in London, who collated the range of normal findings in chest roentgenograms and then identified criteria for roentgenographic abnormalities indicative of airflow obstruction. There were other studies which attempted to expand on these findings. However, a major drawback was the attempt in these studies to correlate roentgenographic, structural, and functional findings. As Pratt points out, emphysematous changes may be present in 25-30 percent of the lung in asymptomatic patients, many of whom may have no abnormalities of airflow. Conversely, many patients with documented airflow obstruction may have no emphysematous change detected at autopsy. It was apparent, therefore, that a study relating the chest roentgenogram to pulmonary function in obstructive lung disease, without regard to pulmonary structure, was necessary. Drawing on the studies by Simon and others, we undertook and published the results of such a study.

We asked two relatively simple questions: 1) are there signs on a chest roentgenogram which would reliably identify airflow obstruction? 2) if so, is there significant interobserver variability in identifying these signs?

We studied 189 subjects, of whom 57 had normal pulmonary function and 132 had airflow obstruction. Details are discussed in the article, but it is important to stress here that in the presence of certain roentgenographic signs, a definite diagnosis of airflow obstruction can be made confidently. The most obvious and simplest sign of the presence of airflow obstruction on a standard PA chest roentgenogram is a right diaphragm dome level at or below the anterior end of the 7th rib (specificity >97 percent). Other workers have since confirmed our findings, and in the years since we completed this study, I have challenged my colleagues at our medical center to refute this sign, ie, to identify a patient with this roentgenographic finding in the absence of airflow obstruction; this has not happened to date, although, of course, this does occur. It is equally important to stress that in the absence of this sign, airflow obstruction may still be present, and therefore, cannot be ruled out in the absence of this sign. Nevertheless, the presence of this sign allows a confident diagnosis of airflow obstruction. There are other criteria which correlated with airflow obstruction, but these were not as useful or simple as observing the level of the right dome of the diaphragm in relation to the anterior ribs. Much credit for leading us to confirm this sign must go to the publications of Simon and colleagues, and it is important to bring this to the attention of the readers of *Chest* so that they are not unintentionally misled by the otherwise excellent editorial by Pratt: pulmonary airflow obstruction CAN be reliably recognized on conventional chest films.

N. K. Burki, M.D., Ph.D, F.C.C.P., Lexington, Kentucky

Pulmonary Division, Department of Medicine, University of Kentucky Medical Center.

Reprint requests: Dr. Burki, Pulmonary Division, University of Kentucky Medical Center, Lexington 40536-0084

REFERENCES

1 Pratt PC. The role of conventional chest radiography in diagnosis and exclusion of emphysema. Am J Med 1987; 82:958-1006
3 Simon G, Pride NB, Jones NL, Daimondi AC. Relation between abnormalities in the chest radiograph and changes in pulmonary function in chronic bronchitis and emphysema. Thorax 1973; 28:15-23
10 Burki NK, Krumpelman JL. Correlation of pulmonary function