sage: that is, it is not reasonable to expect all people, even if they speak the same language, to link the same word or descriptor to a given sensation.

In this issue of CHEST (see page 1942), Han et al have explored another dimension of the question of whether or not the language used to describe dyspnea will provide diagnostic clues. They have examined the possibility that the relationships among illness, the symptoms associated with an illness, and the language used by a patient to describe the illness may differ between patients of different cultures. They are not the first authors to explore this possibility. They have cited two earlier studies on this subject, one of which involved both African Americans and whites, and the other involving Thai children. The study by Han et al is, however, extensive and elegant. The authors have meticulously developed a list of 61 potential descriptors of symptoms that are associated with pulmonary diseases and have administered this list to a total of 328 subjects (232 patients and 96 control subjects). From these responses, the authors have reduced the 61 descriptors to a list of eight factors, which are analogous to the clusters developed by Mahler et al.5

The most interesting finding by Han et al involves their factor called “dyspnea-affective aspect.” This factor is composed both of symptoms that are ordinarily associated with chest disease (eg, tightness) and other symptoms that are usually associated with nonorganic disease (eg, a lump in the throat). This factor is linked to two disparate patient groups: first, those with medically unexplained illness; and second, those with asthma. The authors note that while Western persons would associate feelings such as sadness or lethargy with conditions such as depression, for example, Chinese people would use a descriptor associated with anatomy to describe those same feelings. Chinese people do not view emotional disturbance as illness and therefore describe the feelings Westerners would associate with emotional illness in terms of bodily sensations. In the Chinese culture, the feelings associated with both asthma and unexplained illness are described as “something pressing into the chest.” This reluctance in the Chinese culture to identify unexplained illness as physiologic illness explains why persons with medically unexplained illness describe their discomfort as “tightness.”

Of interest is the fact that in both cultures there seems to be some link between the language used to describe asthma and the words used to describe unexplained illness. In Western culture, asthmatic patients are seen as existing on a continuum in which some of the patients describe an intensity of symptoms that seems to be out of proportion to the extent of their airway obstruction. By contrast, Chinese culture sees two distinct patient groups. In both cultures, there appears to be a link between asthmatic patients and patients with unexplained illness. While the language used to describe asthma may differ between cultures, one can only wonder whether or not the Chinese patients categorized as having unexplained illness who describe their feelings as “tightness” are the same patients as the Western patients with mild asthma who rate their dyspnea as intense and score highly on a somatization scale.

Given the current state of knowledge, it is important for the physician to recognize the possibility that patients of different cultural backgrounds may describe their illnesses differently. Information as to “what cultures,” “what diseases,” and “what specific adjectives” is, at present however, lacking.

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REFERENCES


Does Lung Volume Reduction Surgery Really Improve Bone Mineral Density?

Dr. Mieno and colleagues have presented a well-written and interesting article (see page 1960) concerning other potential benefits derived from lung volume reduction surgery (LVRS) besides improvement in dyspnea and pulmonary function test results. Prior to accepting the conclusion of any study, its methodology must be critically scrutinized and questioned.
The study by Mieno and colleagues is retrospective cohort study that spans a 4-year period. This lengthy time frame lends itself to treatment bias. It may introduce some biases since treatment strategies can change, but it is unlikely that many significant changes were made.

The exclusion criteria removed patients with “chronic therapy capable of interfering with bone metabolism,” but we are not told what those therapies were, nor are we told what treatment or conditions were accepted. But the most obvious problem with this study is that it is not randomized. Seventy patients were offered LVRS, but only 40 underwent resection. The other 30 patients served as the retrospective control group. Are they really adequate control subjects? Isn’t selection bias possible? Perhaps their refusal to undergo surgery alone led to the observed differences in the two groups. Perhaps the actual performance of the LVRS had nothing to do with the increased bone mineral density (BMD) in the treated group, rather those that wanted surgery were more motivated, more physically active, or had a better mental outlook on their disease state. Perhaps they had some other quality linked to wanting to undergo a relatively risky operation that leads to improvement in health and BMD that we cannot measure. This study, like any other nonrandomized study, suffers from all the inherent problems of a retrospective study.

Another potential flaw is the effect that steroids have on BMD. The authors tried to account for this variable. They compared the 21 patients who continued to take some steroids after surgery to all 30 control patients, since none of them had their steroids completely discontinued. We are only told that these 30 patients had “a significant reduction in the median daily dosage.” However, the quantification of that reduction is not given. It may have been useful from a statistically standpoint. For example, the amount of reduction and in how many patients could have led to a dose-response analysis. The authors report “significant improvements [in the 21 patients who underwent LVRS] compared to patients treated only with respiratory rehabilitation.” But again this significant improvement is not quantified. In the “Discussion,” we are told a dose-dependent analysis could not be done because of the low numbers. Do these low numbers, 21 in one group and 30 in the other, force us to question the other findings of the study? Each reader must decide this for themselves.

Despite the concerns mentioned above, this report is clinically important. The authors have acknowledged the limitations of the study and in so doing have strengthened their article. The fact that the patients who underwent LVRS had improvement not only in BMD but in so many other hormones and nutritional parameters lends more scientific support to the performance of this controversial operation. In properly selected patients and in an experienced center, LVRS is safe and effective. It leads to a lessening of dyspnea, improvement in quality of life, and perhaps to increased nutritional status and in BMD as well. The authors are to be congratulated for their outstanding results, hard work, and well-written study.

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Appropriate Management of Respiratory Problems Is of Utmost Importance in the Treatment of Patients With Amyotrophic Lateral Sclerosis

Respiratory problems (RPs) are the main cause of death in patients with amyotrophic lateral sclerosis (ALS). However, nowadays many of these RPs can be successfully managed. Therefore, it is disturbing to see that a great number of patients are not receiving appropriate management for their RPs, with the consequences of premature death and avoidable suffering. The very interesting report by Farrero et al in this issue of CHEST (see page 2132) describes the impact on survival of patients when applying two different ways of tackling their management. The first could be called the conventional approach (which is more or less the way the patients were attended in this study from 1988 to 1997). The second way is the appropriate approach, in which the neurologists, being aware of the gravity of RPs in these patients, coordinate their management with the pulmonologists (in some hospitals with the Physical Medicine and Rehabilitation Department staff) once they have a diagnosis. The pulmonologists take on the responsibility of designing a protocol for good clinical practice to prevent and treat the RPs.

Unfortunately, the situation that the patients lived through from 1988 to 1997 in the study by Farrero et al, before a preestablished management protocol for RPs was followed, is not part of a way of doing things.