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DOI: 10.1378/chest.13-1940

REFERENCES

Physical Activity vs Psychomotor Activity

Prognostication of COPD

To the Editor:

We read with interest the recent article by Nguyen et al1 in CHEST (July 2013), which demonstrated novel findings. However, we would like to draw attention to certain conceptual issues that could effectively question the crux of those findings. As the authors mentioned, objectively measured physical activity is an excellent predictor of prognosis for patients with COPD. However, physical activity is distinct from psychomotor activity. Psychomotor activity is defined as motor/physical activity that is secondary to or dependent on a psychic component and is mostly non-goal-directed.2 For example, manic, psychotic, and anxious patients would demonstrate increased psychomotor activity. This is generally state-dependent, that is, it lasts during the course of psychiatric symptoms and normalizes on effective treatment.

Furthermore, comorbid anxiety symptoms have never been implicated as a good prognostic factor in either COPD or any other chronic illnesses, to our knowledge. If anything, mild anxiety symptoms predict positive outcome negating a sedentary lifestyle; it has to be trait anxiety symptoms that refer to those individuals with anxious predisposition or temperament from adolescence. Considering that the Nguyen et al1 study used a cross-sectional design, state and trait anxiety symptoms could have been discerned by the pattern of microbial testing: serologic tests in 1,537 patients (44%), sputum cultures in 1,913 patients (54%), and blood cultures by the pattern of microbial testing: serologic tests in 1,537 patients (44%), sputum cultures in 1,913 patients (54%), and blood cultures to the discretion of the treating physician. This is at least suggested in this article.

The authors concluded that “comorbidities rather than age should be considered in the selection of antibiotic treatment.” However, the outcome (in this case, a microbial cause) was not assessed of 12 years. The authors mention that the nonhomogeneous assessment of microbial cause is a potential limitation. In our opinion, this is an understatement of the bias that may have resulted from this approach, and this limitation precludes the conclusion that was reached.

The most important finding of the study was that the presence of comorbidities was associated more with potential multidrug-resistant (MDR) pathogens as a cause of CAP than was age. Thus, the authors concluded that “comorbidities rather than age should be considered in the selection of antibiotic treatment.” However, the outcome (in this case, a microbial cause) was not assessed uniformly in all included patients, which is a well-known cause of bias in predictive research.4 Apparently, microbial testing was left to the discretion of the treating physician. This is at least suggested by the pattern of microbial testing: serologic tests in 1,537 patients (44%), sputum cultures in 1,913 patients (54%), and blood cultures in 2,753 patients (78%). By ignoring the fact that microbial tests could be different across patients, the authors implicitly assumed that the tests were missing at random. However, in clinical practice, the choice for microbial testing is often influenced by patient and disease characteristics. Therefore, more extensive diagnostic testing in patients with comorbidities may well explain the higher prevalence of potential MDR pathogens in this patient group. Demonstration of comparable diagnostic procedures in patients with and