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EDITORIAL

A homeopathic remedy for early COPD

“Let’s Diagnose COPD Early!” was the title of an editorial written by the late great Doctor Tom Petty over 35 years ago.¹ Towards the end of his editorial, promoting the widespread use of office spirometry to detect COPD, he stated, “It must be honestly admitted that studies to establish the value of early or so-called preventive therapy are yet to be established.” The U.S. National Heart Lung and Blood Institute and the American Thoracic Society then held a workshop on screening programs for early diagnosis of airway obstruction to discuss the “rapidly developing confusion about pathophysiologic abnormalities associated with early airway obstruction.” The eminent group of respiratory scientists at the 1973 workshop included Doctors Nicholas Anthonisen, Margaret Becklake, Sonia Buist, Reuben Cherniack, Charles Fletcher, Claude Lenfant, Peter Macklem, Solbert Permutt, and others.² They concluded that “a mass screening program for early detection of chronic bronchitis and emphysema should *not* be undertaken at this time” ... because “these diseases have a long course and currently available treatment is at best no more than palliative.” Very little has changed since then, except that many large studies have proven conclusively that COPD inhalers do *not* improve the course of the disease in smokers. However, because of financial imperatives, during the past decade, much more has been written about this topic than is known. The editorial review “New horizons in early stage COPD” in this issue by Marc Decramer and colleagues,³ resulting from a meeting sponsored by Boehringer and Pfizer, is no exception.

The manufacturers and distributors of COPD inhalers are diligently working to expand their 5 billion Euro per year worldwide market. They are generously funding medical education companies (MECs) to hold meetings at luxurious resorts for key opinion leaders to discuss the value of early detection and treatment of mild COPD. The MECs then pay skilled medical writers to produce reviews and editorials which promote this concept as “Early detection and management of COPD guidelines from the National COPD Awareness Panel”.⁴ Some experts worry about the ethics of these marketing methods, even when professional medical societies are involved.^{5,6}

Even after 35 years, there is no consensus definition of “early” COPD. Decramer and colleagues suggest that mild

to moderate airway obstruction with a post-bronchodilator FEV1 above 50% predicted is early COPD. However, this arbitrary range is exceedingly broad: from older adults with entirely normal lung function^{7,8} and only a 10% likelihood that even if they continue smoking they will experience rapid loss of lung function and develop clinically-important COPD during the subsequent 20 years (even if they continue smoking) – to smokers who have irrevocably lost half of their lung function causing dyspnea on exertion and over a 90% likelihood that they have clinically-important COPD which will continue to progress unless they stop smoking.

Neither smokers nor never-smokers who fall into GOLD stage I should be labeled as having COPD. Their FEV1 is normal. Giving them a diagnosis of COPD often harms the patient since it stops the search for the real cause of their symptoms: a disease which may be successfully treated. A chronic cough in an adult smoker is as likely to be due to asthma, post-nasal drainage due to rhino-sinusitis, or gastro-esophageal reflux, as chronic bronchitis.⁹ If they report dyspnea on exertion it is more likely to be due to obesity, cardiovascular deconditioning, anemia, chronic heart failure, asthma, emphysema without airway disease, or other lung diseases.

The higher mortality rates for older adults in GOLD stage I reported by Mannino and colleagues¹⁰ were due to cardiovascular diseases, not COPD. The higher rates of “COPD-related” hospitalizations during the 11 years of follow-up were due to other smoking-related diseases or asthma, not severe COPD exacerbations. Any mention of COPD in the medical record (not a discharge diagnosis) was used to define a COPD-related hospitalization. A much larger study in Sweden showed no difference in hospital admissions (all cause, cardiovascular, asthma, or COPD) with GOLD stage I after 20 years of follow-up.¹¹

GOLD stage I is not associated with dyspnea.¹² Samples of adults with GOLD stage I do not have limitation of peak oxygen consumption during exercise.¹³ Twelve older patients who were referred to a pulmonary specialist for chronic dyspnea, and then categorized as GOLD stage I, were shown to have dyspnea-limited exercise.¹⁴ However, tests such as BNP and echocardiography were not done to detect heart failure and their mean DLCO was lower and mean residual volumes higher than the control group,