Treatment after a COPD Exacerbation

A couple of years ago I was consulted about a patient at the Phoenix VA who had been admitted for the third time for a COPD exacerbation in two months. Each time the patient was treated with inhaled short-acting bronchodilators, corticosteroids and an antibiotic; rapidly improved; and was discharged after only one or two days in the hospital. The discharge medications were albuterol, ipratropium, and rapidly tapering doses of prednisone. Apparently, no consideration was given to adding long-acting beta agonists (LABA), long-acting muscarinic antagonists (LAMA), and/or inhaled corticosteroids (ICS). These later medications have been shown to reduce exacerbations in most studies (1,2).

I was reminded of this incident by a recent article published by Melzer et al. in the Journal of Internal Medicine (3). The authors examined 2760 patients with exacerbations of COPD admitted to hospitals in the VA Northwest Health Network (VISN 20) to determine if a LABA and/or glucocorticoid were prescribed at discharge. These medications reduce exacerbations and the best predictor of a future exacerbation is a history of exacerbations (1,2,4). Of the 2760 patients 93% were not receiving a LABA or an ICS at the time of their exacerbation. Of this 93%, two-thirds of the patients had no change in therapy after their exacerbation. The authors state that “among patients treated for COPD exacerbations, there were missed opportunities to potentially reduce subsequent exacerbations by adding treatments known to modify exacerbation risk”. The authors go on to suggest that the VA could develop a Quality Enhancement Research Initiative (QUERI) program to improve delivery of care for some chronic conditions.

So why did the patient at the Phoenix VA and 2/3 of the patients in VISN 20 not receive a LABA, LAMA and/or inhaled corticosteroid after their exacerbations as recommended by the GOLD and ATS guidelines? Are the doctors in the Pacific Northwest and Phoenix unaware of the guidelines as the article and its accompanying editorial imply (5)? The answer probably lies elsewhere. First, the VA does not use the GOLD or ATS guidelines but has developed their own guidelines (6). These guidelines specifically mention consideration of the addition of inhaled corticosteroids and a LAMA but make no mention of a LABA. Rather than encouraging use of these medications, programs were created at the Phoenix VA which restricted Veterans’ access to these more expensive medications. The VA administration empowered the pharmacy to make unilateral decisions based on fiscal considerations with inadequate expert clinician input. These include a requirement to refer all patients for pulmonary consultation for long-acting bronchodilator therapy. This overloaded the pulmonary clinics with patients that did not necessarily need to be seen. In addition, there was a requirement for a trial of ipratropium before beginning tiotropium which took multiple visits further overloading the clinics.
This is another example of administrators meddling in clinical care only to have it blow up in their face and cause something else to go awry wasting money. In this case, the low use of long-acting bronchodilators likely led to an increase in admissions for exacerbation of COPD which are a major determinant of the costs of COPD care (7). Ignorance of the providers is blamed and another program to correct the harm caused by the initial blunder is created. Another example is the control of blood sugar in the ICU. After pushing for tight control of blood sugar for several years, the VA Inpatient Evaluation Center (IPEC) seamlessly converted their program to one examining hypoglycemia when tight control resulting in hypoglycemia was found to be harmful with the publication of the NICE-SUGAR study (8,9).

A QUERI program examining whether a LABA and/or corticosteroid was prescribed at discharge for a COPD patient does not need to be created. What needs to be done is to allow the physicians in the Pacific Northwest and Phoenix to use their best skills and judgment in caring for the patients without interference. If something must be measured, readmissions for exacerbation of COPD could be considered but should be part of a comprehensive program that measures outcomes such as mortality, length of stay, and morbidity. Otherwise, administrative blunders to correct past mistakes will continue.

Richard A. Robbins, M.D.*

References


*The opinions expressed are those of the author and not necessarily the Southwest Journal of Pulmonary and Critical Care or the Arizona, New Mexico or Colorado Thoracic Societies.