Chronic Obstructive Pulmonary Disease

Clinical implications for patients with lung cancer

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BACKGROUND: Chronic obstructive pulmonary disease (COPD) is the most common smoking-related illness. COPD often is underemphasized as a comorbidity except when considering issues surrounding surgical treatment options.

OBJECTIVES: This article aims to provide nurses with an overview of the pharmacologic and nonpharmacologic treatment implications of COPD.

METHODS: Definitions, differentials, and treatment considerations are provided, and clinical implications and resources are described.

FINDINGS: The added burden of dyspnea, fatigue, and psychological distress related to COPD may affect the overall outcome and quality of life (QOL) of patients with lung cancer. Attention to the prevention, assessment, and treatment of lung cancer and COPD and related symptomatology will help maximize patients' QOL.

KEYWORDS
chronic obstructive pulmonary disease; immunotherapy; lung cancer; quality of life

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THE DIAGNOSIS OF LUNG CANCER IS A PATIENT'S FIRST STEP in a long course of testing and treatment that may be complicated by additional factors, such as comorbidities. Comorbidities are simultaneous or sequential illnesses and disorders in the same person. These illnesses also may interact with each other, affecting the course and outcome of each (Valderas, Starfield, Sibbald, Salisbury, & Roland, 2009). Considering comorbidities is critical when initiating and modifying a patient's lung cancer treatment options. For example, because a patient's advanced age and lower functional status significantly affect lung cancer treatment tolerance, clinicians may tailor treatment plans to take these variables into account (Hsu et al., 2015; Valderas et al., 2009). Chronic obstructive pulmonary disease (COPD) is an often-underemphasized, but prevalent and significant, comorbidity in patients with lung cancer. Before the mid-1980s, clinicians observed that a higher proportion of patients with COPD had lung cancer, but whether it contributed to lung cancer along with smoking, or if smoking was an independent risk factor for the development of both diseases, was unclear (Skillrud, Offord, & Miller, 1986). The relationship between COPD and lung cancer was considered in a seminal study by Skillrud et al. (1986), who examined 226 patients, half with COPD and half without COPD, during a 10-year period. Their trial, confirmed by Young et al. (2009), demonstrated that COPD was an independent risk factor for the development of lung cancer when controlling for age, sex, smoking, and occupation.

Dyspnea, functional decline, and pulmonary cachexia (unintentional and irreversible weight loss)—all associated with COPD—can heavily affect a patient's outcome, independent of the effects of lung cancer disease and treatment (Lehto, 2016; Schols, 2002). With a reported prevalence of 40%–70% in patients with lung cancer (Loganathan, Stover, Shi, & Venkatraman, 2006; Soubeyran et al., 2012; Young et al., 2009), COPD is a common comorbidity that oncology clinicians should carefully consider when developing lung cancer treatment plans. The purpose of this article is to present the definition, differentials, diagnosis, and treatment of COPD, and to offer