

Targeting the symptoms of lung cancer, not just the disease

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Commentary on “Comprehensive Management of Respiratory Symptoms in Patients with Advanced Lung Cancer” by Jessica McCannon, MD and Jennifer Temel, MD. (page 1)

Lung cancer accounts for a large percentage of cancer deaths worldwide. In the United States, an estimated 222,520 new diagnoses and 157,300 deaths associated with lung cancer were projected for 2010.¹ Even with the best approaches available to us today, median 5-year survival rates range from 10% to 15% in advanced disease.² The majority of our efforts have been aimed at prolonging survival, focusing on optimizing tumor-specific options. Unfortunately, we are prone to overlook symptoms that negatively impact quality of life. McCannon and Temel highlight approaches to managing the respiratory symptoms associated with advanced lung cancer, explaining the pathophysiology behind the common symptoms and critiquing the evidence behind these management approaches.

The authors emphasize the fact that multiple causes contribute to respiratory symptoms in patients with lung cancer. It is essential to perform a thorough history and clinical evaluation in order to elucidate the underlying insult(s) and not simply assume symptoms are due to progressive disease. The table gives an excellent framework to guide the approach to these patients. Reversible causes should always be sought and aggressively treated.

In treating thromboembolic phenomenon, low-molecular weight heparin (LMWH) has been shown to be superior to warfarin in preventing recurrent venous thromboembolic events.³ A recent systematic review demonstrated similar superiority of LMWH over its unfractionated

counterpart in the treatment of initial venous thromboembolism in cancer patients.⁴ However, in the patient with advanced lung cancer where hospice is being considered, the cost of covering LMWH may create a financial challenge⁵ and switching to warfarin may be a reasonable alternative.

Indwelling catheters are certainly an appropriate minimally invasive treatment option for patients with rapidly recurring pleural effusions or lung entrapment in which pleurodesis would be contraindicated.

The authors briefly discuss treatment-related pneumonitis, with particular focus on radiation pneumonitis. Multiple systemic drugs such as gemcitabine, the taxanes, and epidermal growth factor receptor tyrosine kinase inhibitors like erlotinib have also been associated with pneumonitis/interstitial lung disease, either directly or via radiation recall.^{6–9} These are diagnoses of exclusion after other more common causes such as infection, lymphangitic carcinomatosis, pulmonary embolus, and heart failure have been ruled out. Early recognition is important as severe cases may be fatal without respiratory support. The efficacy of steroids in case reports has been conflicting.⁸

Dyspnea and cough are certainly the 2 most common respiratory symptoms experienced by patients with lung cancer. As pointed out by the authors, their effects can be amplified by accompanying anxiety. Their systematic review of the pathophysiology, the importance of considering multifactorial etiology, and the efficacy and evidence behind the commonly used treatment options is laudable. Although the role of radiation and chemotherapy in ameliorating these symptoms was beyond the scope of their review, it should be recognized that these modalities can significantly improve respiratory symptoms if directly attributable to the neoplasm, such as effusions or masses associated with chemosensitive small-cell lung cancer or mechanically compressed airways amenable to radiation. Similarly, therapeutic bronchoscopy with laser and/or stent place-

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ment is another viable option for endobronchial disease or extrinsic airway compression, with the choice of stent based on the nature or site of the offending lesion.¹⁰

Over the years there has been substantial growth in the availability of palliative care services, including nonhospice palliative care.⁵ Utilization of these services, however, has not followed suit, particularly when active cancer care is still considered an option. In centers where the referral practice has improved, there continues to be a significant delay in consulting our palliative care colleagues.¹¹ Fadul et al.¹² demonstrated that oncology providers perceived the very term “palliative care” as a barrier to referring their patients to providers more specialized in symptom management as opposed to the term “supportive care.” They cited increased association with distress and loss of hope when considering the former versus the latter and were more likely to refer patients they were actively treating when the service was named “supportive care.” Interestingly, despite these perceptions, Temel and colleagues¹³ demonstrated the benefit of palliative care throughout the continuum of care for advanced lung cancer, with better quality-of-life scores, less depression, and longer survival than those assigned to standard oncologic care.

The authors have aptly pointed out the distressing nature of respiratory symptoms for lung cancer patients and the impact on their quality of life. We agree that particular attention should be paid by the treating oncologist to alleviating these symptoms early and aggressively. There is a desperate need for studies focusing not only on disease-specific treatment but on symptom management as well. McCannon and Temel have demonstrated there is clearly a role for early involvement of nonhospice palliative care services in patients with advanced lung cancer in conjunction with active anti-neoplastic treatment, rather than waiting until the end of life as currently commonly practiced.

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