Cleaning the pipes before changing the furnace: Endoscopic patient optimization before major therapeutic intervention in lung cancer

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Interventional bronchoscopic endoluminal airway treatment can allow for patient optimization before aggressive, potentially curable, treatment strategies in tumors causing airway obstruction with lung atelectasis (Figure 1). Patients often present with severe dyspnea and in a catabolic state as the result of lung atelectasis and postobstructive pneumonia and are unable to be properly worked-up for potentially curative intent treatment (surgery, definitive chemoradiotherapy) because of their respiratory and physical status. In certain cases with preserved lung parenchyma distal to airway obstruction, interventional bronchoscopy can rapidly restore airway patency to allow patient optimization and work-up for potentially curative therapy.

Airway restoration can be achieved with the use of a combination of techniques, including flexible and rigid bronchoscopy, laser therapy, electrocautery, argon beam, mechanical debridement, airway dilation, and airway stenting, depending on the anatomic circumstance.¹⁻³ In patients who may be considered for definitive surgical resection of the primary tumor, stenting should either be avoided or extreme caution

Thoracic interventional endo suite used for staging, optimization, treatment, and palliation.

Central Message

Interventional bronchoscopic treatment can allow for patient optimization before aggressive, potentially curable, treatment strategies in tumors causing airway obstruction with lung atelectasis.

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should be used to assure not to damage normal proximal and distal airway at the sites of future tracheobronchial anastomoses. An advanced endoscopic skill set is required to endoscopically treat these complex patients.

In this edition of the *Journal*, Dr Wu and colleagues⁴ nicely describe a case of complete lung atelectasis in a decompensated patient. Using a custom-made metallic stent, they successfully were able to restore right lung airway patency with complete resolution of distal atelectasis. The patient was able to recover respiratory function, improve in clinical status, and undergo definitive treatment of non-small cell lung cancer. This report highlights the importance of interventional thoracic endoscopy in the overall treatment of advanced lung cancers involving the tracheobronchial tree. This article is a nice example of the broadening indications for endoscopy in patients, not only for palliation, but also in the overall care of potentially curable patients.

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FIGURE 1. Thoracic interventional endo suite used for staging, optimization, treatment, and palliation.