PRESENTATION

A 75-year-old woman presents with moderate COPD and recurrent metastatic breast cancer with a complete response to treatment. She then developed a sub-acute worsening shortness of breath and hemoptysis of a 2-month duration.

WORK UP

A CT chest scan revealed a new sub-carinal lesion that was invading into the left mainstem causing a near complete occlusion.

INTERVENTION

Rigid bronchoscopy revealed extensive endobronchial tumor in the left mainstem that extended from the carina and posterior membrane of the left mainstem, mid-left mainstem, and some of distal left mainstem bronchus.

The left mainstem was 90% occluded with tumor, and approximately 5% occluded with purulent, thick secretions and clotted blood.

Tumor ablation was performed using Nd:YAG laser followed by mechanical debulking. The posterior wall and the medial wall of the left mainstem bronchus was all replaced by tumor; no normal bronchial wall was noticed.

An AERO® Tracheobronchial 12mm x 40mm self-expanding metallic stent was placed, starting from the distal left mainstem covering the mid and proximal left mainstem. Additional tumor was seen in the proximal left mainstem which was not covered by the first stent. A second AERO® Tracheobronchial 12mm x 30mm stent was deployed in the mid-left mainstem covering the proximal left mainstem and ending just at the level of carina.

Both the stents deployed perfectly and covered all the tumor of the left mainstem.
FOLLOW UP

The final pathology confirmed a salivary gland type neoplasm. The histology was most consistent with epithelial myoepithelial carcinoma of lung, which is a rare, but a well documented type of malignancy found in the airway. The patient completed 40.05 Gy in 15 fractions to the region of the carina with a great response. The patient underwent another rigid bronchoscopy two months later which showed no residual tumor or stenosis. The stents were removed and APC was used to control mild bleeding. The patient remains tumor free with no signs of recurrent disease.

CONCLUSIONS

The temporary use of AERO® Tracheobronchial Stents provided efficacious treatment of this disease state with this patient and maintained patency of the involved airway.