

# Uncovered Ultraflex™ Stent Use in Lower Lobe Obstruction

technique spotlight



**David R. Riker, MD, FCCP**

UCSD Medical Center  
San Diego, California



**Figure 1**  
PET Scan

## Patient History

The patient is a 71-year-old female with a history of diabetes, and newly diagnosed anemia. Also, she is status post gastric surgery having a 125-pound weight loss in 18 months. She was recently being evaluated for wheezing, coughing without hemoptysis, nausea, weakness, and fatigue for one month. CT chest, abdomen, and pelvis showed a large liver mass and also a left lower lobe lung mass. PET scan showed avidity in left lower lobe, vertebral bodies, ribs and liver (**Figure 1**). There is a remote smoking history of 1 pack a day x 12 years. Initial flexible bronchoscopy showed a completely obstructed left lower lobe bronchus. Rigid bronchoscopy was scheduled to relieve the obstruction.



**Figure 2**  
LLL Tumor

## Procedure

A rigid Dumon bronchoscope was used to enter the airway. The left-sided airway exam revealed a 100% occlusion of the left lower lobe bronchus by fungating endobronchial tumor (**Figure 2**). YAG laser was used to photocoagulate, then debulk the tumor. Biopsy forceps removed the remaining tumor en bloc resulting in a patent lower lobe bronchus. Normal distal airway segments were observed, except for the superior lower lobe segment which was completely obliterated by tumor.

A Boston Scientific uncovered Ultraflex 8 mm x 20 mm Stent was then placed. An 8, 9, 10 mm CRE™ Balloon was then used in 3 increments of 3 atmospheres, 4 atmospheres, and 5 atmospheres to successfully compress the stent against the bronchial wall (**Figure 3**).



**Figure 3**  
Post Stent

## Post Procedure

Pathology showed moderately differential adenocarcinoma positive for CK7, TTF-1 and Napsin-a consistent with primary lung cancer. Cough improved and the patient underwent chemotherapy with carboplatin, alimta, and avastin.



**Figure 4**  
Stent on x-ray

### Discussion

Complete obstruction of the lower lobe and the finding of malignancy warranted consideration of a metal stent. My preference is a covered stent; however, the bronchus needed an 8 mm x 20 mm stent which is unavailable covered. Complete bronchial patency was restored. The covered Ultraflex Stents allow epithelialization of the stent ends but do not allow tumor growth into the lumen of the stent. The patient underwent chemotherapy and has had no stent complications over a 2 month period. After the stent was placed, she experienced a dramatic improvement in dyspnea.



# Boston Scientific

*Defining tomorrow, today.™*

Boston Scientific Corporation  
One Boston Scientific Place  
Natick, MA 01760-1537  
[www.bostonscientific.com/endoscopy](http://www.bostonscientific.com/endoscopy)

**Ordering Information**  
**1.800.225.3226**

© 2012 Boston Scientific Corporation  
or its affiliates. All rights reserved.

ENDO-66802-AA April 2012