PREOPERATIVE DIAGNOSIS:, Right middle lobe lung cancer.,POSTOPERATIVE DIAGNOSIS: , Right middle lobe lung cancer.,PROCEDURES PERFORMED:,1. VATS right middle lobectomy.,2. Fiberoptic bronchoscopy thus before and after the procedure.,3. Mediastinal lymph node sampling including levels 4R and 7.,4. Tube thoracostomy x2 including a 19-French Blake and a 32-French chest tube.,5. Multiple chest wall biopsies and excision of margin on anterior chest wall adjacent to adherent tumor.,ANESTHESIA: ,General endotracheal anesthesia with double-lumen endotracheal tube.,DISPOSITION OF SPECIMENS: , To pathology both for frozen and permanent analysis.,FINDINGS:, The right middle lobe tumor was adherent to the anterior chest wall. The adhesion was taken down, and the entire pleural surface along the edge of the adhesion was sent for pathologic analysis. The final frozen pathology on this entire area returned as negative for tumor. Additional chest wall abnormalities were biopsied and sent for pathologic analysis, and these all returned separately as negative for tumor and only fibrotic tissue. Several other biopsies were taken and sent for permanent analysis of the chest wall. All of the biopsy sites were additionally marked with Hemoclips. The right middle lobe lesion was accompanied with distal pneumonitis and otherwise no direct involvement of the right upper lobe or right lower lobe.,ESTIMATED BLOOD LOSS: , Less than 100 mL.,CONDITION OF THE PATIENT AFTER SURGERY: , Stable.,HISTORY OF PROCEDURE:, This patient is well known to our service. He was admitted the night before

surgery and given hemodialysis and had close blood sugar monitoring in control. The patient was subsequently taken to the operating room on April 4, 2007, was given general anesthesia and was endotracheally intubated without incident. Although, he had markedly difficult airway, the patient had fiberoptic bronchoscopy performed all the way down to the level of the subsegmental bronchi. No abnormalities were noted in the entire tracheobronchial tree, and based on this, the decision was made to proceed with the surgery. The patient was kept in the supine position, and the single-lumen endotracheal tube was removed and a double-lumen tube was placed. Following this, the patient was placed into the left lateral decubitus position with the right side up and all pressure points were padded. Sterile DuraPrep preparation on the right chest was placed. A sterile drape around that was also placed. The table was flexed to open up the intercostal spaces. A second bronchoscopy was performed to confirm placement of the double-lumen endotracheal tube. Marcaine was infused into all incision areas prior to making an incision. The incisions for the VATS right middle lobectomy included a small 1-cm incision for the auscultatory incision approximately 4 cm inferior to the inferior tip of the scapula. The camera port was in the posterior axillary line in the eighth intercostal space through which a 5-mm 30-degree scope was used. Third incision was an anterior port, which was approximately 2 cm inferior to the inframammary crease and the midclavicular line in the anterior sixth intercostal space, and the third incision was a utility port, which was a 4 cm long incision, which was

approximately one rib space below the superior pulmonary vein. All of these incisions were eventually created during the procedure. The initial incision was the camera port through which, under direct visualization, an additional small 5-mm port was created just inferior to the anterior port. These two ports were used to identify the chest wall lesions, which were initially thought to be metastatic lesions. Multiple biopsies of the chest wall lesions were taken, and the decision was made to also insert the auscultatory incision port. Through these three incisions, the initial working of the diagnostic portion of the chest wall lesion was performed. Multiple biopsies were taken of the entire chest wall offers and specimens came back as negative. The right middle lobe was noted to be adherent to the anterior chest wall. This area was taken down and the entire pleural surface along this area was taken down and sent for frozen pathologic analysis. This also returned as negative with only fibrotic tissue and a few lymphocytes within the fibrotic tissue, but no tumor cells. Based on this, the decision was made to not proceed with chest wall resection and continue with right middle lobectomy. Following this, the anterior port was increased in size and the utility port was made and meticulous dissection from an anterior to posterior direction was performed. The middle lobe branch of the right superior pulmonary vein was initially dissected and stapled with vascular load 45-mm EndoGIA stapler. Following division of the right superior pulmonary vein, the right middle lobe bronchus was easily identified. Initially, this was thought to be the main right middle lobe bronchus, but in fact it was the

medial branch of the right middle lobe bronchus. This was encircled and divided with a blue load stapler with a 45-mm EndoGIA. Following division of this, the pulmonary artery was easily identified. Two branches of the pulmonary artery were noted to be going into the right middle lobe. These were individually divided with a vascular load after encircling with a right angle clamp. The vascular staple load completely divided these arterial branches successfully from the main pulmonary artery trunk, and following this, an additional branch of the bronchus was noted to be going to the right middle lobe. A fiberoptic bronchoscopy was performed intraoperatively and confirmed that this was in fact the lateral branch of the right middle lobe bronchus. This was divided with a blue load stapler 45 mm EndoGIA. Following division of this, the minor and major fissures were completed along the edges of the right middle lobe separating the right upper lobe from the right middle lobe as well as the right middle lobe from the right lower lobe. Following complete division of the fissure, the lobe was put into an EndoGIA bag and taken out through the utility port. Following removal of the right middle lobe, a meticulous lymph node dissection sampling was performed excising the lymph node package in the 4R area as well as the 7 lymph node package. Node station 8 or 9 nodes were easily identified, therefore none were taken. The patient was allowed to ventilate under water on the right lung with no obvious air leaking noted. A 19-French Blake was placed into the posterior apical position and a 32-French chest tube was placed in the anteroapical position. Following this, the

patient's lung was allowed to reexpand fully, and the patient was checked for air leaking once again. Following this, all the ports were closed with 2-0 Vicryl suture used for the deeper tissue, and 3-0 Vicryl suture was used to reapproximate the subcutaneous tissue and 4-0 Monocryl suture was used to close the skin in a running subcuticular fashion. The patient tolerated the procedure well, was extubated in the operating room and taken to the recovery room in stable condition.