INDICATIONS FOR PROCEDURE:, Persistent cough productive of sputum requiring repeated courses of oral antibiotics over the last six weeks in a patient who is a recipient of a bone marrow transplant with end-stage chemotherapy and radiation-induced pulmonary fibrosis.,PREMEDICATION:,1. Demerol 50 mg.,2. Phenergan 25 mg.,3. Atropine 0.6 mg IM.,4. Nebulized 4% lidocaine followed by nasal insufflation of lidocaine through the right naris and topical 4% lidocaine gel through the right naris, 4 mg of Versed was given at the start of the procedure and another 1 mg shortly after traversing the cords., PROCEDURE DETAILS:, With the patient breathing oxygen by nasal cannula, being monitored by noninvasive blood pressure cuff and continuous pulse oximetry, the Olympus bronchoscope was introduced through the right naris to the level of the cords. The cords move normally with phonation and ventilation. Two times 2 mL of 1% lidocaine were instilled on the cords and the cords were traversed. Further 2 mL of 1% lidocaine was instilled in the trachea just distal to the cords, at mid trachea above the carina, and on the right, and on the left mainstem bronchus. Scope was then introduced on to the left where immediately some hyperemia of the mucosa was noted. Upper lobe and lingula were unremarkable. There appeared to be some narrowing or tenting of the left lower lobe bronchus such that after inspection of the superior segment, one almost had to pop the bronchoscope around to go down the left mainstem. This had been a change from the prior bronchoscopy of unclear significance. Distal to this, there was no hyperemia or inspissated mucus or mucoid secretions or signs of infection. The scope was wedged in the left lower lobe posterior basal segment and a BAL was done with good returns, which were faintly hemorrhagic. The scope was then removed, re-introduced up to the right upper lobe, middle lobe, superior segment, right lower, anterior lateral, and posterior basal subsegments were all evaluated and unremarkable. The scope was withdrawn. The patient's saturation remained 93%-95% throughout the procedure. Blood pressure was 103/62. Heart rate at the end of the procedure was about 100. The patient tolerated the procedure well. Samples were sent as follows. Washings for AFB, Gram-stain Nocardia, Aspergillus, and routine culture. Lavage for AFB, Gram-stain Nocardia, Aspergillus, cell count with differential, cytology, viral mycoplasma, and Chlamydia culture, GMS staining, RSV by antigen, and Legionella and Chlamydia culture.