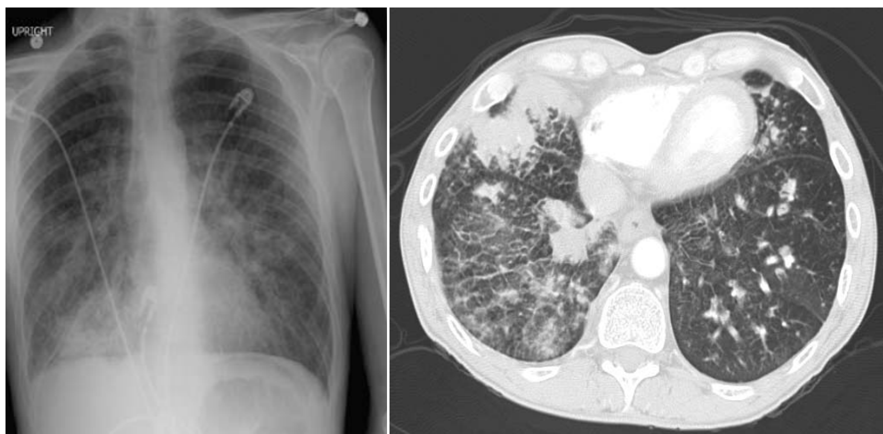
Practical Approach to Interventional Bronchoscopy Procedural Decision Making: Scenario # 13: Flexible bronchoscopy with BAL in suspected pulmonary lymphangitic carcinomatosis and informed consent in a deaf person

Based on the information presented below, please describe your procedural decision making using The Practical Approach to Procedural Decision making. Do your best to complete each item of the Four Boxes. If the case scenario contains no information pertaining to an item, please address it as NOT AVAILABLE. Note that each case scenario may have greater emphasis on one or more items listed in the "Practical Approach".

MM is a 72 year old man with stage IV adenocarcinoma of the lung admitted for progressive dyspnea. He has undergone multiple chemotherapy regimens. Four months before admission he was started on tyrosine kinase inhibitors. He has increasing shortness of breath, fatigue, dry cough, and weight loss for several weeks. He also has COPD with FEV1 35% predicted and is deaf. He lives with his 33 year old son. The patient's Karnofsky status is 50. Chest radiograph shows diffuse bilateral interstitial infiltrates and an ill-defined opacity at the right lung base. Computed tomography scan reveals intralobular septal thickening and consolidation in the right middle lobe which was the site of the primary tumor. Physical Exam reveals a temperature of 37.6 blood pressure 112/74 pulse 92 respiratory rate 22 and SaO2 91% on Room Air. He is in no acute distress but is ill-appearing and cachectic. His exam is normal except for diffuse bilateral crackles with decreased breath sounds at the right base and evidence of digital clubbing. Laboratory findings reveal Sodium 136 BUN 33 Creatinine 1.7 Glucose 124, complete blood count showing: WBC 12.3 Neutrophil 78% no bands, Hemoglobin is 13.3 and platelets 163,000. Blood cultures are negative, urinalysis is negative, and sputum gram stain is negative (cultures are pending). The oncology team has formulated a differential diagnosis that includes lymphangitic carcinomatosis, pulmonary infection, and drug-related pneumonitis. Pulmonary consultation is requested for bronchoscopy.



After addressing items of the four boxes, please consider the following:

- Identify radiographic characteristics of pulmonary lymphangitic carcinomatosis.

- Define the role of bronchoalveolar lavage and transbronchial lung biopsy for diagnosis of lymphangitic spread.
- Identify ways of obtaining informed consent from a deaf person.

Initial Evaluation	Procedural Strategies
1. Physical examination, complementary tests, and functional status assessment 2. Patient's significant co-morbidities 3. patient's support system (also includes family) 4. Patient preferences and expectations (also includes family)	1. Indications, contraindications, and expected results 2. Operator and team experience and expertise 3. Risk-benefits analysis and therapeutic alternatives 4. Respect for persons (Informed Consent)
Procedural Techniques and results	**Long term Management Plan**
1. Anesthesia and other perioperative care 2. Techniques and instrumentation 3. Anatomic dangers and other risks 4. Results and procedure-related complications	1. Outcome assessment 2. Follow-up tests, visits, and procedures 3. Referrals to medical, surgical, or palliative/end of life subspecialty care 4. Quality improvement and team evaluation of clinical encounter

INITIAL EVALUATION

PROCEDURAL STRATEGIES

PROCEDURAL TECHNQUES AND RESULTS

LONG TERM MANAGEMENT PLAN