Clinical case 13: Flexible bronchoscopy with BAL in suspected pulmonary lymphangitic carcinomatosis and informed consent in a deaf patient

MM is a 72 year old man with stage IV adenocarcinoma of the lung admitted for progressive dyspnea. He had chemotherapy and recently received tyrosine kinase inhibitors. He has increasing shortness of breath, fatigue, dry cough, and weight loss. He also has COPD with FEV1 35% predicted and is deaf. He lives with his 33 year old son. 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. Temperature is 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. There are diffuse bilateral crackles with decreased breath sounds at the right base. He has digital clubbing. Sodium is 136, BUN 33, Creatinine 1.7, Glucose 124, complete blood count 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 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:
1. Identify radiographic characteristics of pulmonary lymphangitic carcinomatosis.
2. Define the role of BAL and TBLB to diagnose lymphangitic spread.
3. Describe at least two ways for obtaining informed consent from a person with a hearing disorder.