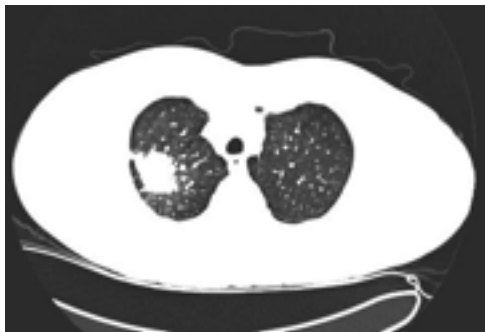




Clinical case 7: Endobronchial Ultrasound for right paratracheal node in a patient with COPD and cancer is

GG is a 67 year old male with a 50 pack- year history of smoking developed cough and weight loss (15kg) for six months. His Vital signs revealed a blood pressure of 160/80mmHg, heart rate 90/min, body temperature 37.2°C and respiratory rate 18/min. The Physical examination shows prolonged expiratory breath sounds and egophony in right upper lung field. He is a retired electrician and lives with his wife. He has no advance directives. He desires all available active treatment modalities if diagnosed with cancer. Laboratory data reveal WBC 8000 (neutrophil 81%, lymphocyte 2%), Hemoglobin 13 gm/dl, Platelets 310,000/mm³. Arterial blood gas analysis showed pH 7.45, PaCO₂ 50 mmHg, PaO₂ 64 mmHg on 2L oxygen/min via nasal canula). Pulmonary function tests revealed FEV₁- 1.6 L (49% predicted), DLCO- 50% predicted. A computer tomography scan of the chest showed a 3 cm right upper lobe mass and a 1 cm right paratracheal lymph node that is PET negative. The CT guided transthoracic needle aspiration of the right upper lobe mass positive for non-small cell lung cancer.



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

1. Describe each step in the performance of EBUS-TBNA.
2. Describe principles and use of endobronchial Doppler ultrasound
3. Describe the relationship between PET negative lymph node size and malignancy.