

# **AABIP - Advanced Bronchoscopy and Interventional Pulmonology Board Review Virtual Course 2022**

**AB Alraiyes, MD, Chair**

**John Egan, MD, Co-Chair**

**Saturday, October 29, 2022**

**Times shown in EST**

**9:00            Opening Remarks**

**9:10            Lung Cancer Screening (15 minutes)**

- **John Egan, MD (Spectrum Health, MI)**
- Recommendations from national and international societies in regards to population to be screened, frequency of scanning and program support requirements
- Discuss the different “Radiologic categories” about CT readings, and recommendations
- List challenges for implementing screening in practice

**9:25            Approach to Lung Cancer Diagnosis, Staging and initial Treatment (15 minutes)**

- **Nicholas Pastis, MD (OSU, OH)**
- Bronchoscopic staging vs pathologic staging
- Advantages of Multidisciplinary approach

- Discuss the approach to patients with suspected lung cancer, imaging staging (like PET scan), type of biopsy
- Discussion of different guidelines for approach to lung cancer

**09:40 Mediastinal and hilar anatomy (15 minutes)**

- **Amit Tandon, MD (AdventHealth Wesley Chapel, FL)**
- Definitions of the relevant LN station
- When and How to do EBUS Mediastinal staging
- Exemplify a few T lesions: T1a, T4, T3, etc. and their relevance to treatment decisions
- Contrast the LN stations and other sites that can be biopsied by EBUS vs. EUS-FNA and surgical methods

**09:55 EBUS-TBNA: technical aspects and clinical applications (20 minutes)**

- **Mounir Ghali, MD (University of Michigan Health-West, MI)**
- Illustrate the staging strategies (a few examples)
- Diagnostic yield for other diseases (lymphoma and sarcoidosis) and how it compares with surgical biopsy
- List the evidence based technical parameters for obtaining adequate EBUS-TBNA specimens
- ROSE vs no-ROSE

**10:15 Interactive Questions & Answers Panel Discussion (30 minutes)**

***(John Egan, Nicholas Pastis, Amit Tandon, Mounir Ghali)***

**10:45        BREAK**

**10:55 Approach to patient with peripheral lung nodules (20 minutes)**

- **Eduardo Celis Valdiviezo, MD (Mercy Medical Center, IA)**
- Illustrate the Fleischner society and NRADS guidelines for solid, sub solid and GGO nodules
- Diagnostic yields of transbronchial biopsy, brushings and peripheral TBNA for SPN
- Correlation between radiographic patterns (calcification, PET avidity) and probable diagnosis
- Diagnostic yields of navigation bronchoscopy, radial EBUS for diagnosing SPNs
- Contraindication of ENB and its diagnostic yield depending upon size, location and other patient-related factors
- Robotic platforms

**11:15        Anesthesia and airway management for advanced bronchoscopy**  
**(15 minutes)**

- **Ara Chrissian, MD (Loma Linda University, CA)**
- Different techniques of anesthesia/sedation: moderate vs general
- Emphasize on anesthesia/sedation for EBUS TBNA bronchoscopy
- Differences on sedation providers: anesthesiology vs bronchoscopist
- Discuss factors under consideration for appropriate airway management during bronchoscopy
- Types of airway devices and their appropriate indications during bronchoscopy

**11:30 Pathology and Molecular markers of Lung Cancer (15 minutes)**

- **Christine Argento, MD (Johns Hopkins Healthcare, MD)**
- Discuss basic immunohistochemistry for defining NSCLC subtypes
- List the genetic abnormalities and the FDA approved agents in NSCLC
- Discuss specimen requirements for genetic testing and PD L1 testing
- Discuss side effects for immunotherapy

**11:45 Interactive Questions & Answers Panel Discussion (30 minutes)**

***( Eduardo Celis, Ara Chrissian, Christine Argento)***

**12:15 BREAK**

**12:25 Pleural space infections: chest tube selection and management (15 minutes)**

- **Saadia Faiz, MD (MD Anderson Cancer center, TX)**
- Summarize the relevant chest wall anatomy and technique for chest tube insertion
- Discuss indications for VATS in parapneumonic effusions
- Pros and Cons of small and large bore chest tubes for Complicated Parapneumonic Effusion/Empyema

**12:40 Pleurodesis and Tunneled indwelling pleural catheter (15 minutes)**

- **Jasleen Pannu, MD (Ohio State University, OH)**
- Outcomes (pain, dyspnea, QOL) of TPCs, thoroscopic talc insufflation and chest tube pleurodesis in MPE (summarize clinical trials)

- Indications/Contraindications of TPCs on benign disorders
- List the indications and contraindications for pleurodesis as well as predictors of success (chemistry, performance status)

**12:55**      **Pleural Effusions: Thoracentesis and Medical Thoracoscopy (20 minutes)**

- **Catherine Oberg, MD (David Geffen School of Medicine, UCLA)**
- Diagnostic yield of thoracentesis and thoracoscopy for Malignant Pleural Effusion
- Indications and main findings of pleural manometry
- List the main pleural fluid and imaging findings in chylothorax, trapped lung
- Summarize the CT findings and potential thoracoscopy –related complications in mesothelioma

**13:15**      **Interactive Questions & Answers Panel Discussion (30 minutes)**

***(Saadia Faiz, Jasleen Pannu, Catherine Oberg)***

**13:45**      **BREAK**

**13:55**      **Mechanisms of Tissue destruction (20 minutes)**

- **Javier Diaz-Mendoza, MD (Henry Ford Hospital, MI)**
- Discuss the basic physics of Cryo, APC, CO2 laser, KTP, Nd YAG, diode, argon, brachytherapy and PDT (mechanism of tissue injury, depth of effect)
- Summarize the outcomes and complications for commonly performed ablation techniques: cryo, APC and NdYAG, PDT

**14:15**      **Rigid bronchoscopy (15 minutes)**

- **Bryan Husta, MD (Memorial Sloan Kettering Cancer Center, NY)**
- Indications and contraindications of therapeutic bronchoscopy (including improvement in QOL, dyspnea scale, survival, and lack of functional distal lung, respectively)
- Predictors of success and mortality in therapeutic bronchoscopy based on the ACQUIRE registry and most recent studies
- Anesthesia for rigid bronchoscopy
- Indications, complications of microdebrider

**14:30**      **Airway stents (15 minutes)**

- **Fayez Kheir, MD (Massachusetts general hospital, MA)**
- List stent-related complications and association with type of stent: silicone vs SEMS for each complication
- Benefit of stents as a bridge to treatment in malignant obstruction (eg. chemo or radiotherapy) and benign disease (eg. tracheoplasty for malacia)
- Summarize indications, technique and complications of T tubes
- Discuss indications for stenting malignant TEF (esophageal, airway, both)

**14:45**      **Non-malignant CAO: Strictures and TBM (20 minutes)**

- **Colleen Keyes, MD (Massachusetts General Hospital, MA)**
- Work up for benign airway strictures
- Indications for bronchoscopic dilations
- Discuss the bronchoscopic and surgical management of typical endobronchial carcinoid

- Summarize diagnostic criteria and management strategies for Relapsing Polychondritis, Idiopathic Tracheal Stenosis, Post-intubation Tracheal Stenosis, Granulomatosis with Polyangiitis

**15:05          Interactive Questions & Answers Panel Discussion (30 minutes)**

*(Javier Diaz-Mendoza, Bryan Husta, Fayez Kheir, Colleen Keyes)*

**15:35          BREAK**

**15:45          Airway complications following lung transplant (15 minutes)**

- **Francisco Almeida, MD (Cleveland Clinic, OH)**
- Enumerate the evidence based risk factors for anastomotic complications
- Summarize the bronchoscopic strategies for managing dehiscence and strictures
- Summarize the evidence for indications and frequency of Transbronchial Lung Biopsy post lung transplant

**16:00          Management of Pneumothorax and bronchopleural fistula (20 minutes)**

- **Neeraj Desai, MD (Chicago Chest Center, IL)**
- Indications for drainage in PSP, SSP
- Pros and Cons of small and large bore chest tubes for pneumothorax

- Define central and peripheral (parenchymal) BPF and summarize treatment strategies

**16:20      Bronchoscopic lung volume reduction for emphysema (15 minutes)**

- **Rolando Peralta, MD (Henry Ford Hospital, MI)**
- Summarize the NETT study findings
- Discuss the concept of collateral ventilation and its impact on BLVR
- List evidence based indications and contraindications to BLVRS

**16:35      Miscellaneous: Transbronchial Cryobiopsy and Bronchial Thermoplasty (15 minutes)**

- **Jennifer Johnson, MD (Loyola University Medical Center, IL)**
- Techniques, indications, outcomes and complications of cryobiopsy
- Summarize mechanism of action and clinical studies of BT, as well as discussion of use of BT and future

**16:50      Percutaneous tracheostomy and transtracheal oxygen therapy (20 minutes)**

- **Danai Khemasuwan, MD (VCU medical center, VA)**
- Indications and potential problems of trans tracheal oxygen therapy systems
- Outcomes (mortality, ICU LOS, hospital LOS and VAP) of the studies evaluating early vs late trachea and surgical vs percutaneous dilatation tracheostomy
- Discuss anatomical landmarks as pertinent to avoiding complications (bleeding, subglottic stenosis)



**17:10**      **Interactive Questions & Answers Panel Discussion (25 minutes)**

*(Francisco Almeida, Neeraj Desai, Rolando Peralta, Alejandro Aragaki, Danai Khemasuwan)*

**17:35**      **Break**

**17:45**      **Management of complications of bronchoscopy (15 minutes)**

- **Maykol Postigo, MD (University of Kansas, KS)**
- Discuss various post operative complications after bronchoscopy
- Management of complications of bronchoscopy
- Strategies to prevent complications

**18:00**      **Bronchoscopy management in high risk patients with comorbidities**  
**(15 minutes)**

- **Laura Frye, MD (University of Utah, UT)**
- Discuss bronchoscopy during pregnancy
- Bronchoscopy in Pulmonary Arterial Hypertension patients
- Special consideration pre-bronchoscopy in high risk population
- Strategies to prevent complications in patient with comorbidities

**18:15**      **Coding and billing for bronchoscopy (15 minutes)**

- **Gus Cumbo Nacheli, MD (Spectrum Health, MI)**
- Discuss procedural billing for major bronchoscopic procedures.
- Discuss common mistakes and misconceptions regarding appropriate billing for bronchoscopic procedures.

**18:30      Surgical interventions and CT guided TTNA (15 minutes)**

- **Ellen Volker, MD, (National Jewish Health, CO)**
- Indications for CT guided biopsy
- Diagnostic yield and complications associated with TTNA and their management

**18:45      Interactive Questions & Answers Panel Discussion (20 minutes)**

***(Maykol Postigo, Laura Frye, Gus Nacheli, Ellen Volker)***

**19:05      Closing comments**