

# **AABIP - Advanced Bronchoscopy and Interventional Pulmonology Board Review Virtual Course 2024**

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**Saturday, November 2nd, 2024**

**Times shown in EST**

**9:00 Opening Remarks**

**9:05 Lung Cancer Screening (15 minutes)**

- **Erin DeBiasi, MD (Yale University)**
- 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

**9:20 Approach to Lung Cancer Diagnosis, Staging and initial Treatment (15 minutes)**

- **Emily Ducomb, MD (University of Michigan)**
- 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

**09:35 Mediastinal and hilar anatomy (15 minutes)**

- **Diana Yu, MD, (UCSF)**
- 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

**09:50 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

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

***(DeBiasi, Ducomb, Yu, Ghali)***

**10:40 BREAK      10min**

**10:50 Approach to patient with peripheral lung nodules (20 minutes)**

- **Ken Sakata, MD (Mayo-Arizona)**
- 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/Robotic bronchoscopy and its diagnostic yield depending upon size, location and other patient-related factors
- Robotic platforms

**11:10 Anesthesia and airway management for advanced bronchoscopy (15 minutes)**

- **Sameer Avasarala, MD (Case Western Reserve University School of Medicine)**
- 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
- Brief overview of best practice anesthesia for robotic bronchoscopy/EBV placement

**11:25 Pathology and Molecular markers of Lung Cancer (15 minutes)**

- **Abbie Begnaud, MD (University of Minnesota)**
- 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

**11:40 Surgical interventions and CT guided TTNA (15 minutes)**

- **Pranjal Patel, MD (Stanford University)**
- Indications for CT guided biopsy
- Diagnostic yield and complications associated with TTNA and their management
- Surgical management of lung cancer

**11:55 Interactive Questions & Answers Panel Discussion (30 minutes)**

***( Sakata, Avasarala, Begnaud, Patel)***

**12:25 BREAK 10min**

**12:35 Pleural space infections: chest tube selection and management (15 minutes)**

- **Robert Lentz, MD (Vanderbilt University Medical Center)**
- 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

**12:50 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)

**13:05 Pleural Effusions: Thoracentesis and Medical Thoracoscopy (20 minutes)**

- **Audra Schwalk, MD (UT South Western)**
- 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

**13:25 Management of Pneumothorax and bronchopleural fistula (15 minutes)**

- **Ali Sadoughi, MD (Montefiore Medical Center-Einstein Campus)**
- 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

**13:40 Interactive Questions & Answers Panel Discussion (30 minutes)**

***(Lentz, Pannu, Schwalk, Sadoughi)***

**14:10 BREAK 10min**

**14:20 Bronchoscopic lung volume reduction for emphysema (15 minutes)**

- **Russell Miller, MD (Naval Medical Center)**
- Summarize the NETT study findings
- Discuss the concept of collateral ventilation and its impact on BLVR
- List evidence based indications and contraindications to BLVRS

**14:35 Miscellaneous: Transbronchial Cryobiopsy (15 minutes)**

- **Jessica Johnson, MD (Northwestern Medicine)**
- 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

**14:50 Management of high-risk patients and complications of bronchoscopy (20 minutes)**

- **Kyle Bramley, MD (Yale)**
- Discuss various post operative complications after bronchoscopy
- Management of complications of bronchoscopy
- Strategies to prevent complications
- 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

**15:10 Coding and billing for bronchoscopy (15 minutes)**

- **Daniel Djondo, MD (Loyola University)**
- Discuss procedural billing for major bronchoscopic procedures.
- Discuss common mistakes and misconceptions regarding appropriate billing for bronchoscopic procedures

**15:35 Interactive Questions & Answers Panel Discussion (30 minutes)**

*(Miller, Johnson, Bramley, Djondo)*

**16:05 BREAK (CAQ is done)**

**16:15 Mechanisms of Tissue destruction (20 minutes)**

- **Brian Shaller, MD (Stanford University)**
- 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

**16:35 Rigid bronchoscopy (15 minutes)**

- **John Egan, MD (Spectrum Health)**
- 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

**16:50 Airway stents (15min)**

- **Mihir Parikh, MD (Beth Israel Deaconess Medical Center)**
- 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 TBM)
- Summarize indications, technique and complications of T tubes
- Discuss indications for stenting malignant TEF (esophageal, airway, both)

**17:05 Interactive Questions & Answers Panel Discussion (25 minutes)**

**(Shaller, Egan, Parikh)**

**17:30 BREAK      5 Min**

**17:35 Non-malignant CAO: Strictures and TBM (20 minutes)**

- **Jose DeCardenas, MD (University of Michigan)**
- 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 a Polyangiitis

**17:55 Airway complications following lung transplant (15 minutes)**

- **Faisal Shaikh, MD (Columbia University)**
- 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

**18:10 Percutaneous tracheostomy and transtracheal oxygen therapy (15 minutes)**

- **Van Holden, MD (University of Maryland)**
- 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)

**18:25 Interactive Questions & Answers Panel Discussion (25 minutes)**

*(DeCardenas, Shaikh, Holden)*

**18:50 Closing comments (10 minutes)**