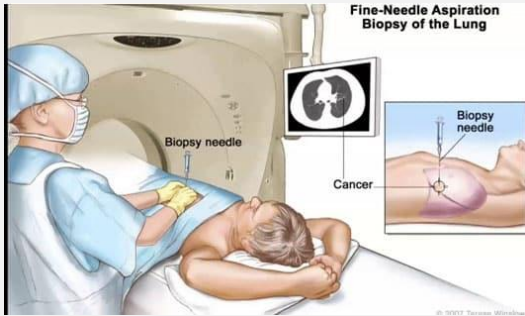


Lung Lesions : Atypical Cases and Diagnostic Approach

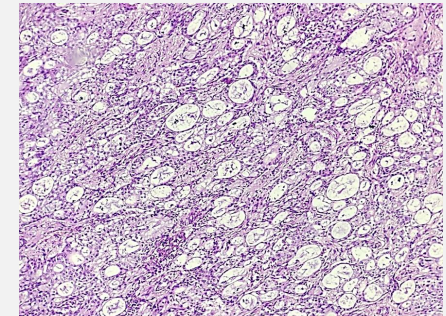


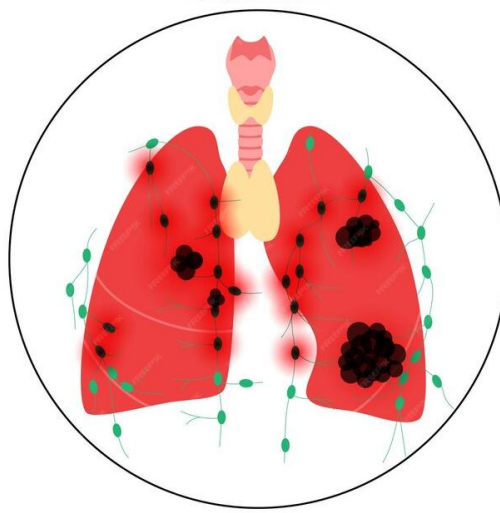
Presenters-

Dr Naila Awal, Associate Professor

Dr. Shahana Sultana Shova, Asst. Prof.(CC)

Department of Pathology
Green Life Medical College





CASE SCENERIOS

Dr. Shahana Sultana Shova

Assistant Professor (CC)
Department of Pathology
Green Life Medical College

CASE SCENERIO 1

- A 37 yrs old male, muslim , medical representative by occupation got admitted at Green life medical hospital on 19th December,2024
- He gave H/O fever for 20days ,right sided chest pain & respiratory distress for same duration .He also gave H/O occasional productive cough for 2months

CONTINUE...

- He gave past H/O pulmonary tuberculosis
- He is non smoker ,but have H/O betel chewing for long duration



**Looking
For An
Answer?**

CONTINUE...

- **General physical examination :**
 - Blood pressure - 120/70 mmHg
 - Pulse - 75 beats /min
 - Anemia - Absent
 - Lymphadenopathy - Absent
- **Systemic examination :** On Respiratory system examination wheezing was present on auscultation. Other systemic examination reveal no significant abnormality

CONTINUE...

- **Investigation profile:**

- ☐ **CBC** : Hb-13 g/dl ; ESR - 58 mm in 1st hour
- ☐ **S. electrolytes** : Sodium > 137 mmol/L
Potassium > 3.5 mmol/L
Chloride > 100 mmol/L
- ☐ **S. Creatinine** : 0.8 mg/dl

CONTINUE...

Investigation profile:

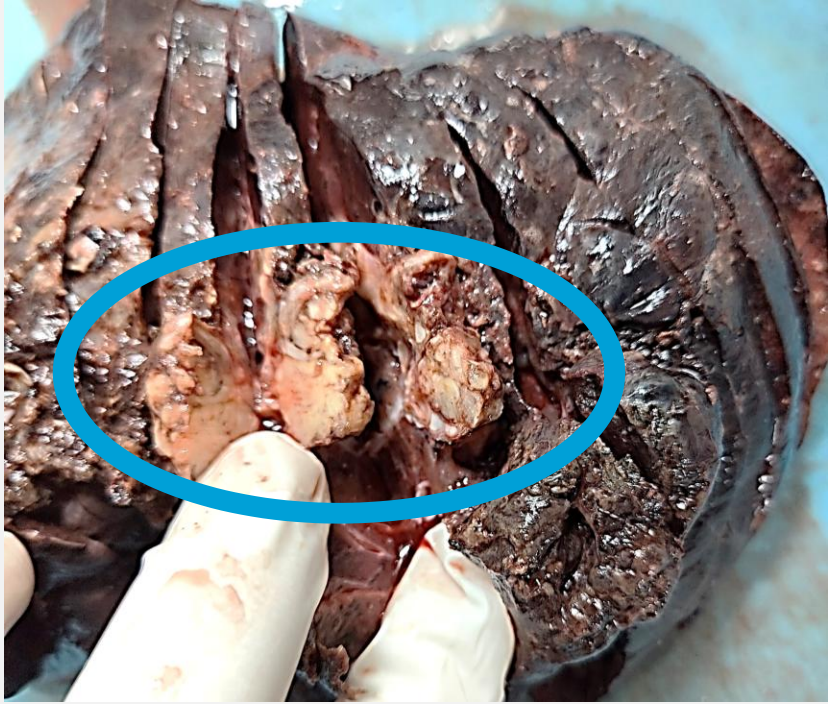
- ❑ **X-ray chest** : Consolidation in right upper lobe of lung
- ❑ **CT-scan of chest** : Suspected mass lesion at right upper lobe with adjacent consolidation with right hilar lymphadenopathy
- ❑ **Bronchoscopy** : Right upper lobe endobronchial growth
(Histopathology was done)

CONTINUE...

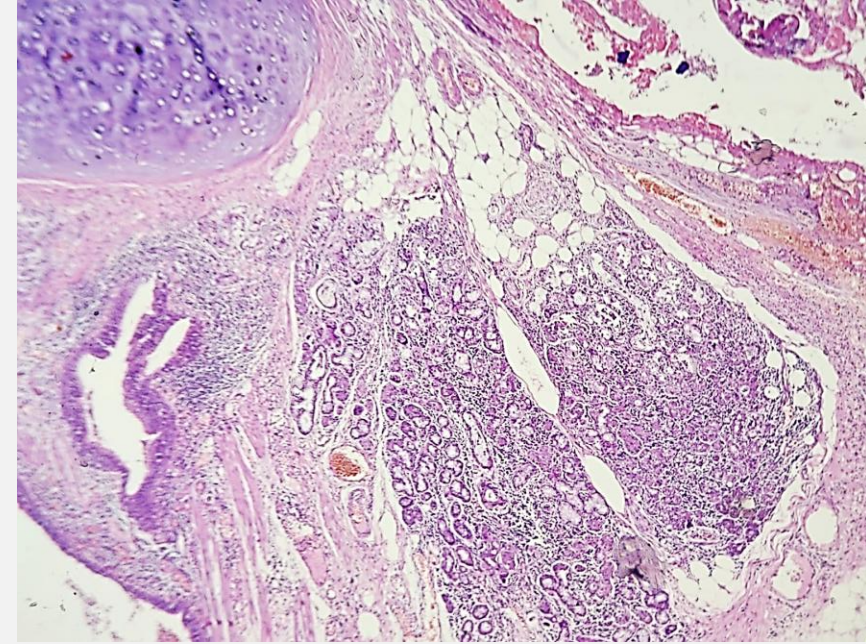
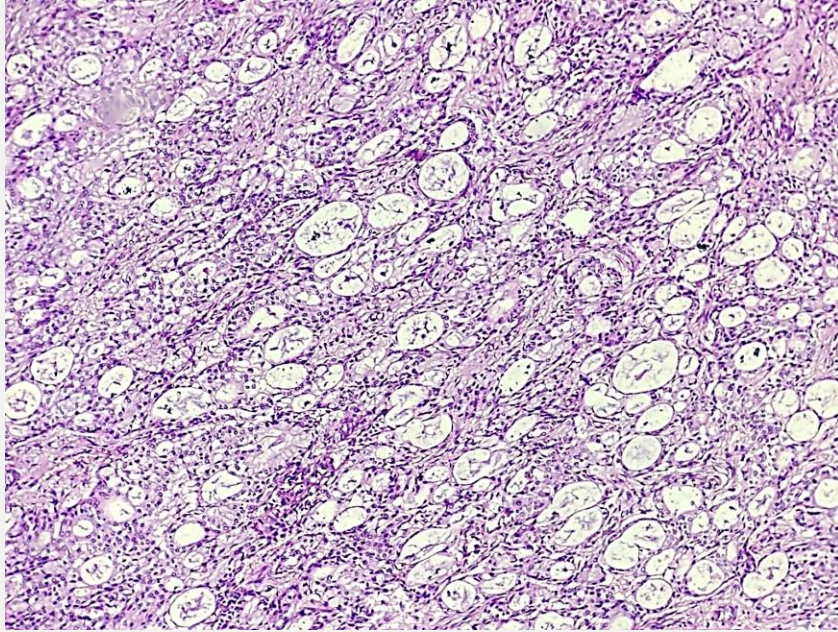
- ❑ **Broncho-alveolar lavage** : Negative for malignant cell
C/S - No growth of bacteria
- ❑ **PET Scan** : Irregular elongated hyperdense area containing air bronchogram in right upper lung compatible with primary malignant lesion with ipsilateral lung & nodal metastases .No other suspicious lesion elsewhere in the body surveyed

CONTINUE...

- On 21st December ,2024 right upper bi-lobectomy followed by frozen section biopsy and routine histopathology examination were done



Grossly reveal a tan brown firm mass involving bronchial resection margin



Tumor composed of mostly solid and cystic areas. The cystic spaces lined by columnar cells. The solid areas are mostly composed of intermediate and mucus cells

DIAGNOSIS...

- Mucoepidermoid carcinoma, Low grade

CASE SCENERIO 2

- A 50 yrs old male, muslim , radio technologist got admitted at Green life medical hospital on 29th October, 2023
- He gave H/O recurrent hemoptysis for the past 6 months.

Lost about 2 kg of weight for same duration

CONTINUE...

- He gave no H/O shortness of breath, chest pain, cough, or fever
- He is nonsmoker, but chews betel nuts and occasionally drinks alcohol



Looking
For An
Answer?

CONTINUE...

- **General physical examination :**
 - Blood pressure - 130/80 mmHg
 - Pulse - 80 beats /min
 - Anemia - Absent
 - Lymphadenopathy - Absent
- **Systemic examination :** On Respiratory system examination breath sounds were diminished in the right chest. Other systemic examination reveal no significant abnormality

CONTINUE...

- **Investigation profile:**

- ☐ **CBC** : Hb- 14 g/dl ; ESR - 16 mm in 1st hour
- ☐ **S. electrolytes** : Sodium > 138 mmol/L
Potassium > 4.1 mmol/L
Chloride > 101 mmol/L
- ☐ **S. Creatinine** : 1.0 mg/dl
- ☐ **SGPT** : 62 unit/L

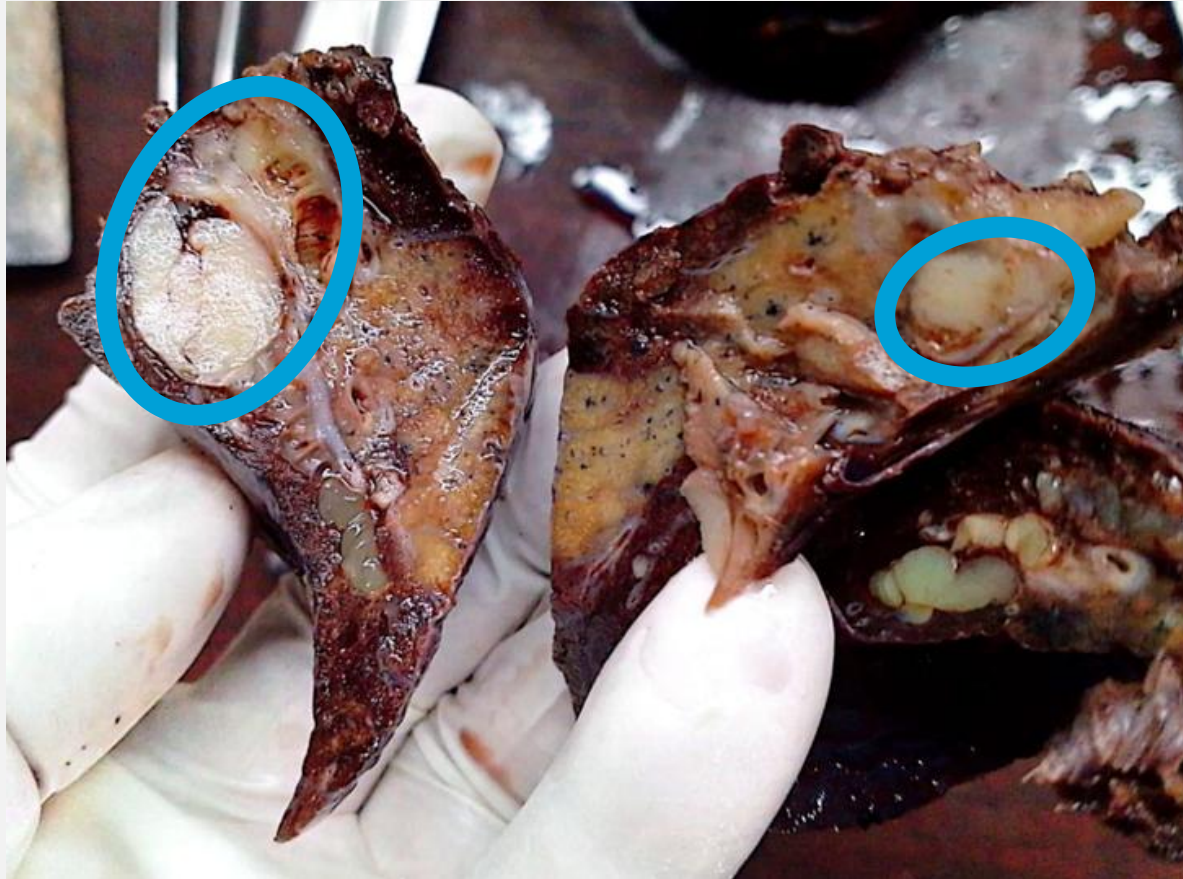
CONTINUE...

Investigation profile:

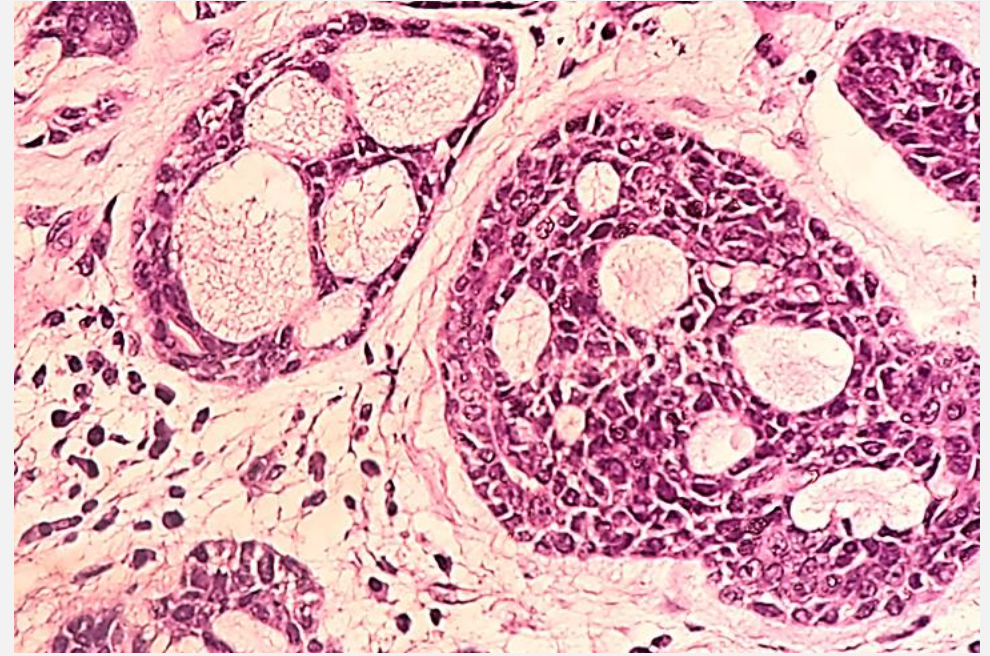
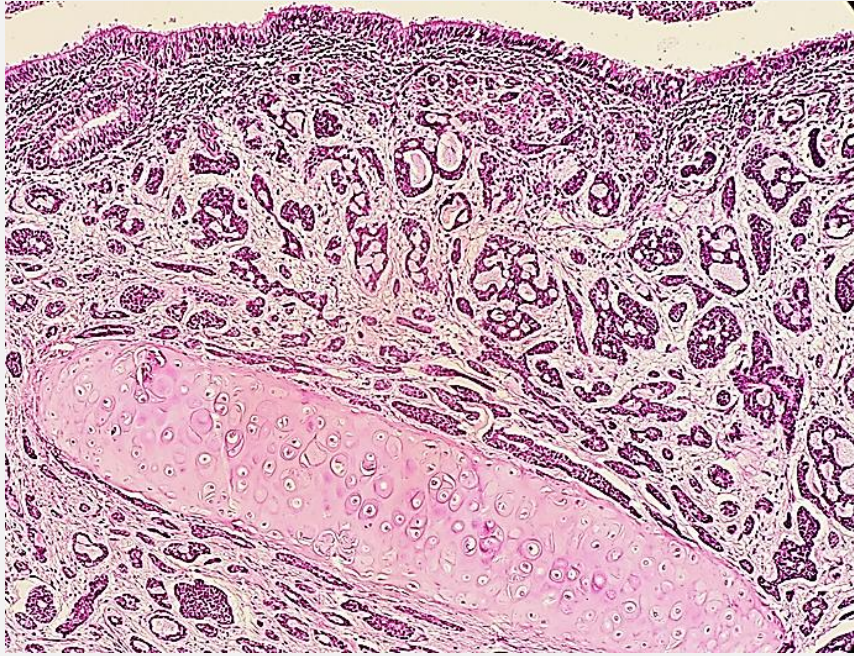
- ❑ X-ray chest : Consolidation in right upper lobe of lung
- ❑ CT-scan of chest : Endo bronchial mitotic lesion in Right principal bronchus with right lower lobe collapse with consolidation

CONTINUE...

- ❑ **Bronchoscopy** : Endo bronchial mass lesion present in truncus intermedius , near the opening of Rt upper lobe bronchus
- ❑ **Bronchial washing** : Positive for malignant cell
- ❑ **Bronchial brushing** : Positive for malignant cell



Grossly reveal gray white nodular mass very close to bronchial resection margin



Tumor cells are arranged in nest, column and cribriform pattern. Lumen of the glands contains eosinophilic material

DIAGNOSIS..

- Pulmonary adenoid cystic carcinoma,
Intermediate grade

MUCOEPIDERMOID CARCINOMA

- Most common salivary gland type neoplasm of lung, but still rare one
- **Epidemiology** : <1% of all primary lung tumors of adults; Mean age 30-40 years with no sex predominance
- **Site** : Central or Endobronchial in location ; but any lung lobe can be affected. Arise from submucosal bronchial glands
- Classified as **Low grade** and **High grade**

MUCOEPIDERMOID CARCINOMA...

- **Clinical features** : Large central tumors cause obstructive symptoms like dyspnea, cough, wheeze, hemoptysis or pneumonia. Peripheral lesions are asymptomatic
- **Prognostic factors** : Age, Stage, Margin status, Lymphnode metastasis;

Excellent prognosis after complete surgical resection in low grade carcinoma

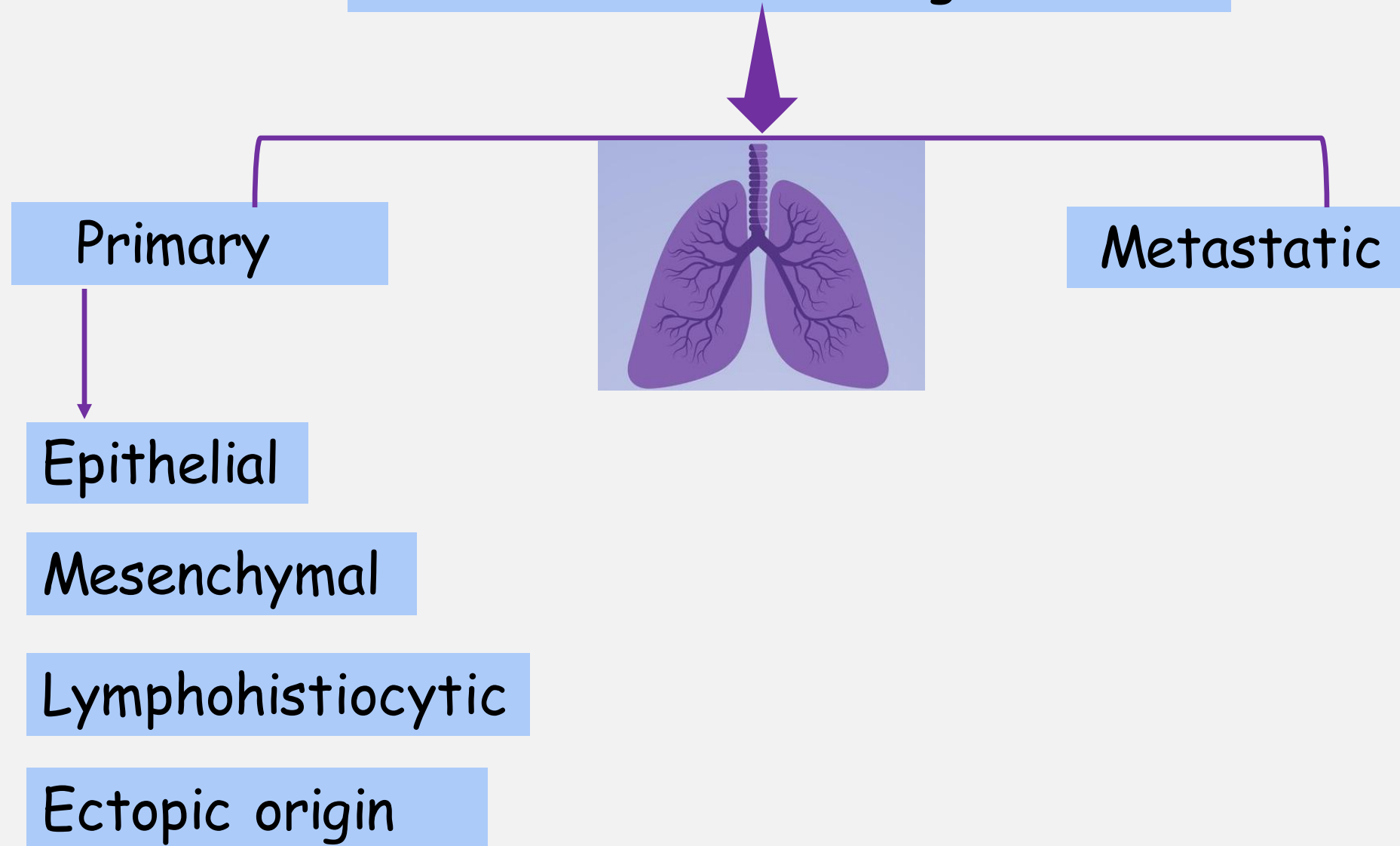
ADENOID CYSTIC CARCINOMA

- **Epidemiology** : <1% of all primary lung tumors of adults; Average age at presentation is 50 years with no sex predominance
- **Site** : Central / Endobronchial / Peripheral. Arise from submucosal salivary glands. **Usually spread along neurovascular bundles**
- **Clinical features** : Large central tumors cause obstructive symptoms like dyspnea, cough, wheeze hemoptysis or pneumonia. Peripheral lesions are asymptomatic

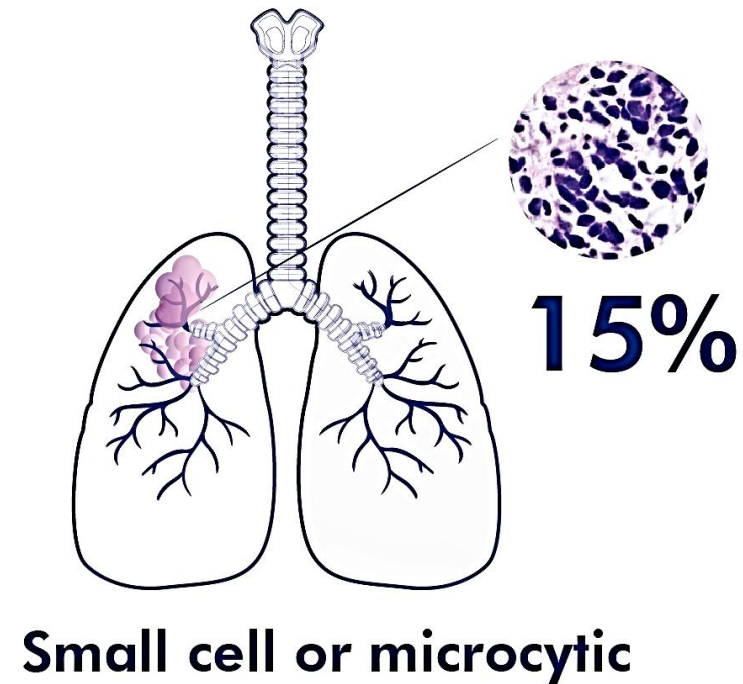
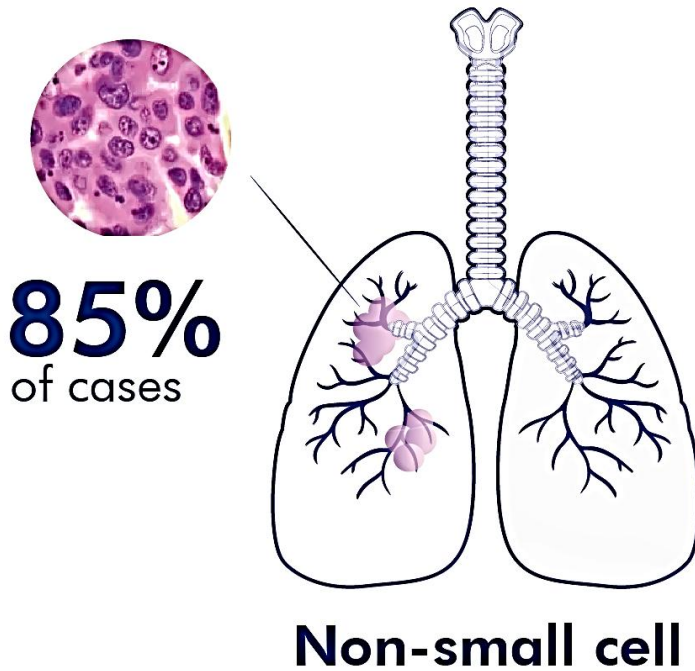
ADENOID CYSTIC CARCINOMA...

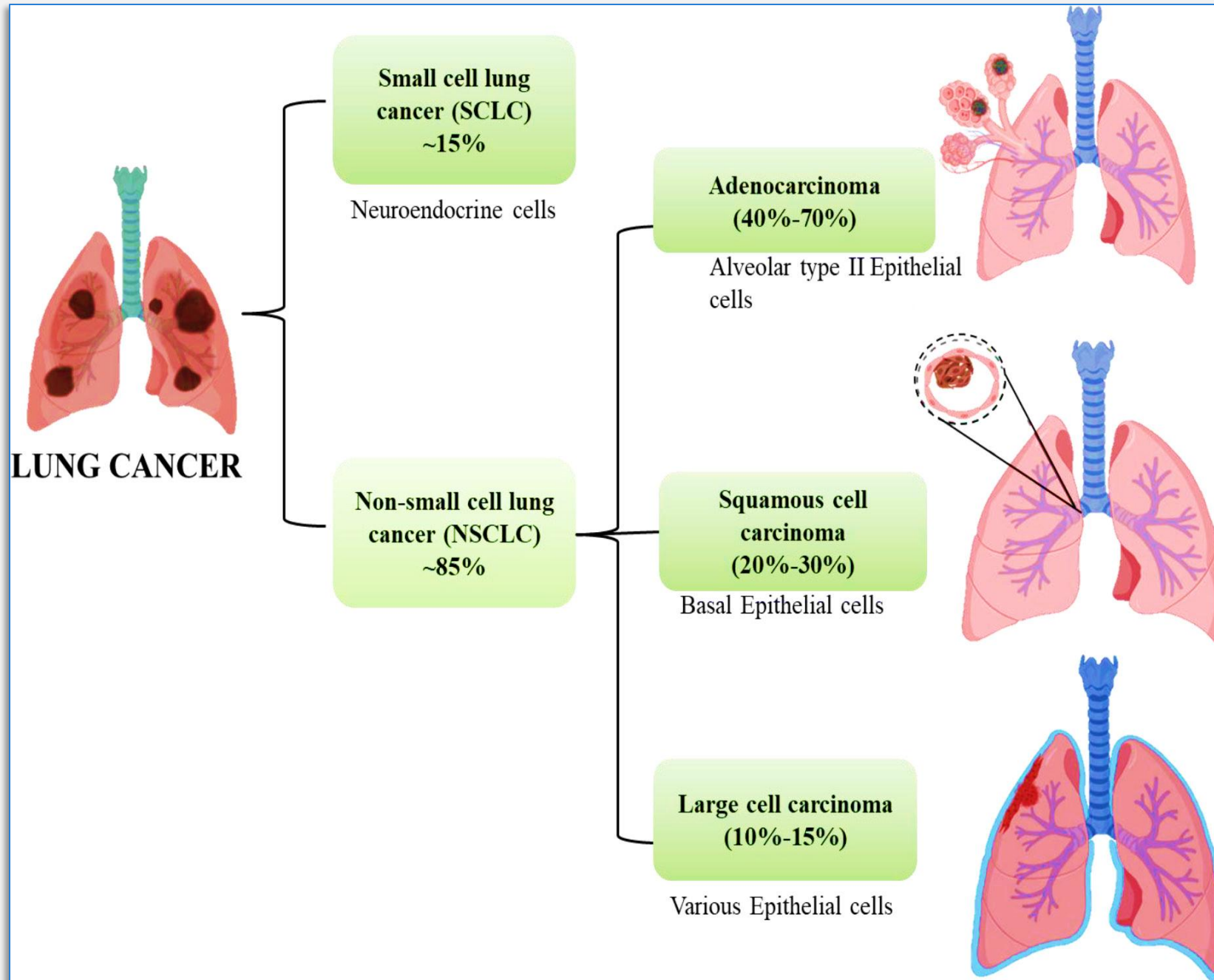
- **Prognostic factors** : Prolonged course ,but overall prognosis is poor. Can recur after years, potentially with metastasis to lymphnodes and distant sites

Classification of lung Tumors



Classification of Primary epithelial lung tumors





Thank you



To be continue.....