

**RSM-8**

# LUNG TUMORS-2



Dr.Eman Kreishan,M.D.

25-10-2022

# Clinical Features

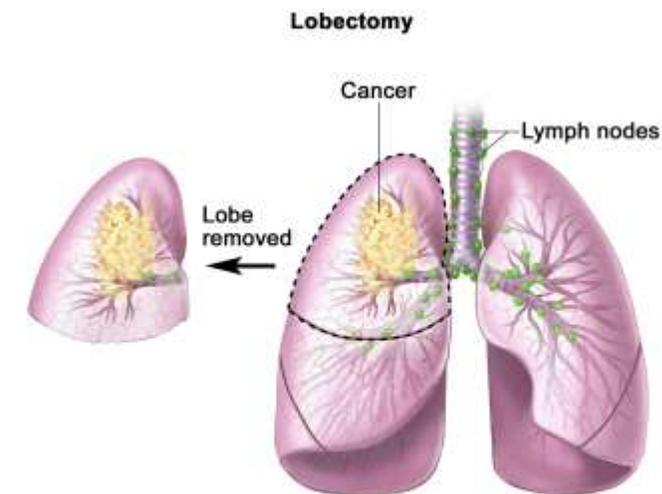
- ▶ Carcinomas of the lung are insidious lesions that in many cases have spread so as to be unresectable before they produce symptoms.
- ❖ chronic cough and expectoration call attention to localized, resectable disease.
- ❖ Hoarseness.
- ❖ chest pain.
- ❖ superior vena cava syndrome.
- ❖ pericardial or pleural effusion.
- ❖ persistent segmental atelectasis or pneumonitis

# symptoms caused by metastasis!!

- ▶ spread to sites such as:
  - brain (mental or neurologic changes).
  - liver (hepatomegaly).
  - bones (pain).
- ▶ Although the adrenal glands may be nearly obliterated by metastatic disease, adrenal insufficiency (Addison disease) is uncommon, because islands of cortical cells sufficient to maintain adrenal function usually persist.

# Prognosis

- ▶ squamous cell carcinoma and adenocarcinoma carry a more favorable prognosis than small cell carcinoma.
- ▶ When squamous cell carcinomas or adenocarcinomas are detected before metastasis or local spread (as in high-risk patients undergoing surveillance imaging), cure is possible by lobectomy.
- ▶ Unrespectable adenocarcinomas associated with targetable mutations in tyrosine kinases such as EGFR may show remarkable responses to specific inhibitors.



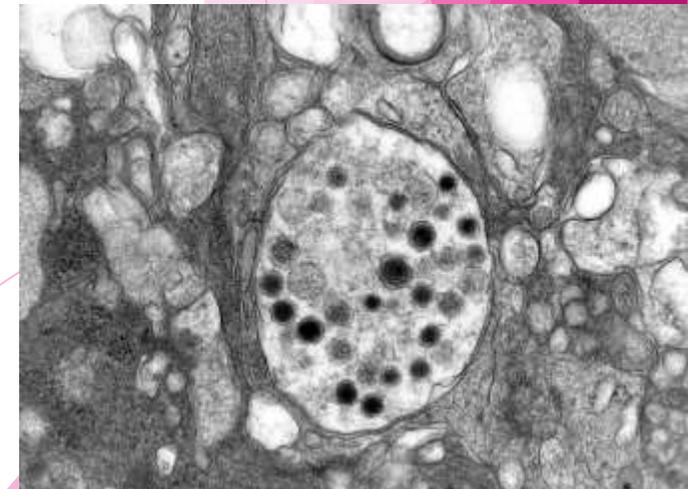
- ▶ **Small cell carcinoma have invariably spread by the time they are detected, even if the primary tumor appears to be small and localized; thus, surgical resection is not a viable option.**
- ▶ **Small cell carcinoma are very sensitive to chemotherapy but invariably recur, and as of yet targeted therapies are unavailable.**
- ▶ **The median survival even with treatment remains only 1 year**

# paraneoplastic syndromes

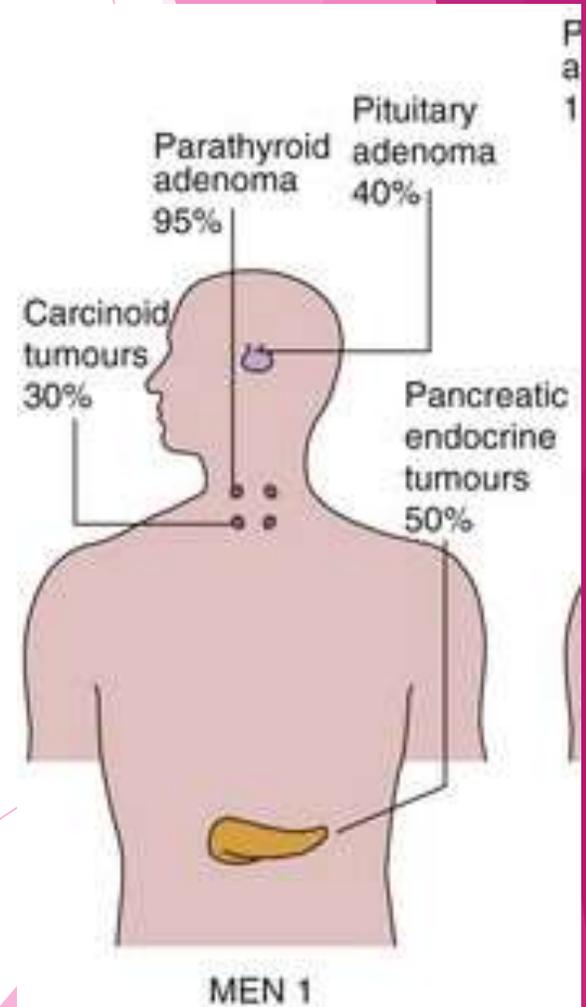
- ▶ (1) hypercalcemia caused by secretion of a parathyroid hormone-related peptide.
- ▶ (2) Cushing syndrome (from increased production of adrenocorticotrophic hormone).
- ▶ (3) syndrome of inappropriate secretion of anti-diuretic hormone.
- ▶ (4) neuromuscular syndromes, including a myasthenic syndrome, peripheral neuropathy, and polymyositis.
- ▶ (5) clubbing of the fingers and hypertrophic pulmonary osteoarthropathy.
- ▶ (6) coagulation abnormalities, including migratory thrombophlebitis, nonbacterial endocarditis, and disseminated intravascular coagulation

# Carcinoid Tumors

- ▶ Carcinoid tumors are malignant tumors composed of cells that contain dense-core neurosecretory granules in their cytoplasm and, rarely, may secrete hormonally active polypeptides.
  - ▶ They are best thought of as low-grade neuroendocrine carcinomas and are subclassified as:
    - typical.
    - atypical.
- both are often resectable and curable

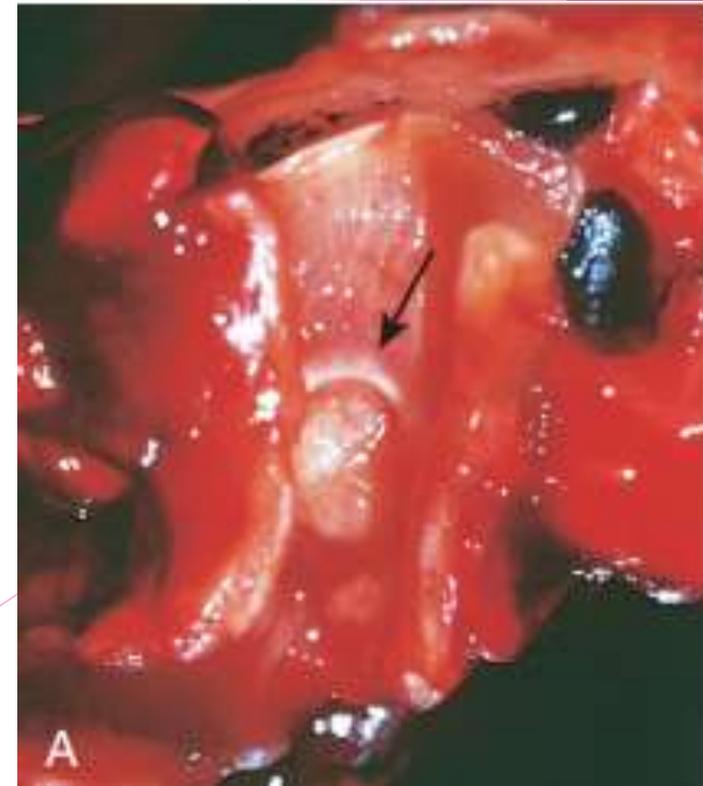


- ▶ They occasionally occur as part of the multiple endocrine neoplasia syndrome.
- ▶ Although 5% to 15% of carcinoids have metastasized to the hilar nodes at presentation, distant metastases are rare



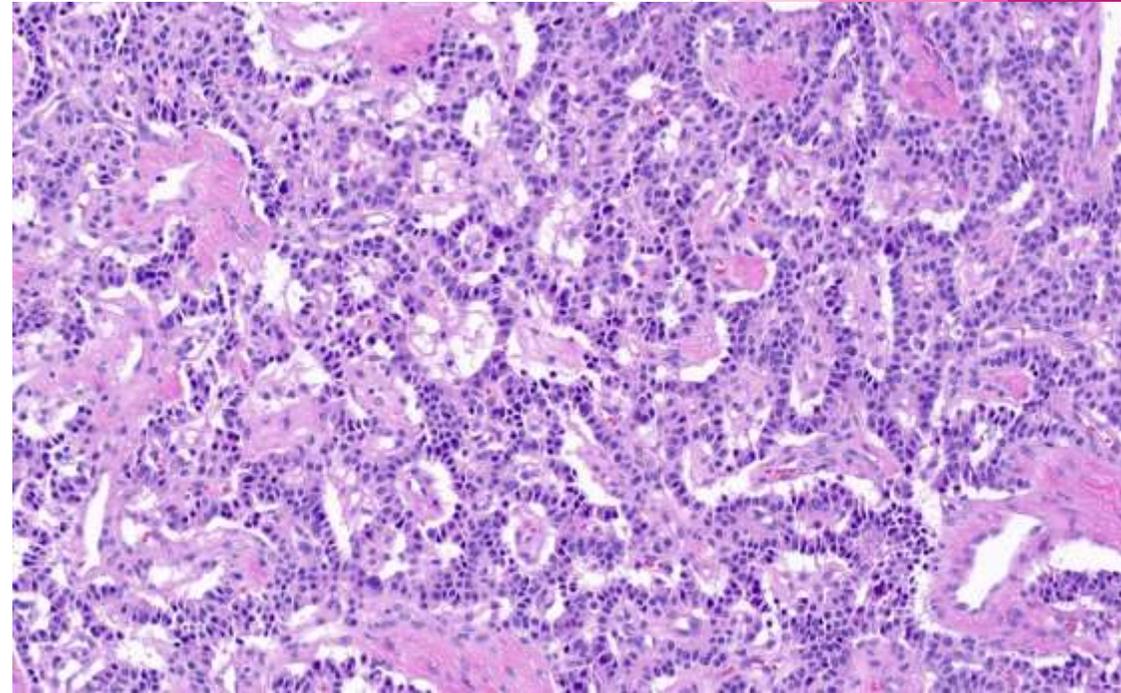
# MORPHOLOGY

- ▶ Most carcinoids originate in main bronchi and grow in one of two patterns:
- ▶ (1) an obstructing polypoid, spherical, intraluminal mass.
- ▶ (2) a mucosal plaque penetrating the bronchial wall to fan out in the peribronchial tissue.



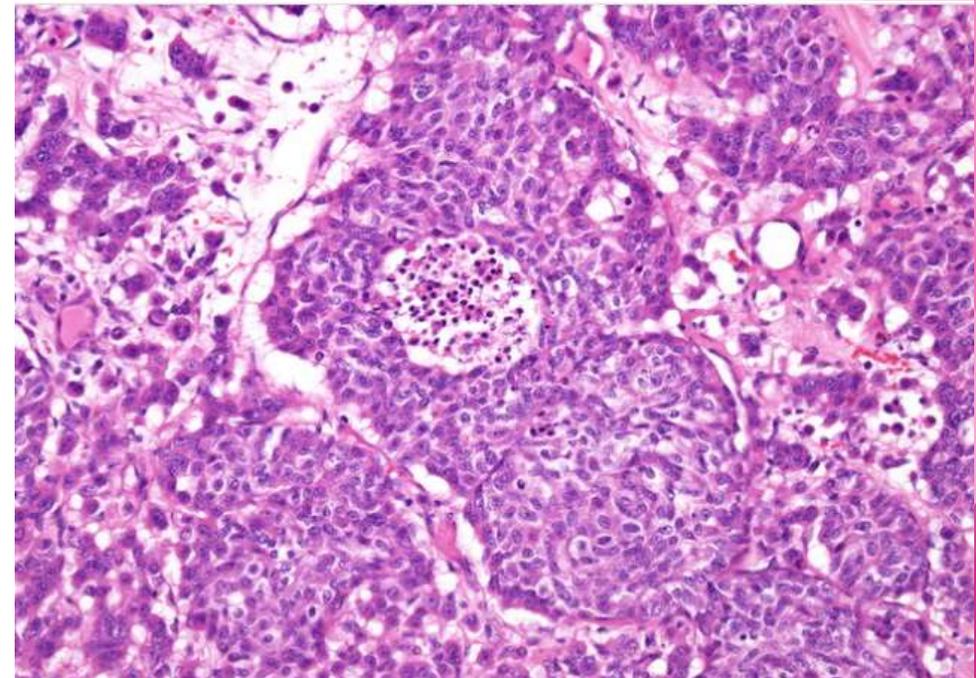
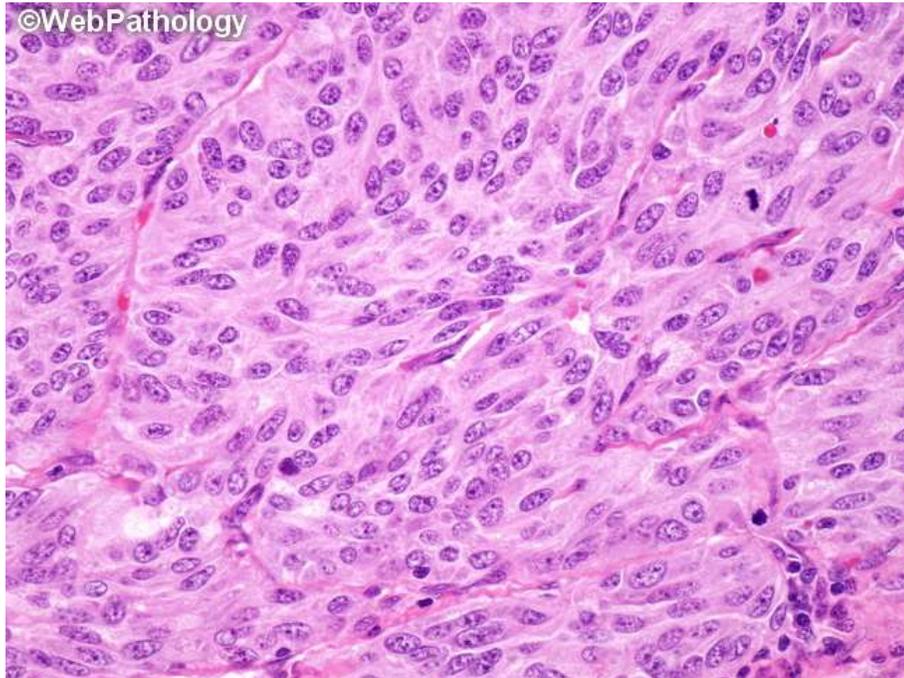
# Histologically

- ▶ typical carcinoids:
- ▶ are composed of nests of uniform cells that have regular round nuclei with “salt-and-pepper” chromatin, absent or rare mitoses and little pleomorphism.



▶ **Atypical carcinoid tumors :**

- display a higher mitotic rate and small foci of necrosis.
- These tumors have a higher incidence of lymph node and distant metastasis than typical carcinoids. Unlike typical carcinoids, the atypical tumors have TP53 mutations in 20% to 40% of cases



# Clinical features

- ▶ Most carcinoid tumors manifest with signs and symptoms related to their intraluminal growth, including cough, hemoptysis, and recurrent bronchial and pulmonary infections.
- ▶ Peripheral tumors are often asymptomatic and are discovered incidentally on chest radiographs.
- ▶
- ▶ Only rarely do pulmonary carcinoids induce the carcinoid syndrome, characterized by :
  - intermittent attacks of diarrhea.
  - flushing.
  - cyanosis