

Large Cell Carcinoma

Lung carcinoma is typically divided into two categories, small cell carcinoma and non-small cell carcinoma. Non-small cell carcinoma subtypes include adenocarcinoma, squamous cell carcinoma, large cell carcinoma, and carcinoid tumor. Large cell carcinoma of the lung has a strong correlation with smoking and typically has a poor prognosis. It is commonly located in the periphery of the lung. Patients may present with gynecomastia and galactorrhea since some tumors secrete beta-hCG. Large cell carcinoma is often a diagnosis of exclusion and histology shows anaplastic cells and pleomorphic giant cells. Treatment is typically surgical resection since this tumor is less responsive to chemotherapy.



PLAY PICMONIC

Characteristics

Strong Correlation with Smoking

Strong-arm Smoking

Large cell carcinoma is strongly correlated with a history of cigarette smoking.

Poor Prognosis

Gravestone

There is often a poor prognosis for patients diagnosed with large cell carcinoma of the lung. These tumors tend to grow rapidly and spread more quickly than other types of non-small cell lung cancers. The estimate for 5-year survival rate of large cell carcinoma is around 10%.

Peripheral Lesions

Peripheral Leeches

Large cell carcinoma tends to be located in the periphery of the lung. It usually presents as a large peripheral mass with prominent necrosis.

Symptoms

Gynecomastia

Man-boobs

Certain subtypes of large cell carcinoma can secrete beta-hCG which can lead to high levels of estrogen, painful gynecomastia (breast enlargement) and galactorrhea (spontaneous discharge of milk from the breast).

Galactorrhea

Lactating and Pumping Breast-milk

Certain subtypes of large cell carcinoma can secrete beta-hCG which can lead to high levels of estrogen, painful gynecomastia (breast enlargement) and galactorrhea (spontaneous discharge of milk from the breast).

Diagnosis

Anaplastic Cells

[A-plastic-water-bottle Cells](#)

Large cell carcinoma tends to be a highly anaplastic undifferentiated tumor. Anaplastic cells are poorly differentiated cells that lose their normal morphological characteristics.

Pleomorphic Giant Cells

[Play-dough-morphic Giant Cells](#)

Histologically, large cell carcinoma is characterized by large polygonal cells and anaplastic cells growing in solid nests. There is often abundant pale staining cytoplasm.

May Produce Beta hCG

[Pregnant Beta-fish](#)

Recall that beta-hCG is normally produced by the placenta to maintain progesterone production and therefore pregnancy. Certain subtypes of large cell carcinoma can secrete beta-hCG which can lead to high levels of estrogen, painful gynecomastia (breast enlargement) and galactorrhea (spontaneous discharge of milk from the breast).

Diagnosis of Exclusion

[Diagnostic-computer Excluding Tumor-guys](#)

Large cell carcinoma does not exhibit glandular or squamous differentiation (which is seen in adenocarcinoma and squamous cell carcinoma respectively). It also lacks cytologic features of small cell carcinoma. Since it does not have features of other lung cancers, it is a diagnosis of exclusion.

Treatment

Surgical Resection

[Surgeon](#)

Non-small cell lung cancers that present early in the disease process are generally treated upfront with surgical resection. Patients with metastatic disease outside of the chest are not candidates for surgical resection. Even with a complete resection, recurrence is still possible.

Less Responsive to Chemotherapy and Radiation

[Less Responsive to Chemotherapy-head-wrap and Radiation-radio](#)

Large cell carcinoma is less responsive to chemotherapy. Surgical resection is typically preferred.