Small Cell Lung Cancer

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Who, What ??

- 1. SCLCA occurs exclusively in smokers and former smokers.
- 2. The proportion of patients identified as having SCLCA has decreased from 17% to < 13% over 20 years.
- 3. Is is rapidly growing and in general is NOT curable by surgery or radiation alone but rather concurrent chemotherapy and radiation.
- 4. Staging is categorized as *Limited* or *Extensive* stage with cure rates of 10-13 vs 1 t 2% respectively

Classification:

Are considered neuroendocrine tumors

Varieties include:

1. Classical Small Cell
2. Large Cell Neuroendocrine
3. Mixed SCLCA and NSCLCA (usually squamous)

Therapy for #'s 2 & 3 more closely resembles NSCLCA and the prognosis is worse than the straight forward NSCLCA

Peculiarities

- Because of the neuroendocrine “nature” the cells have the ability to secrete substances that produce paraneoplastic syndrome
- **1. Cerebellar degeneration**
- **2. Myasthenia gravis**
- **3. Cushing's Syndrome**
- **4. Syndrome of Inappropriate ADH**

THERAPY

If disease limited to the chest and the disease can be included in 1 radiation field (limited stage disease) the therapy is simultaneous radiation as well as chemotherapy.

It is curable in double digits and the cure rate is improved by adding radiation to the brain if the patient has had a reasonable response to initial “concurrent” therapy

If the disease is larger than above (extensive stage) the therapy is chemotherapy alone with radiation to the brain added in some circumstances.

Therapy (contin.)

Cures for extensive stage are less frequent- usually < 5%

If untreated the patients rarely survive more than a few months

Future:

We are continuously trying to improve survival by improving delivery of chemotherapeutic agents as well as radiation with dosing variations (2x/day XRT) prophylactic radiation to the brain, new agents and targeting strategies.