

General Data

- Sex: female
- Age: 63 y/o
- Birth date: 1939/12/27
- Birth place: Taiwan
- Date of Admission: 2003/03/12

Chief complaint

- Cough and sorethroat for a month

Present illness (1)

- This 63 y/o female is a patient with past history of L-spine trauma for 20 years. And she received operation for 3 times. The last time, the operation for L-spine was performed at 國泰 hospital in this January.
- She had been inserted endotracheal tube during operation. After that she felt sorethroat and dry cough.

Present Illness (2)

- She had ever visited 國泰 hospital, bronchodilator and steroid were given but in vein. Then she came to our OPD for help. Cough with whitish mucoid sputum was noted. She also complained dyspnea on exertion.
- She denied body weight loss, cold sweating, headache, fever, nausea

Past History

- Surgical history: operation for L-spine trauma for three times
- DM: denied
- HTN: denied

Physical Examination:

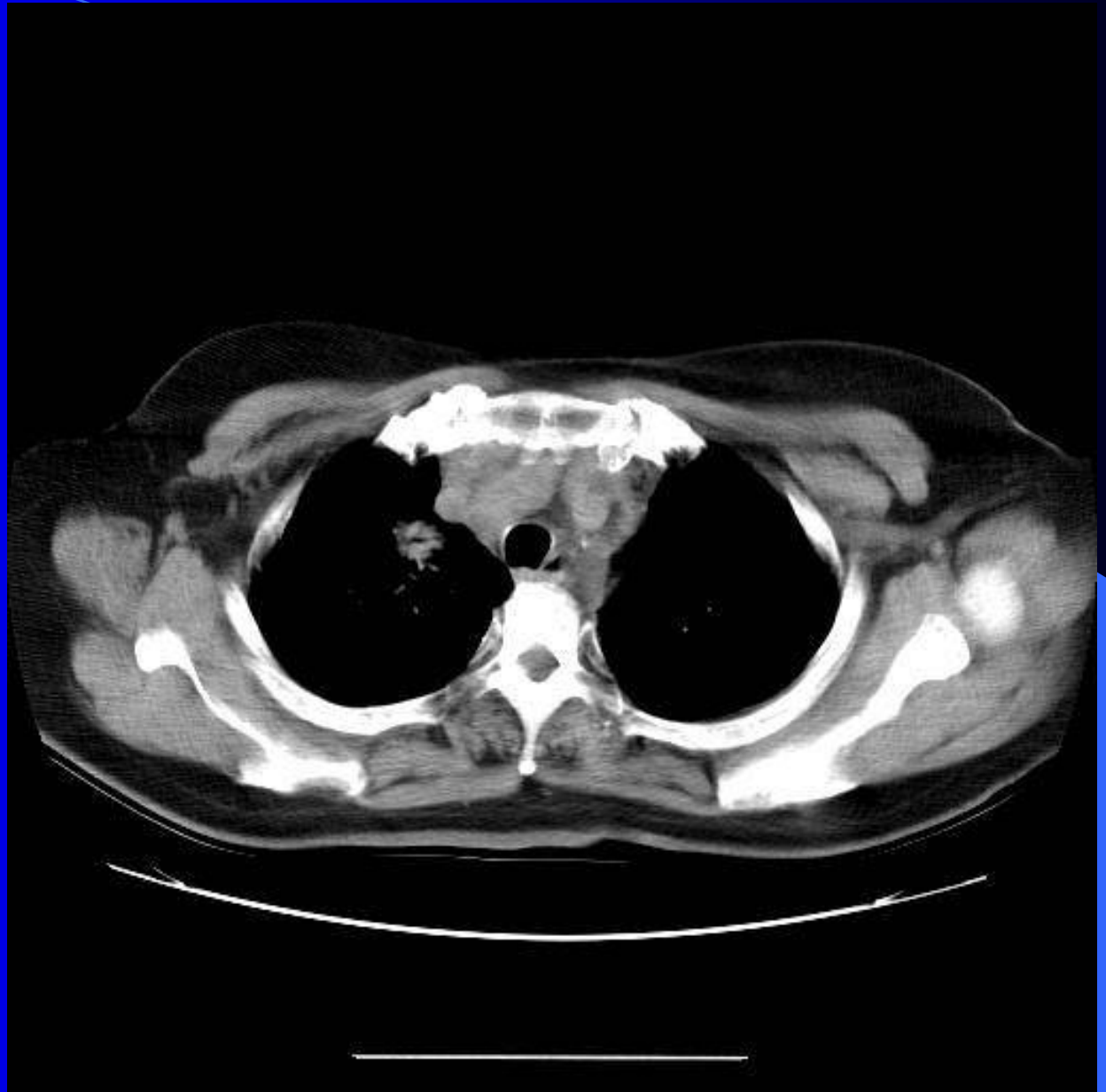
- Conscious:clear TPR:36/80/20 BP:130/60
- Chest: clear breathing sound
- Heart: RHB, no murmur
- Abdomen: soft, flat
Liver span: 8cm at RMCL
- Extremities: no pitting edema

Image:



- Multiple nodules & right hilar enlargement

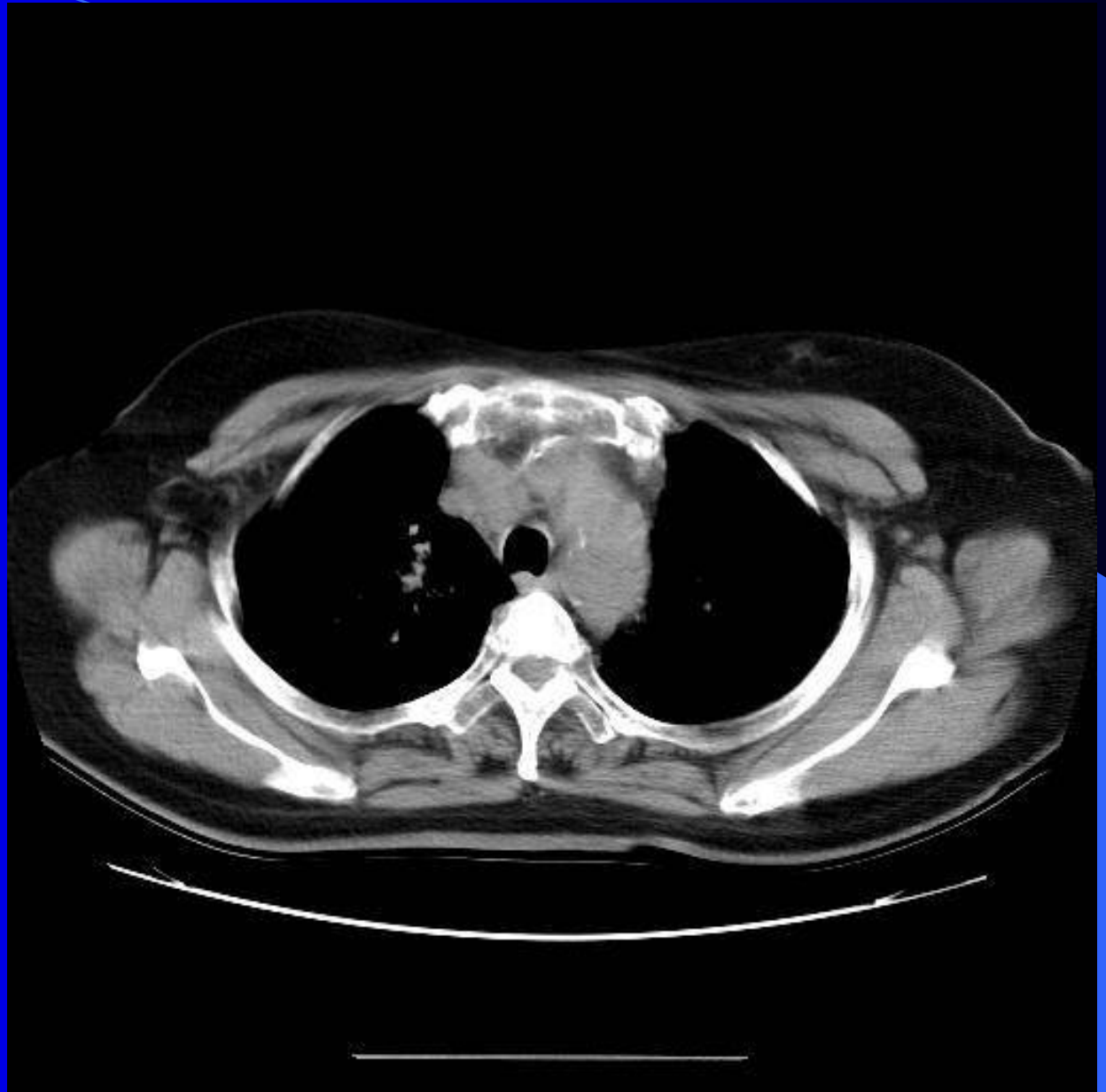
- a spiculated
- lesion at RUL



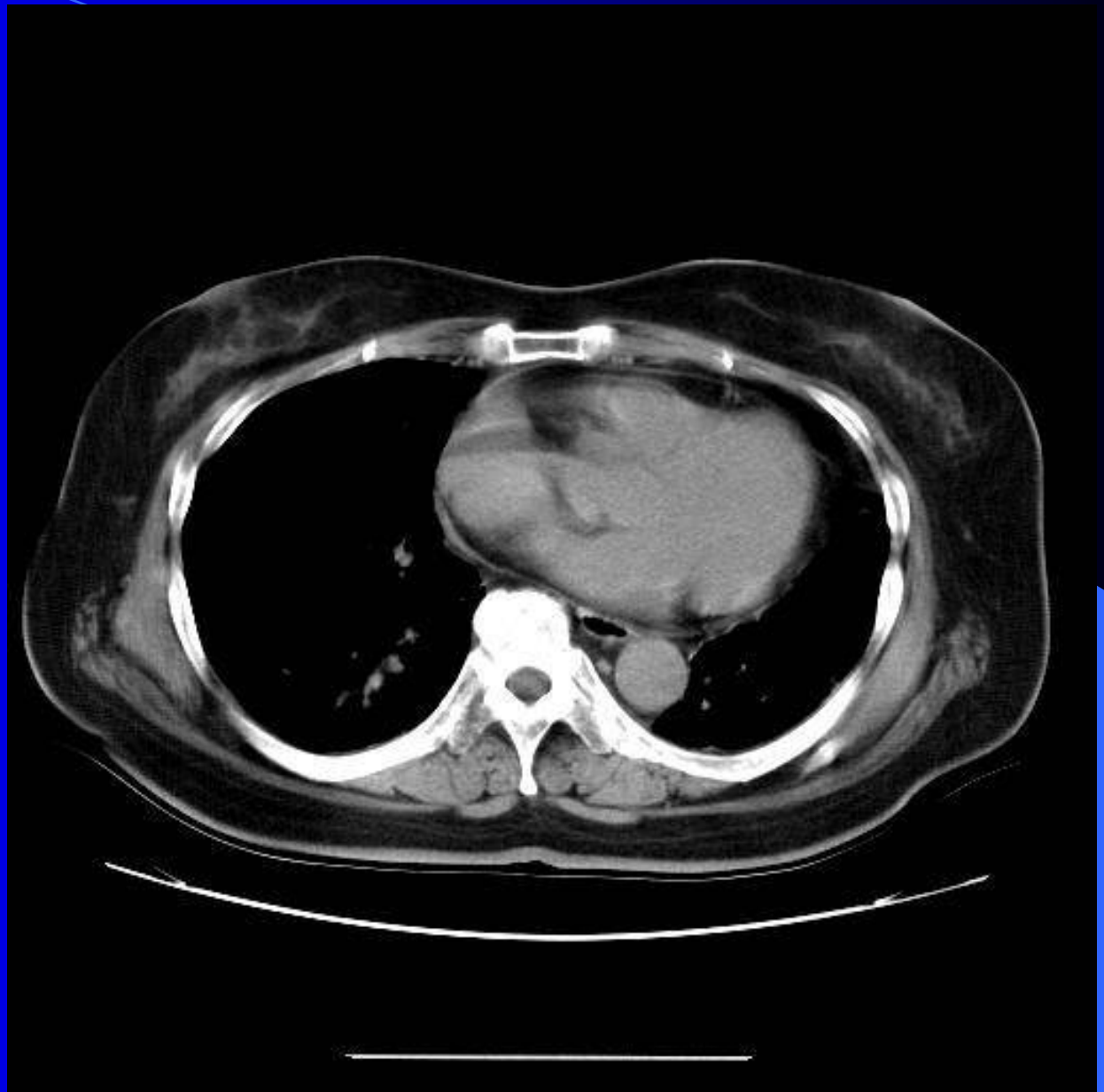
- multiple enlarged
- mediastinal lymph
- nodes are noted
- at peri-aortic
- region

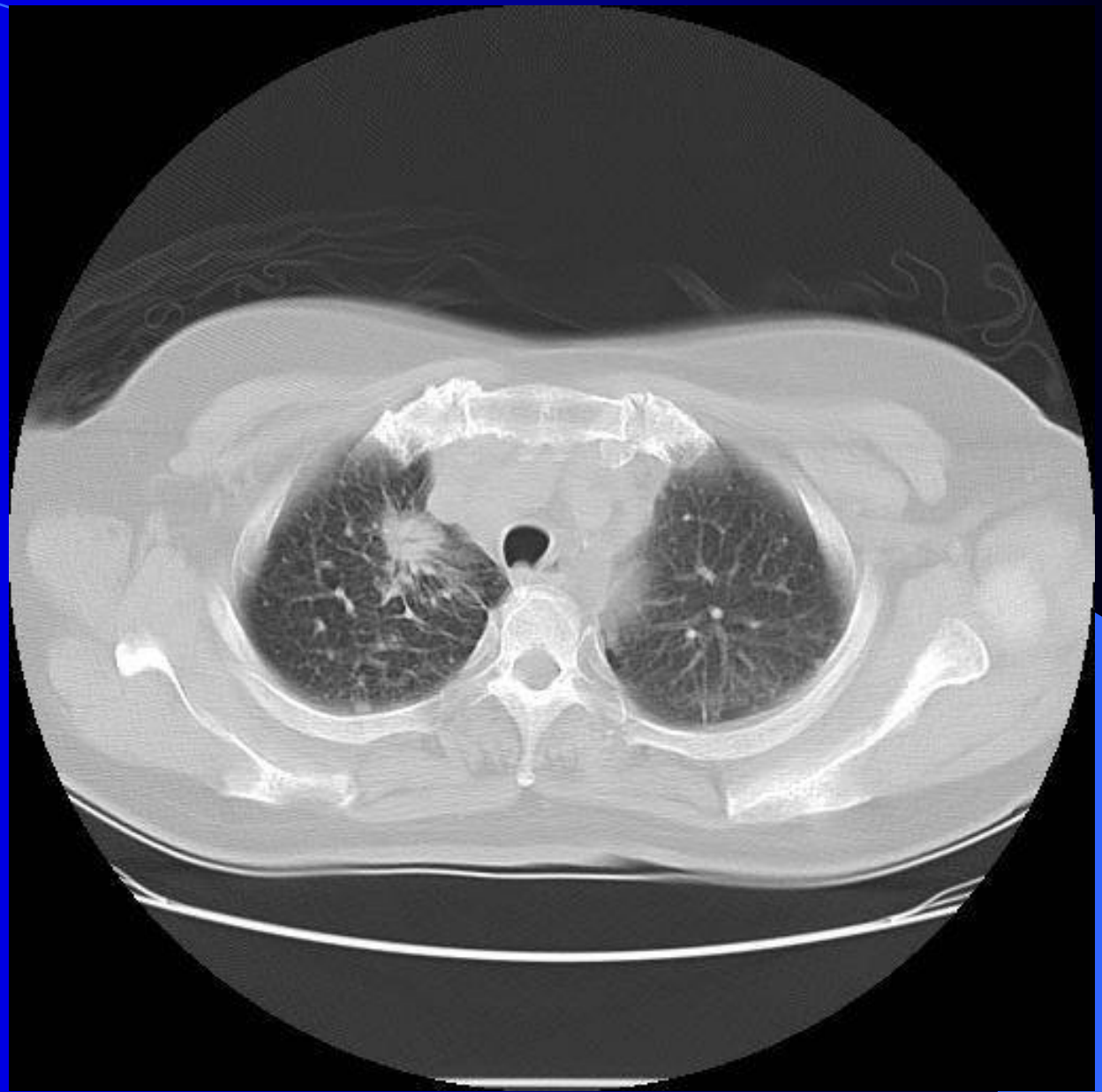


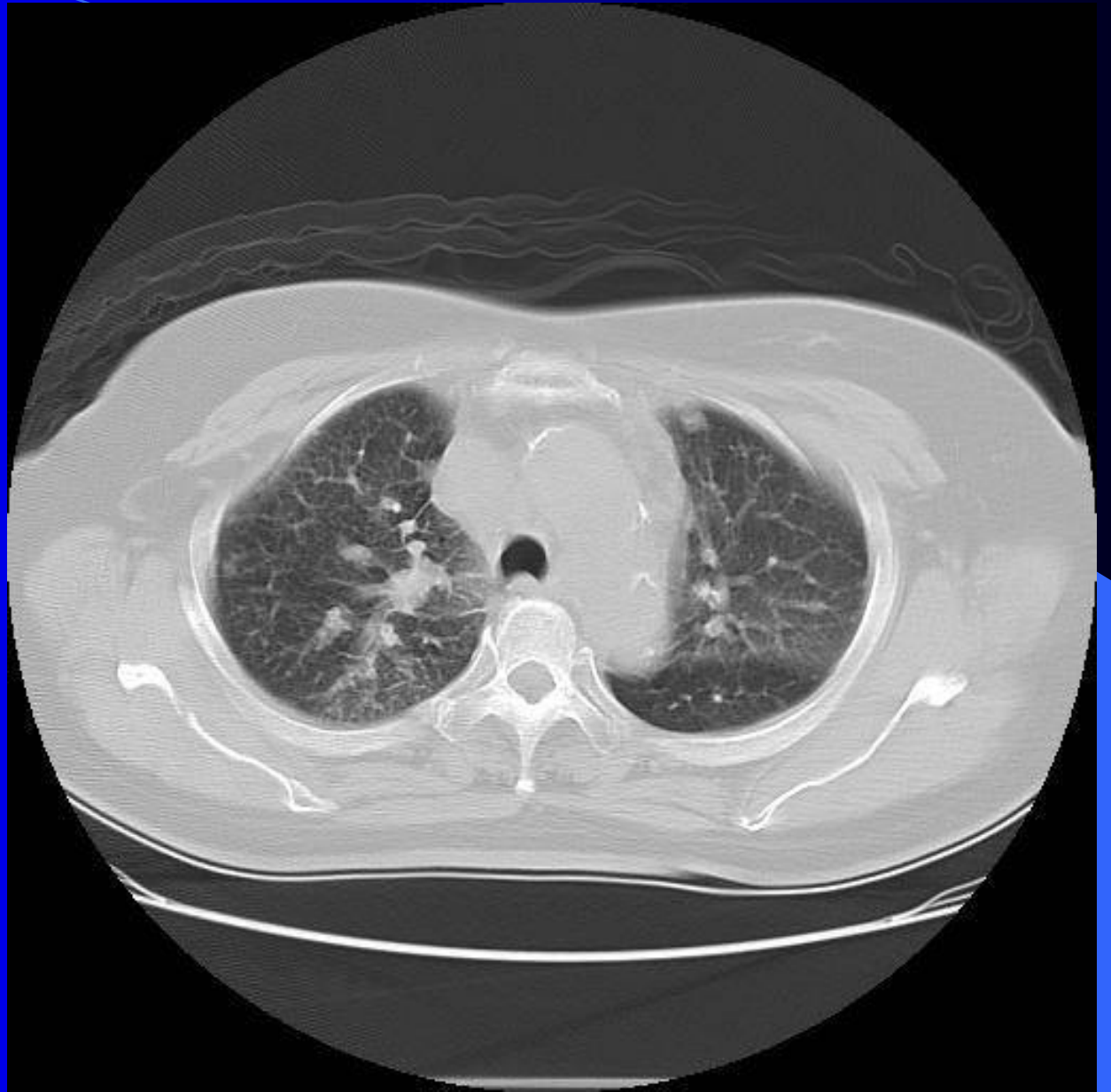
- Multiple
- nodules



- Multiple
- nodules







Radiological finding:

- Chest X-ray: multiple nodules & right hilar enlargement
- CT:a spiculated lesion is located at RUL.
- Multiple nodules throughout the entire bilateral lung fields

Differential diagnosis

- Malignant tumor
 - I. Non small cell
 - 1. Squamous cell carcinoma
 - 2. Adenocarcinoma
 - 3. Large cell carcinoma
 - II. Small cell carcinoma
- Metastases
- Miliary pulmonary tuberculosis

Discussion

- Clinical manifestations of lung cancer:
- Cough , wheeze , stridor
- Hemoptysis
- Postobstructive Pneumonitis
- Paraneoplastic syndromes

Squamous cell carcinoma

- Strongly associated with cigarette smoking
- Doubling time: 90 days
- Spread locally to contiguous tissue
- Central location within main bronchus: large central mass \pm cavitation, airway obstruction with atelectasis (37%)
- Solitary peripheral nodule: characteristic cavitation, the most common type to cause Pancoast tumor

Adenocarcinoma

- Most common cell type in women & nonsmoker
- Doubling time: 150-180 days
- Solitary peripheral subpleural mass (52%)
- Peripheral adenocarcinoma sometimes associated with areas of scarring
- Mediastinal enlargement 3%

Large cell carcinoma

- Strongly associated with smoking
- Doubling time: 120 days
- Rapid growth + early distant metastases
- Mediastinal enlargement 10%
- Large area of necrosis

Small cell carcinoma

- Strongly associated with smoking
- Metastasize widely, the most aggressive pattern
- Doubling time:30 days
- 90% central within lobar/ mainstem bronchus
- Mediastinal enlargement 13%
- Most common primary lung cancer causing superior vena caval obstruction

Metastases

- Nodular type:(Milliary type, Golf ball type)
- Smooth and sharply contoured, homogenous nodules
- Unusual cavitation
- Calcification can occur in osteogenic sarcoma and chondrosarcoma metastases

Pulmonary tuberculosis

- Massive hematogenous dissemination of organisms any time after primary infection
- Incidence: 2-3.5 % of TB infection
- Radiographically recognizable after 6 weeks post hematogenous dissemination
- Generalize granulomatous interstitial foci of pinpoint to 2-3 mm size

Impression

- Small cell carcinoma:
- Small cell carcinoma accounts for approximately 20% of all lung cancers.
- Small cell carcinomas arise in peribronchial locations and infiltrate the bronchial submucosa.
- Widespread metastases occur early in the course of the disease, with common spread to mediastinal lymph nodes, liver, bones, adrenal glands, and brain

Small cell carcinoma

- Paraneoplastic syndromes:
- Most common paraneoplastic syndromes are the syndrome of inappropriate secretion of antidiuretic hormone (SIADH) and the syndrome of ectopic adrenocorticotrophic hormone (ACTH) production.

Treatment

- Untreated patients: median survival period 6 to 17 weeks
- Patient treated with chemotherapy: median survival period 40 to 70 weeks
- Limited stage: combination CR_x + chest RT
- Extensive stage: combination CR_x