Image in Medicine

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Quiz 1

CT scan of chest of 56-year-old man presenting with cough and weight loss since 3 months.

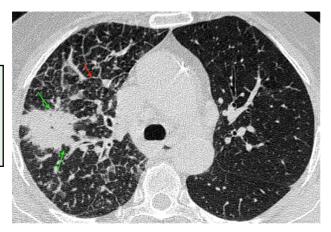
<u>Questions :</u>

- (1) What is the diagnosis?
- (2) What is the mechanism of lymphangitis carcinomatosis?
- (3) What are common differentials of thickened interlobular septae?

Answers :

(1) Mass with spiculated margins (green arrows) is seen in right upper lobe. There is thickening of interlobular septae (red arrow) in right upper lobe, suggestive of lymphangitis carcinomatosis.

(2) Lymphangitic carcinomatosis is spread of tumour through lymphatics and is most commonly seen secondary to adenocarcinoma. In most cases (except in bronchogenic adenocarcinoma), spread into lymphatics occurs following haematogenous seeding of the lungs,



with subsequent lymphatic involvement. It may also occur by retrograde spread into the lymphatics from mediastinal and hilar lymph nodes.

(3) The other differentials of thickened interlobular septae are sarcoidosis- which usually shows nodular septal thickening and pulmonary edema- which shows bilateral involvement in central distribution.

Quiz 2

A 25-year-old female presented with swelling over lateral aspect of lower leg since 2 months.

Questions:

- (1) What is the diagnosis?
- (2) What are the common locations of this lesion?
- (3) How to differentiate ewing's sarcoma from osteosarcoma?

Answers :

(1) An osteolytic lesion showing permeative bone destruction and associated soft tissue component is seen involving metadiaphysis of lower end of fibula. These imaging findings favour diagnosis of ewing's sarcoma, which was confirmed on biopsy.

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(2) Ewing's sarcoma is commonly seen in metadiaphyseal or diaphyseal location of bone. The commonly involved bones are long bones like femur, tibia, humerus and flat bones like pelvis, scapula, ribs.

(3) Osteosarcomas are commonly seen in metaphyseal location and the soft tissue component associated with the lesion has amophous calcified matrix. Whereas ewing's sarcoma is diaphyseal or metadiaphyseal lesion and the associated soft tissue component rarely shows matrix calcification.

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