Image of Medicine

Quiz 1

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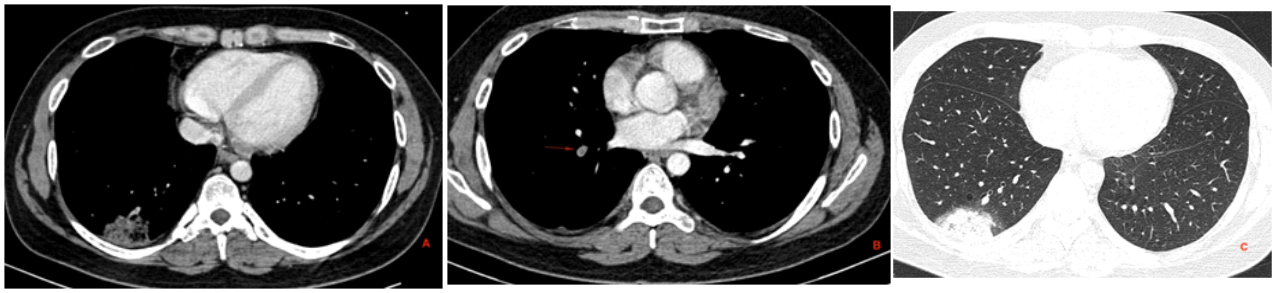


CT scan axial images of a 40 year old man with acute onset of breathlessness.

Questions :

(1) What is the diagnosis?

(2) What is the name of the X-ray sign for pathology shown in image a & c?

(3) What is the clue to diagnosis on CT scan images (image a & c)?

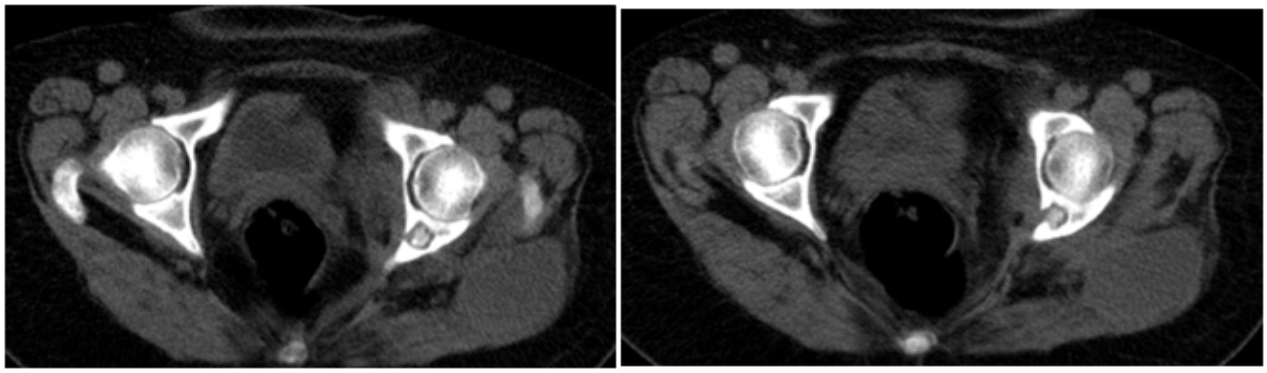
Answers:

(1) Pulmonary thromboembolism with pulmonary infarct.

(2) Hampton hump – It referes to pleural based wedge shaped / rounded opacity due to pulmonary infarction.

(3) Bubbly consolidation or central lucencies within the infarcted lung parenchyma, best appreciated on mediastinal window images is the clue to diagnosis of pulmonary infarct. It is hypothesised to represent coexistence of aerated non-infarcted lung with infarcted lung in the same pulmonary lobule due to dual blood supply by pulmonary vascular and bronchial vascular system.

Quiz 2



CT scan axial images of a 33 year old lady presenting with pain and swelling in left gluteal region.

Questions:

1) What is the diagnosis?

2) Name the sign shown in the image.

3) What are the differential diagnosis of this lesion?

Answers:

1) Osteolytic lesion with sequestrum in posterior left acetabulum along with collection in gluteal region. Biopsy was performed from the lesion and gluteal collection was aspirated - the results of which confirmed tubercular osteomyelitis.

2) Bony sequestrum – It refers to calcification within lucent lesion, often completely separated from surrounding bone. Pathologically sequestrum refers to a piece of devitalised bone with necrosis and resorption that has been separated from its surrounding bone.

3) Bony sequestrum is often present in osteomyelitis and skeletal tuberculosis. The other conditions which mimic sequestrum are eosinophilic granuloma, lymphoma, metastasis and malignant fibrous histiocytoma. Some primary bone tumors like osteoid osteoma can also mimic bony sequestrum.

Picture This by Jankharia, Mumbai, Maharashtra
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