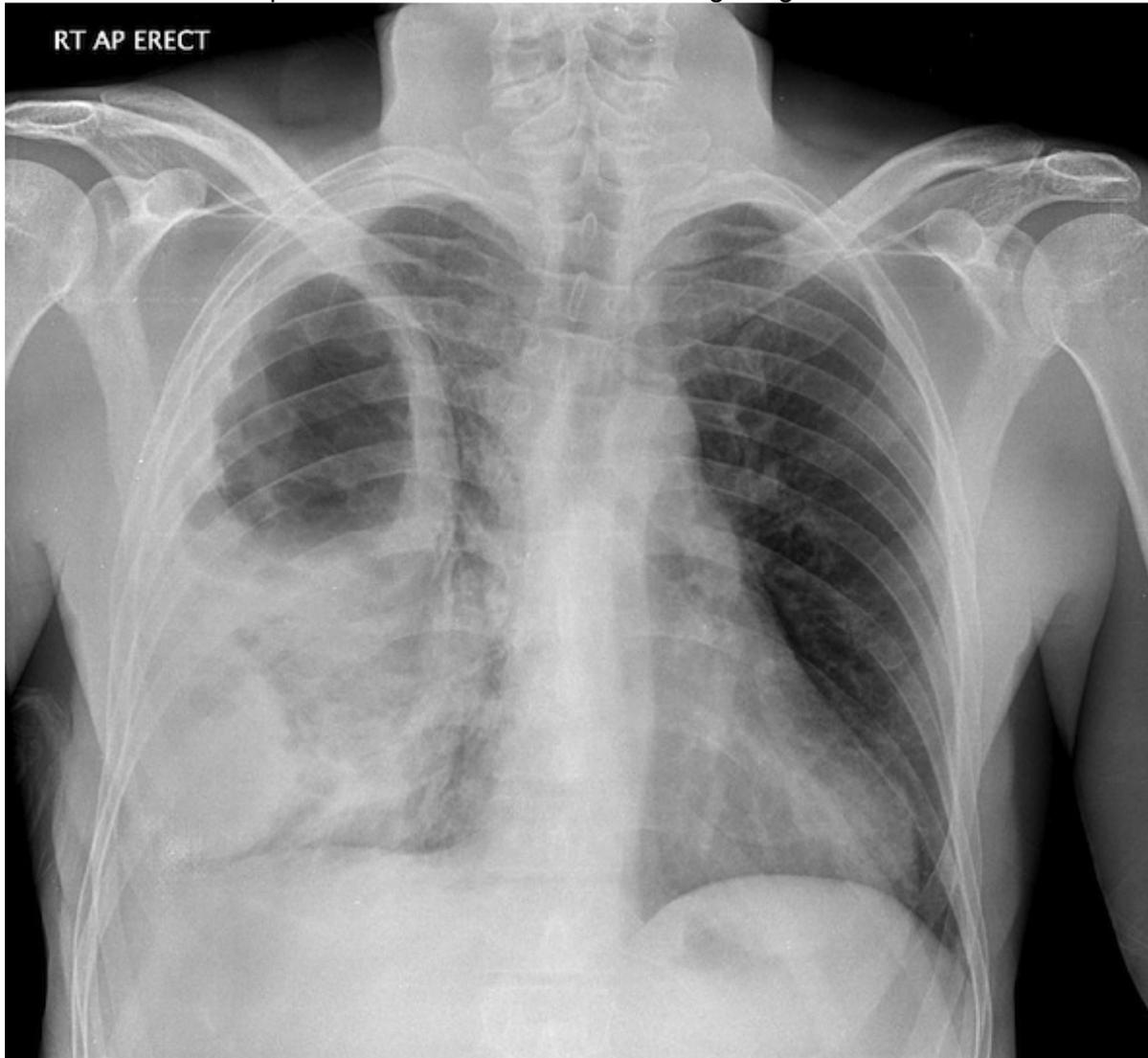


2009.2.2 (XR)

A 35 year old homeless man presents with two months increasing cough. He has no other medical history.



Describe and interpret his chest X-ray (100%)

This is a profoundly abnormal chest radiograph with extensive changes affecting mostly the right lung. The combination of a large cavitating lesion, soft tissue density, and pleural thickening and the indolent nature of the presentation in a high-risk patient could suggest multiple pathologies including malignancy, tuberculosis, and pulmonary abscess.

AP erect chest radiograph
penetration satisfactory
striking right lung field changes as described below

Heart – normal size, shape
Mediastinum – normal size, shape though obscuration of right border
Trachea – central
Lung fields

left essentially clear, possible slight patchy change lower zone
right profoundly abnormal
large cavitating lesion right upper zone
air fluid level, thick walled, adjacent pleural thickening
roughly circular, large soft tissue density
adjacent to / possibly involves lower part of cavitating lesion
right lower zone
abuts pleura and may arise from it
opacification of most of remaining right lung field with some apical sparing

Pleurae

left normal

right as described above, pleural thickening extends to apex

Bones

essentially normal

slight curvature of thoracic spine suggests mild scoliosis

minor sclerosis of right humeral head could suggest benign lesion or sclerotic metastasis

Extrathoracic

no diagnostic features other than those described above

These findings in this subacute presentation of an itinerant patient could be due to malignancy – primary or secondary
tuberculosis
atypical infection in immunocompromised patient (e.g. AIDS, aspergilloma)
post-aspiration pneumonitis abscess

Need all in **bold** to pass

Extra marks for detail, systematic approach, more reasonable differentials

description of main findings – right lung field

cavitating lesion in right upper zone

soft tissue mass in lower zone

some description of rest of radiograph

differential diagnosis

infectious cause

consideration of atypical organism (need at least 1)

TB, aspergillosis, pulmonary abscess from previous pneumonitis / pneumonia