

# Challenge Article

## Clinical Image Challenge

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A 47 year old smoker presented with low grade fever and loss of 10 kg weight over a one month period. He had also noticed progressive change in the contour of his nails for the past two years, with recent onset of pain in both wrist and ankle joints.

Examination revealed pan-digital clubbing (Fig 1) with diffuse bone tenderness. Systemic examination was normal.



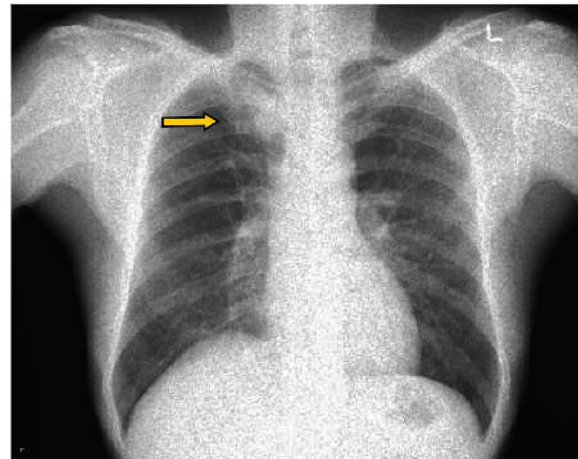
**Fig 1 :** Pan-digital Clubbing

Radiographs obtained of the hands, wrists and long bones (Fig 2) showed extensive periosteal reaction, consistent with hypertrophic pulmonary osteoarthropathy.



**Fig 2 :** X-Ray of the hands showing periosteal reaction

Chest radiograph (Fig 3) showed a homogenous opacity in the right paratracheal region; Computed tomography (CT) of the chest was performed (Fig 4) which was reported to show a well defined homogeneously enhancing mass lesion of size 3.0 x 2.5cm in right upper lobe, abutting the right lateral wall



**Fig 3 :** Chest radiograph showing homogenous opacity in the right paratracheal region



**Fig 4 :** Computed Tomography of the chest showing mass lesion

of trachea. Multiple large subpleural bullae were also noted along with a few enlarged right upper and bilateral lower para tracheal lymph nodes.

Patient was subjected to bronchoscopy and trans-tracheal lung biopsy, which was consistent with adenocarcinoma of the lung. Patient refused chemotherapy and is being managed symptomatically.

**Diagnosis:** Hypertrophic Pulmonary Osteoarthropathy secondary to adenocarcinoma of the lung.

### Learning Point

Hypertrophic pulmonary osteoarthropathy is a paraneoplastic manifestation which may be seen in 1 – 10% of adenocarcinomas of the lung. It is classified as Grade IV clubbing, and its presence should always prompt the treating clinician to investigate thoroughly for underlying malignancy, even in an asymptomatic patient.