

# Extra-pulmonary tuberculosis

By

Prof. Dr. Hamdy Ali

# Tuberculous pericarditis

- Pericarditis is a **serious and life threatening** manifestation of tuberculosis.
- The disease begins either by infiltration of the pericardium by a caseous node or by miliary spread.

# Clinical features:

- The commonest symptoms of pericardial disease
- are weight loss, cough, dyspnoea, orthopnoea, chest pain and ankle swelling.

# ■ Signs:

- Fever, tachycardia, pericardial rub, paradoxical pulse, hepatomegaly, oedema, neck vein distension, muffling of heart sounds, abdominal distension, ascites.
- The clinical signs vary depending on degree of effusion or constriction.

# Investigations:

## ■ **1-Chest X-ray:**

- Cardiomegaly when pericardial effusion is present but heart size may be normal when constriction predominates.

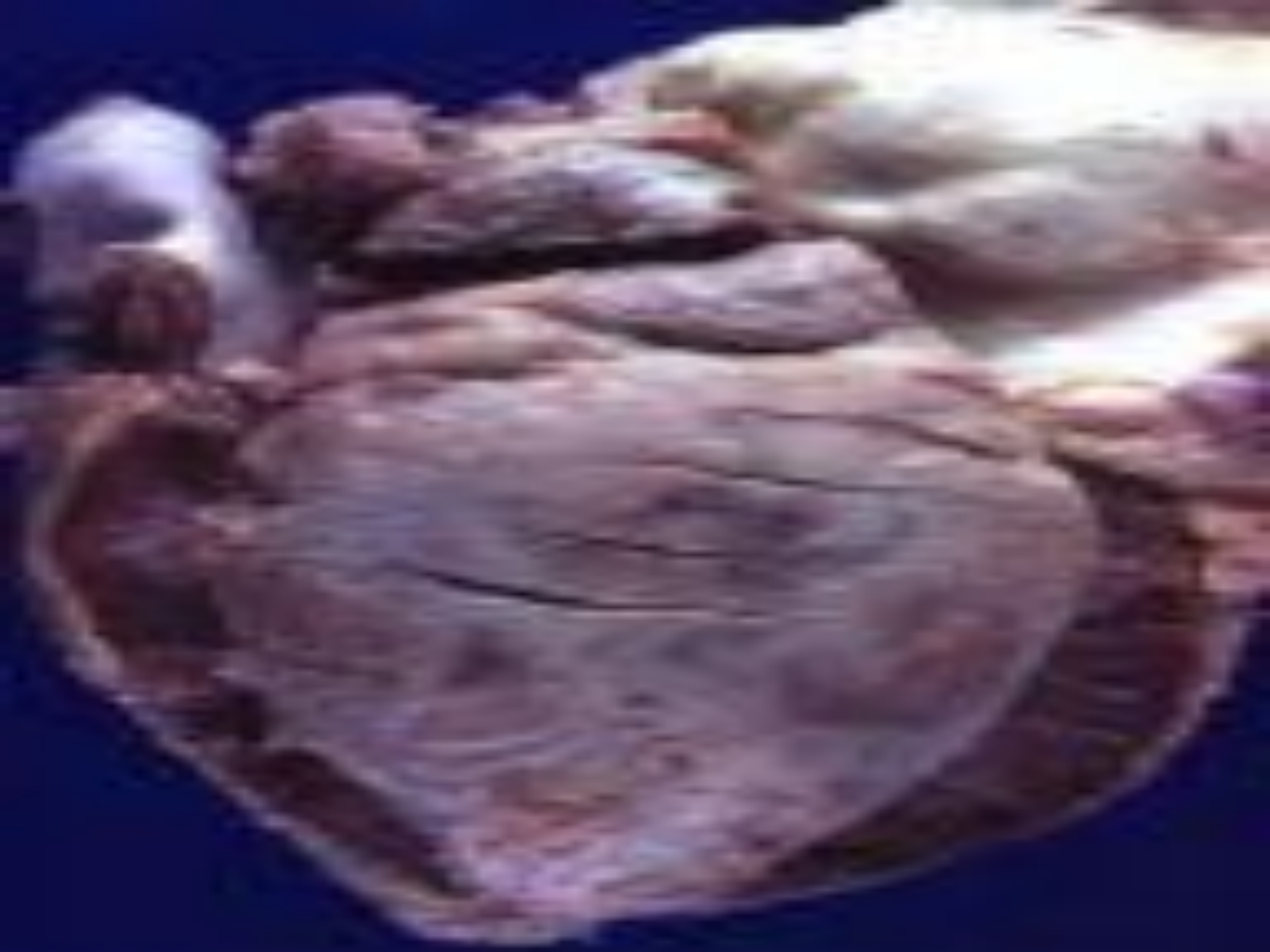
## ■ **2-ECG:**

- T wave inversion or flattening.

## ■ **-Echocardiography:**

- reveals pericardial effusion with or without pericardial thickening and fibrinous or caseous debris





# Bone and joint tuberculosis



- Tuberculosis of the skeleton usually arises as result of **haematogenous spread**.
- The commonest sit for skeletal tuberculosis is **spine**.
- The next commonest sites are the weight bearing joints (The hips, the knees and the ankles)

- Another sites can be involved including
- elbow, shoulder, wrist, hands, fingers and now articular Skelton including the ribs, scapula and skull.
- **Spinal tuberculosis or pott's disease** is the commonest in the lower thoracic and lumbar regions but may also affect the cervical spine. The vertebral bodies and intervertebral bodies and interdiscs are most commonly affected.

# Clinical features:

- 1-The commonest presentation is local pain, stiffness and limitation of movement.
- 2-Systemic symptoms of fever, weight loss.
- 3-If Para spinal cold abscess develops sinus formation may be feature
- 4-Gibbus deformity of kyphoscoliosis occurs in patients with more advanced disease due to collapse of vertebra (vertebral body destruction)

5-Neurological signs vary depending on the spinal level involved at worst patient may present with complete motor and sensory loss in lower limbs with loss of sphincteric control (paraplegia). Cervical spine involvement may present with quadriplegia











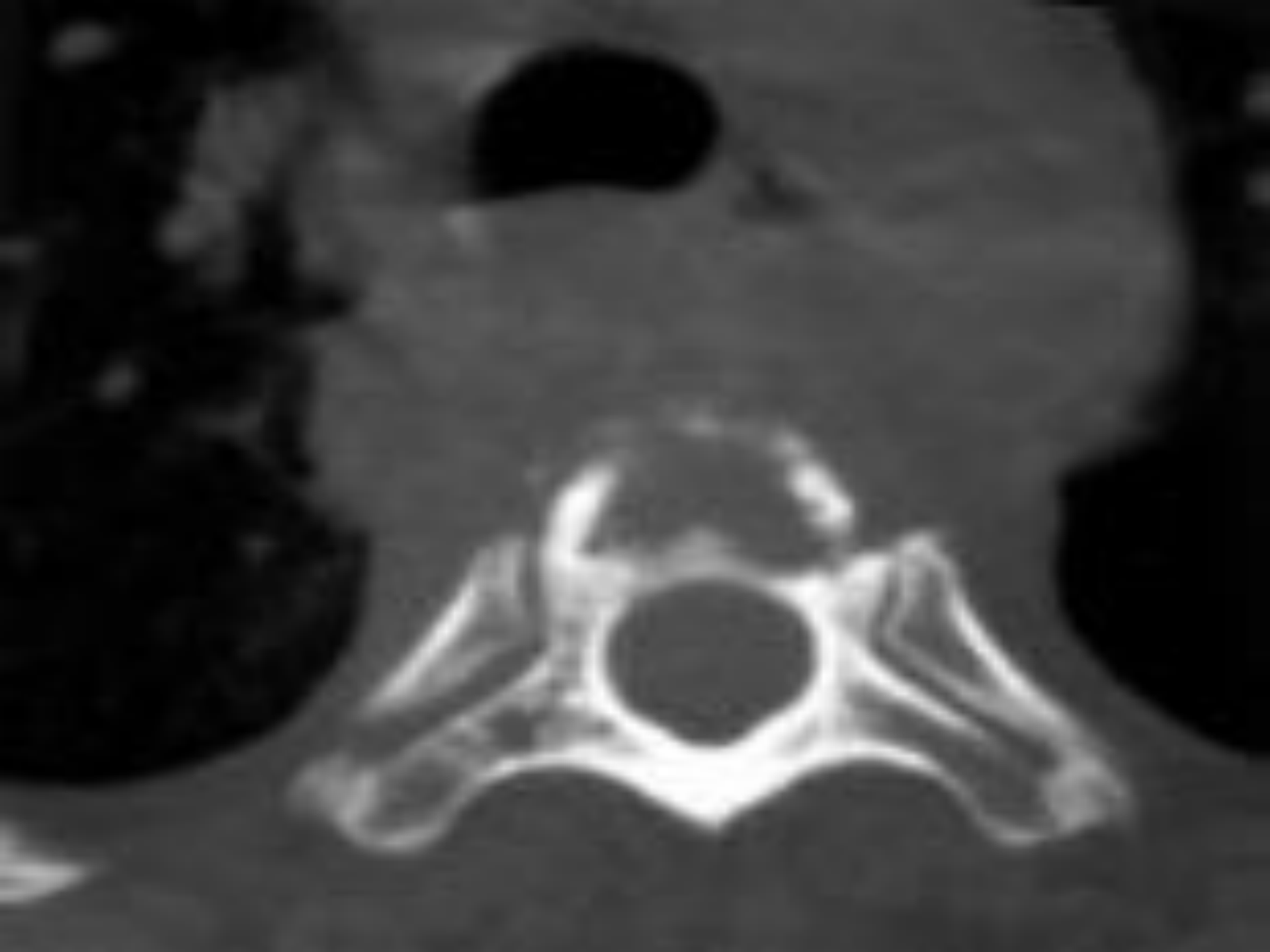


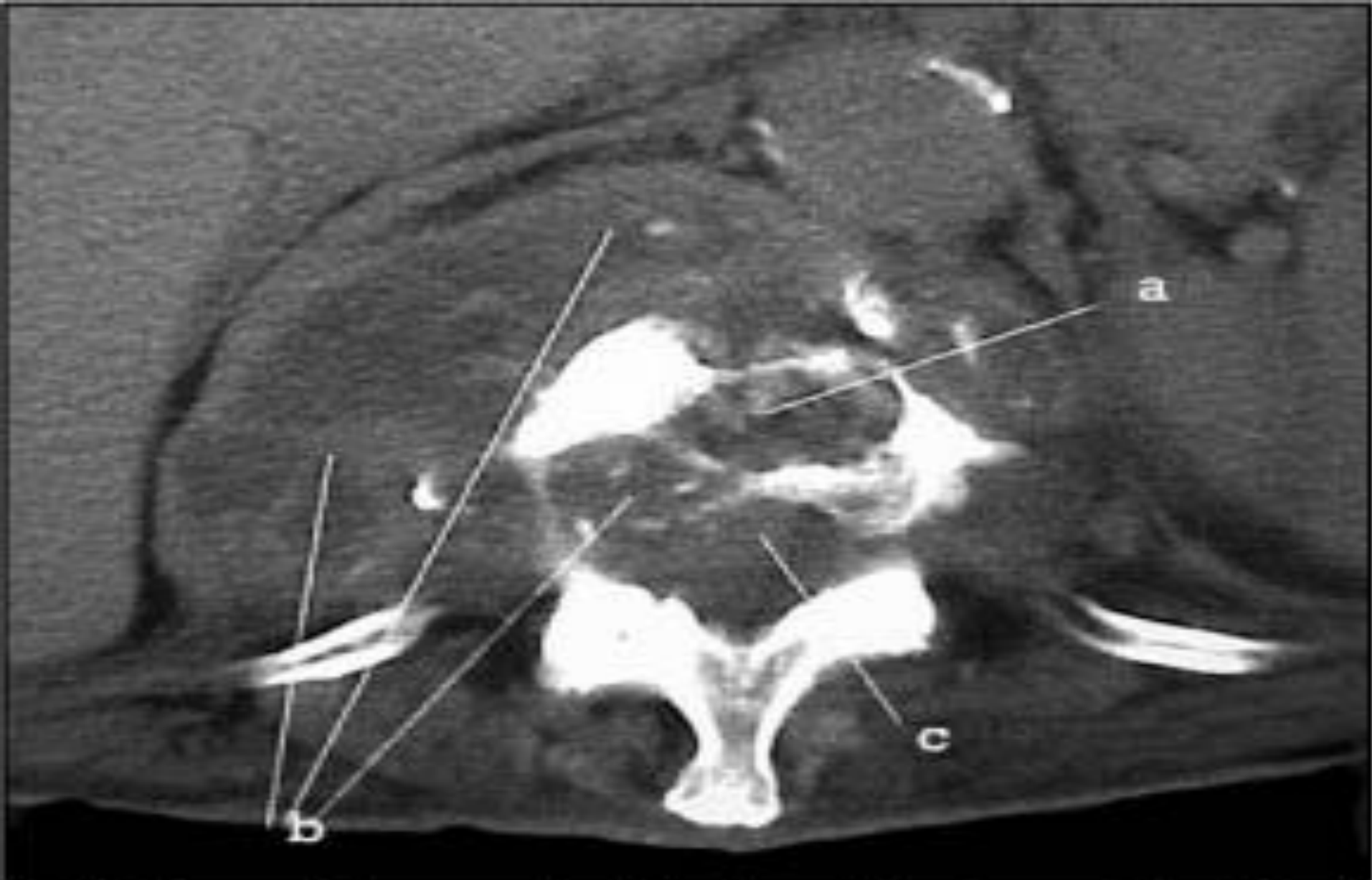
# Investigations:

- **1-Radiological features**
  - Destruction and collapse of vertebral bodies
  - Para spinal abscess may be evident in sin X-rays
  - CT spin, MRI
- **2-Tuberculin skin test.**
- **3-Direct smear** and culture of synovial fluid, synovium or bone (casous material or pus is used)
- **4-Diagnostic exploration** may be necessary (bacteriology and histology)



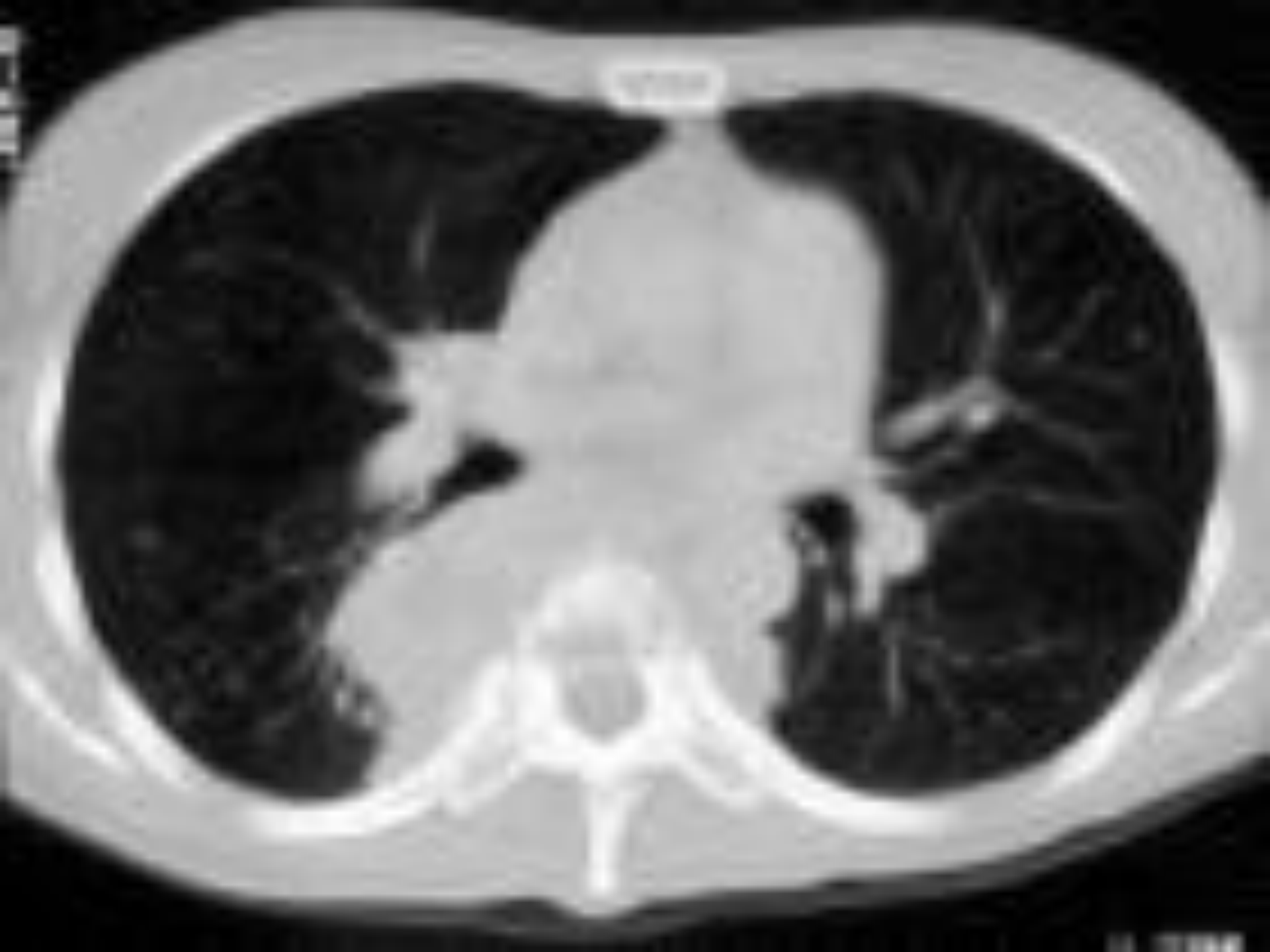
© 1994 by [unreadable]





*Fig 2. Tomografia computadorizada axial notar a destruição do corpo de T12 (a), o extenso abscesso paravertebral (b) e invasão do canal medular (c).*

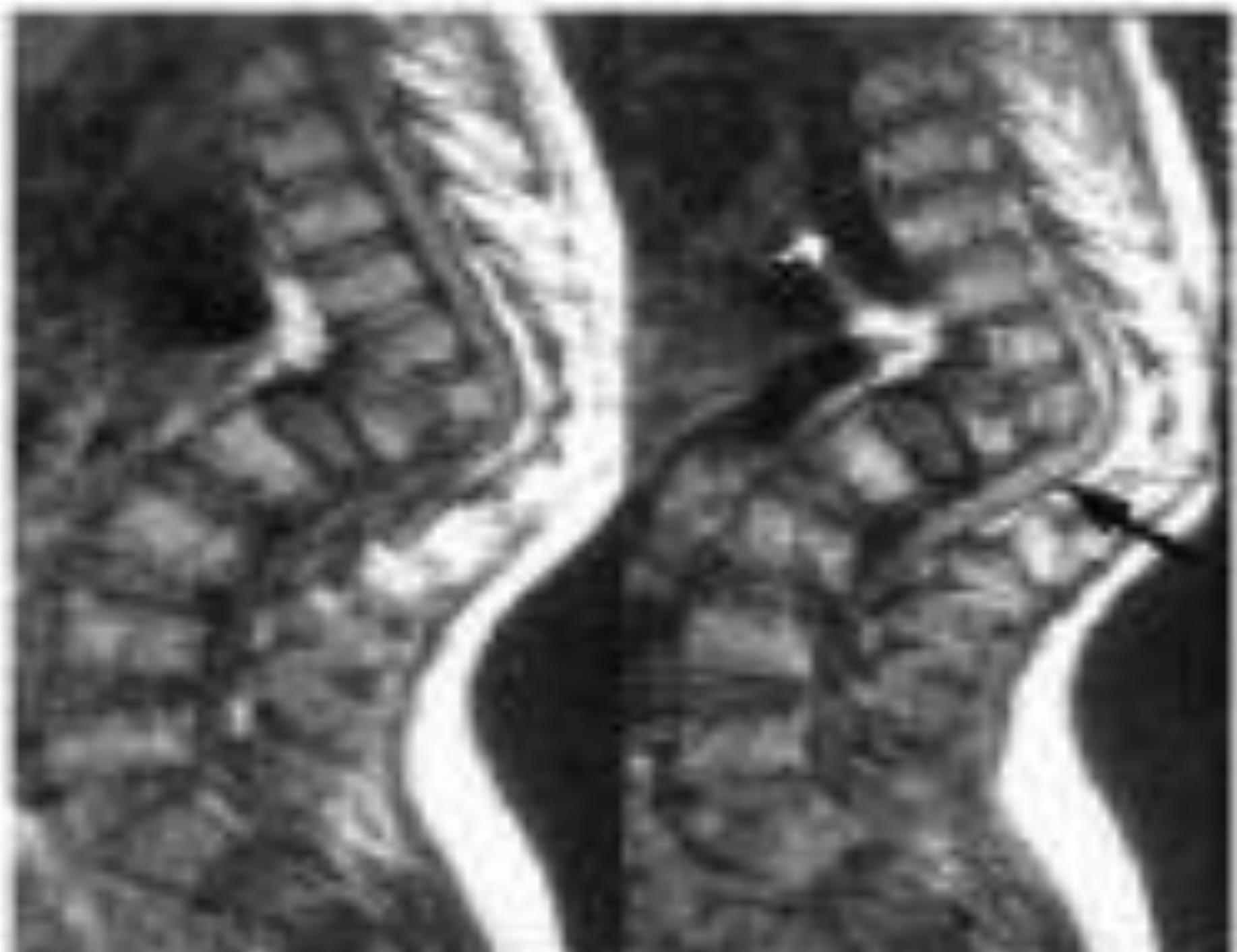


















**THANK YOU**