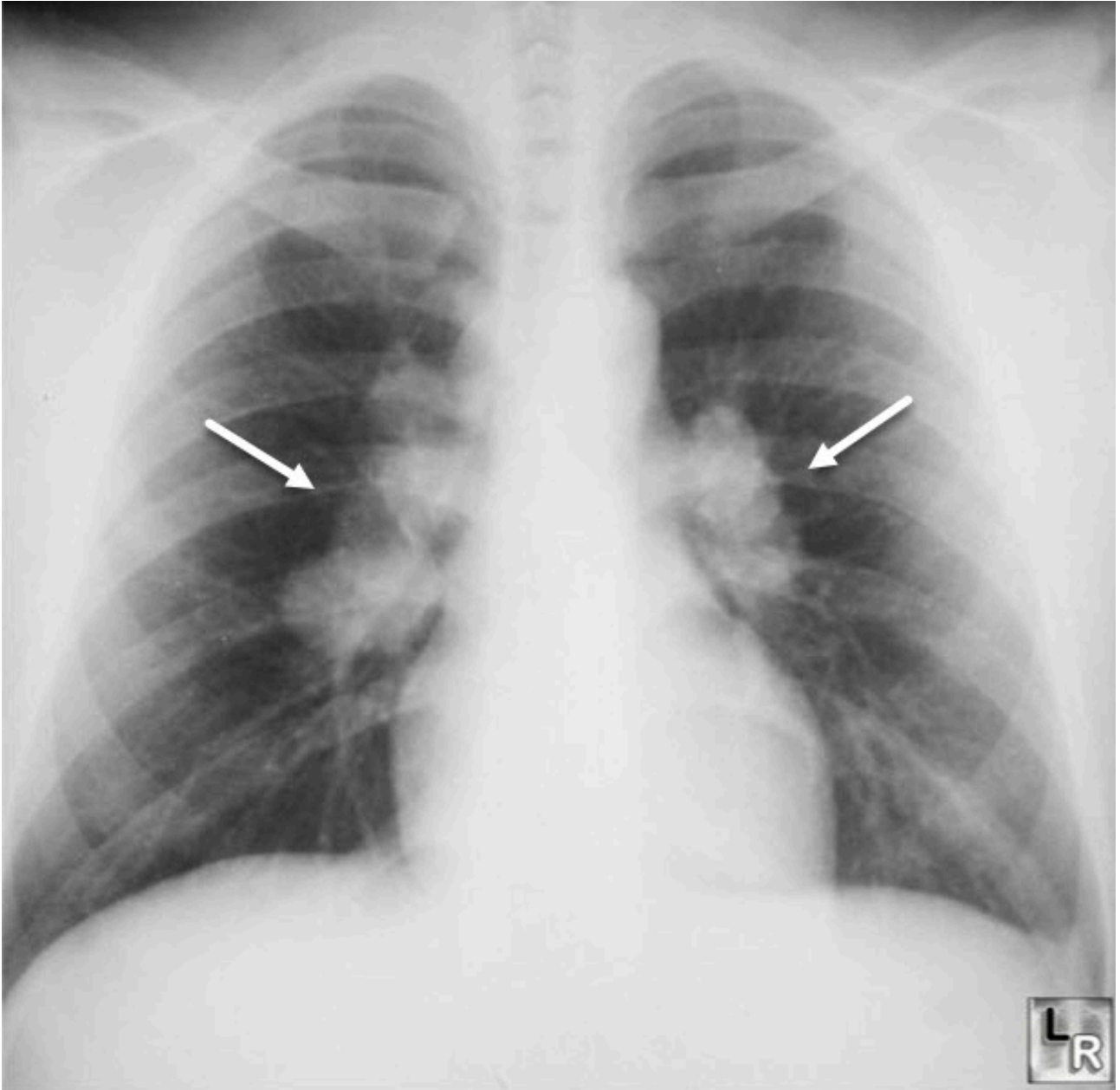
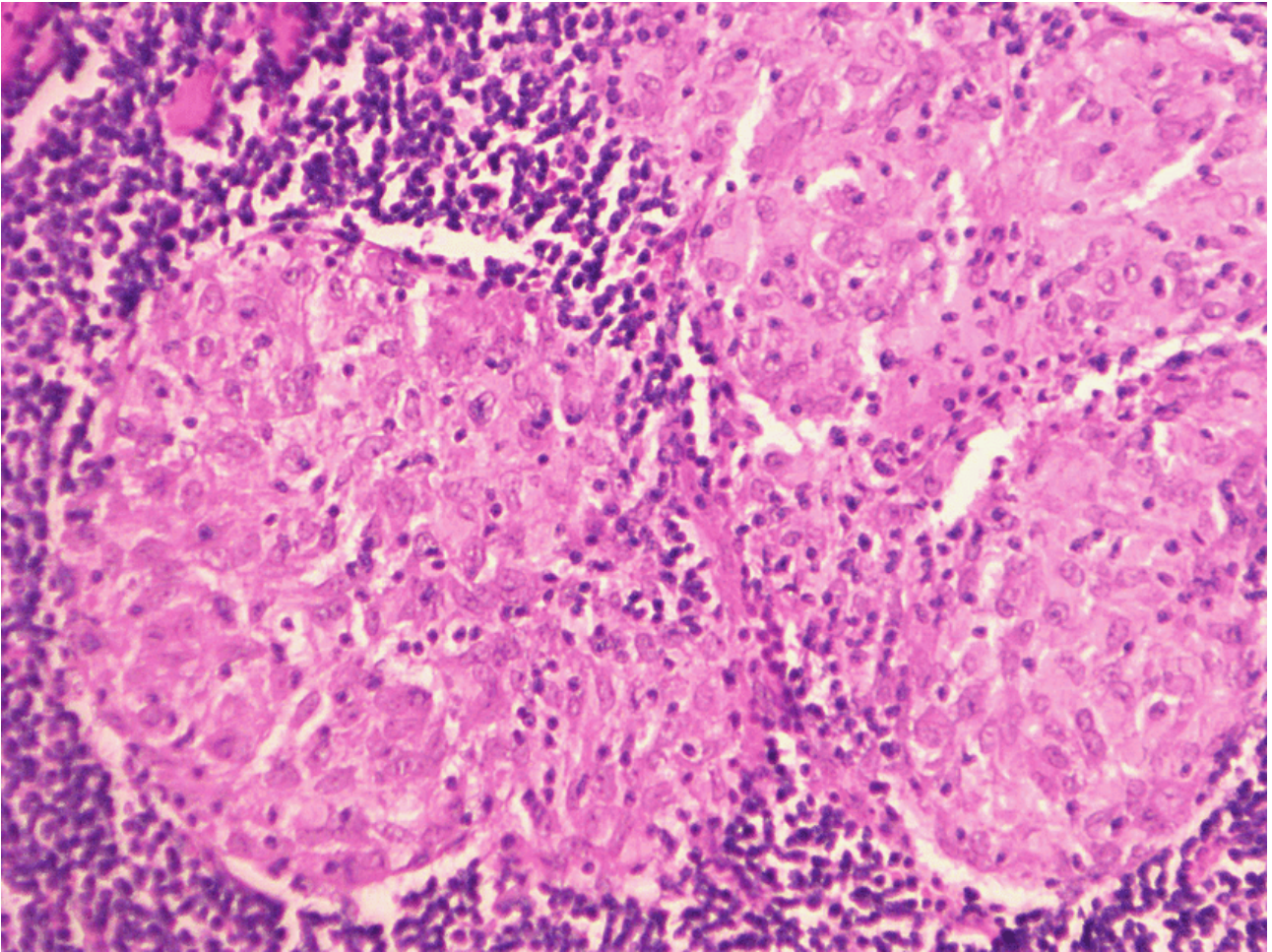


1. A 40 year old black woman presents at hospital complaining of a cough and shortness of breath for 3 months. She also gives a history of fever and fatigue. You examiner and find subcutaneous nodules. You order a chest x ray (a) and find bilateral hilar lymphadenopathy but no lung or mediastinal masses. A biopsy of the skin nodules demonstrates as shown below (b).

(a)



(b)



- A) What is the differential diagnosis?
- B) What serum blood test can help confirm the diagnosis?
- C) What special stains would you ask for to rule out the differentials?

2. A 74 year old woman presents with a history of a worsening cough for a year. She gives a history of weight loss. A chest x ray demonstrates hilar lymphadenopathy and a right sided lung mass.

- a) What laboratory studies would you ask for to arrive at a definitive diagnosis?
- b) What are the risk factors for tumours of the lung?

3. A 30 year old lady presents with chest pain and dyspnea. On chest examination you note good air entry bilaterally. The mother gives a history of the patient have been on a non stop flight from Amsterdam to Lusaka.

- a) What is the most likely diagnosis?
- b) What is the most likely underlying mechanism?
- c) What are the risk factors?

4. A 67 year old man complains of fatigue, weakness and weight gain especially around the abdomen. Physical examination reveals hypertension and abdominal striae. Laboratory studies show an elevated serum cortisol level not suppressed with dexamethasone. A pituitary or adrenal mass is not seen on radiographic examination. A CT scan of the chest shows a right lung mass near the hilum.

- a) What is the most likely diagnosis?
- b) What other disorders may cause similar clinical finding?
- c) What are the underlying mechanisms involved?