Internal Medicine Quiz - Case 3

An 80-year-old man was complaining of pain in the left shoulder and arm for the last 2 months. He did not report any recent traumatism or repeated mechanical strain of the shoulder joint, while he did not have any similar complaints in the past. His past medical history included mild arterial hypertension, diabetes mellitus treated with insulin, coronary artery disease and chronic obstructive pulmonary disease, both of them adequately controlled with medication. He was a former smoker, with 50 pack/years. He did not have any fever or arthralgias in any other joints and apart from weight loss of 5 kg in the last 4 months he did not report any other systemic complaints. After seeing an orthopedic surgeon NSAIDs were prescribed, which led to improvement of the pain. For the next 2 weeks he continued taking the NSAIDs according to the intensity of the pain. Eventually his left arm and hand developed weakness and his pain grew stronger and refractory to the NSAIDs, necessitating the use of codeine based analgesics. At that time the patient developed a persistent cough as well, which led him to the outpatient department of our hospital. Initial physical examination revealed tenderness on palpation and a palpable mass of the left supraclavicular fossa as well as ptosis of the left eyelid, and radiologic investigations were ordered. A chest X-ray was obtained (figures 1A and 1B). After this, a CT scan of the thorax (figures 2A and 2B) was obtained.

Comment
The chest X-ray (fig. 1A) revealed a large mass at the apex of the left lung as well as a pathologic fracture of the posterior part of the 2nd rib (fig. 1B). The CT scan of the thorax (figures 2A and 2B) showed that the mass originated posteriorly and extended to the intervertebral foramina, while its expansion through the chest cage caused the fracture of the 2nd rib.

Tumor of the superior pulmonary sulcus, with involvement of the left brachial plexus and the stellate ganglion (classic Pancoast tumor) of the left lung. Although this clinical diagnosis is usually compatible with a non-small-cell lung cancer, alternative diagnoses, such as lymphoma, primary chest wall tumors and tuberculosis must be ruled out before treatment efforts are undertaken (induction chemoradiotherapy followed by surgical resection). A transthoracic fine needle aspiration was performed.

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