From the Lung to the Finger: An Unusual Presentation of Adenosquamous Cell Carcinoma

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Learning Objective

To recognize unusual presentations of metastatic lung disease

Case

- 81-year-old male with a history of adenosquamous lung carcinoma (ASC) presented to the office with swelling, irritation, and pain around the distal third digit on his right hand (fig.1) for 2 weeks.
- The patient had worsening soreness despite antibiotic use. X-ray showed a destructive lesion confirmed by a CT scan (fig.2). Due to concerns for metastatic disease, a CT chest, abdomen, and pelvis was performed, revealing a new right upper lobe pleural lesion and an anterior mesenteric lymph node. A subsequent PET scan demonstrated hypermetabolic activity (fig.3). Abdominal lymph node and right middle finger biopsies confirmed the diagnosis of metastatic ASC (fig.4).
- Overall, the patient's clinical status deteriorated gradually due to disease progression despite ongoing chemotherapy-immunotherapy, and the patient was transitioned to palliative care

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Figure 1. Right third digit

Figure 2. CT right hand

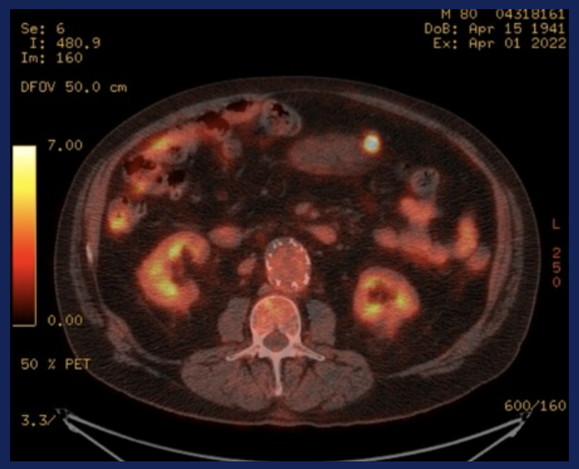

Figure 3. CT right hand

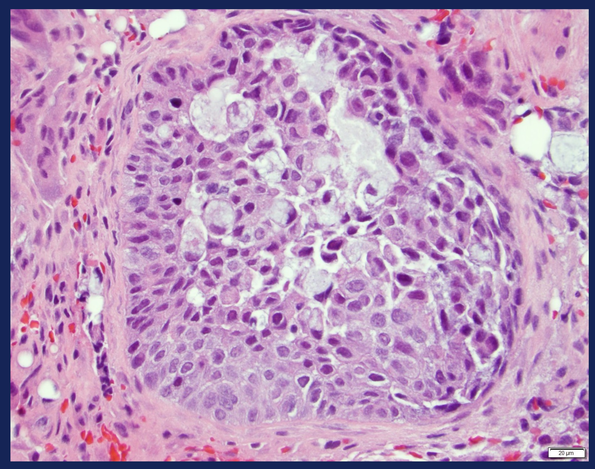

Figure 4. Pathology from finger biopsy

Take Home Points

- Lung cancer is the most frequent malignancy linked to acrometastases.
- The symptoms are nonspecific, as a result, acrometastases are frequently misdiagnosed as an infection, gout, trauma, or other non-malignant etiology.
- Unfortunately, patients with acrometastases have poor prognosis, therefore, in patients with cancer history, the plausible diagnosis of acrometastases should encourage the obtainment of appropriate imaging and ultimate biopsy for treatment options.

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Discussion

- Acrometastases are metastases located distal to the elbow and knee. Metastases in the hand are uncommon as opposed to the spine, ribs, and pelvis. When the bony lesions involve the foot or the hand, the terminal phalanges are the most frequent site affected, followed by the metacarpals and the proximal phalanges. Its prevalence is exceptionally low, and data is limited to case reports. Cases usually present with advanced disease and are associated with poor prognosis. The presentation can vary, but most often appears as erythematous, swollen, and tender-to-touch digits. As a result, acrometastases are usually mischaracterized as an infection, gout, trauma, or other non-cancerous etiology as they are more likely culprits of hand or wrist pain and swelling.
- While literature suggests that other primary malignancies that also are noted with acrometastases are kidney, breast, colorectal, and esophageal, the most common primary type of cancer associated with acrometastases is lung (39.2%).
- ASC is an unusual subtype of non-small cell lung cancer (NSCLC) that contains at least 10% adenocarcinoma (AC) and 10% SCC according to the World Health Organization (WHO).
- ASC has a poorer prognosis than either component alone and accounts for 0.4 - 4 % of all lung carcinoma and there is no unified standard chemotherapy, therefore, additional investigation of targetable treatments should be further investigated to improve overall survival.

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