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Case Presentation

Multiple Cutaneous Nodules Presenting as Metastatic Squamous Cell Carcinoma of the Esophagus

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Abstract

A 62-year-old man with weight loss and dysphagia developed 3 cutaneous nodules. Fine needle aspirate of one of the nodules identified squamous cell carcinoma, which was found to be a metastasis from esophageal cancer.

Case Report

A 62-year-old man with a history of hypertension, chronic obstructive pulmonary disease, and coronary artery disease was admitted to the cardiac unit with atypical chest pain. After acute coronary syndrome was ruled out, he had an episode of hemoptysis. He had a smoking history of 75 pack-years and daily consumption of 8-10 beers for the last 40 years. In addition, the patient complained of weight loss, dysphagia, and development of three painful skin nodules on the back, right arm, and neck over the past month (Figure 1 and Figure 2).



Figure 1. Painful erythematous cutaneous nodule.



Figure 2. Cutaneous nodule on the neck.

Physical exam was also significant for supraclavicular lymphadenopathy. An otolaryngologist performed a fiber optic laryngoscopy and noted an immobile left vocal cord with no visible lesion. A cytopathologist performed a bedside fine needle aspiration (FNA) of the cervical cutaneous lesion. Onsite rapid microscopic evaluation showed the presence of malignant cells suggestive of squamous cell carcinoma. The final interpretation was squamous cell carcinoma clinically consistent with metastasis (Figure 3).

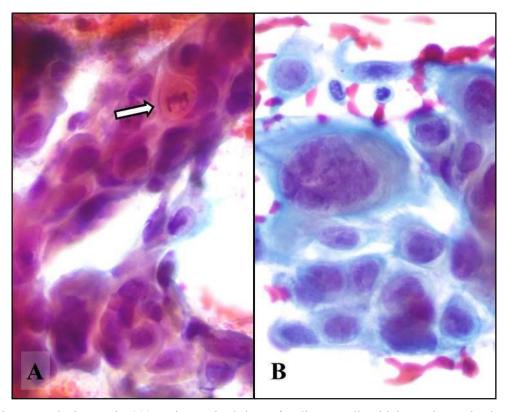


Figure 3. Panel A, Papanicolaou stain, 200x: Disorganized sheet of malignant cells with hyperchromatic pleomorphic nuclei, increased nucleus/cytoplasm ratio, and mitoses (arrow). In addition to malignant features, the cells contain dense orangeophilic cytoplasm and have distinct cellular borders consistent with squamous cell carcinoma. Panel B, Papanicolaou stain, 400x: Small clusters and individual bizarre malignant cells with orangeophilic cytoplasmic filaments.

CT scan with contrast of the neck and thorax showed an irregular, necrotic, enhancing mass circumferentially involving the esophagus from the level of the thyroid cartilage to just below the carina with severe narrowing of the distal esophagus and necrotic lymph nodes in the mediastinum. There was also a lytic bone lesion and numerous tiny pulmonary nodules leading to a clinical diagnosis of metastatic squamous cell carcinoma of the esophagus confirmed by subsequent endoscopic esophageal biopsy. The patient underwent gastrostomy tube placement for nutritional support owing to mechanical obstruction in hopes of providing some symptom relief. He was then referred to hospice with a consultation for palliative radiation.

Discussion

Skin lesions are commonly seen by primary care physicians. Cutaneous metastasis should always be considered in the differential diagnosis. Five to ten percent of patients with known metastatic disease have cutaneous metastasis [1], which may be the first sign of extranodal disease but is rarely the presenting sign of malignancy [2]. Breast is the most common primary site followed by similar rates for lung, ovary, and colorectal cancer, excluding melanoma and leukemia/lymphoma [1]. Interestingly, cutaneous metastasis as a presenting sign of malignancy is significantly less frequent in women compared to men [3]. This may partially relate to a tendency in males to ignore their own health care. Metastasis morphology is quite variable. Findings include ulcerated and flesh colored nodules, inflammatory plaques in carcinoma erysipelatodes, vascular nodules, and, less frequently, zosteriform eruptions. Rarely are metastases painful [3]. They often present as nodules, occasionally multiple [4]. Esophageal metastasis accounts for less than one percent of all cutaneous metastasis; only one percent of patients with metastatic esophageal carcinoma have skin metastasis. However, esophageal adenocarcinoma more commonly metastases to the skin [5]. Prognosis at this stage is quite poor. Average survival time at the diagnosis of skin lesions is four months [2], in line with the life expectancy for all stage IV esophageal carcinoma of four to six months [6]. Treatment at this stage focuses on palliation with consideration of esophageal stenting or gastrostomy tube placement and palliative chemotherapy and radiation.

Fine needle aspiration provides a relatively quick, non-invasive, inexpensive method to aid in diagnosis and staging [7]. Immunostaining has been shown to help in cases of unknown primaries [8]. In conjunction with a meticulous history and physical examination, the use of FNA can lead to an immediate diagnostic impression at the bedside, which can expedite ancillary testing, treatment, and patient management.

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