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Case Report

Metastatic Cutaneous Squamous Cell Carcinoma with Gastrointestinal Involvement: A Case Report

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Squamous cell carcinoma · Metastasis · Gastrointestinal oncology

Abstract
Metastatic squamous cell carcinoma (SCC) involving the gastrointestinal tract as the sole site of metastatic disease is exceedingly rare. We report a patient with known cutaneous SCC that metastasized to regional lymph nodes who, after therapy, appeared to be disease free until a small metastatic lesion was identified on colonoscopy within a diverticular orifice. He was subsequently noted to have more diffuse gastrointestinal involvement, including a small bowel lesion not previously identified on imaging. The presence of a gastrointestinal metastatic lesion in this setting should prompt consideration to exclude other synchronous lesions and the need for possible additional systemic therapy.

Introduction

Squamous cell carcinoma (SCC) is a common malignancy, and cutaneous SCC accounts for up to 20% of non-melanoma skin cancers in the United States, making it the second most common skin cancer [1]. Other primary sites of SCC are locations where squamous epithelium is normally found, including the lung, oropharynx, cervix, esophagus, and anal canal [2]. Metastatic SCC without a known primary site constitutes about 5% of all cancers of un-

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known primary site [3]. Gastrointestinal involvement as a manifestation of metastatic SCC is relatively uncommon, yet has been reported in the literature, including several cases identifying colonic involvement from known primary locations including the esophagus [4], lung [5, 6], and cervix [7]. However, this is the first report that identifies a gastrointestinal metastasis manifesting as recurrent disease from a cutaneous primary source without evidence of active disease elsewhere on multiple imaging studies.

Case Report

The patient was a 65-year-old male with a history of cutaneous SCC involving the right upper chest diagnosed in 2009 and initially treated with resection followed by Mohs surgery. Two years later he had a cutaneous recurrence confirmed to be carcinoma in situ. In October 2014, right axillary adenopathy was noted demonstrating poorly differentiated metastatic SCC. CT of the chest, abdomen, and pelvis showed bulky right axillary and retropectoral lymphadenopathy. Lymph node dissection in November 2014 confirmed 7 of 22 positive nodes for metastatic disease. Postoperative PET scan demonstrated mildly FDG-avid right pectoral lymph nodes believed to be reactive and a small area of increased uptake in the transverse colon of uncertain significance. Colonoscopy was recommended based on the PET scan but deferred by the patient as he began chemoradiation using radiosensitizing doses of carboplatin and paclitaxel, including the right subpectoral lymph node in the treatment field. This therapy was completed in February 2015, and subsequent imagining including PET/CT scans in August 2015 and February 2016 demonstrated low-grade metabolic uptake in the region of the right shoulder and axilla, consistent with posttreatment changes without any evidence of active disease, including no evidence of increased colonic uptake. On February 22, 2016 the patient underwent a routine screening colonoscopy, which did not demonstrate any lesion in the transverse colon, but a small area of nodular polypoid tissue within a diverticulum of the sigmoid colon was identified (Fig. 1). Multiple biopsies and a partial snare excisional biopsy were obtained which demonstrated SCC. These findings were confirmed on histology and immunohistochemical stains (pancytokeratin AW1/AE3 and p63 positive, CK20 negative). The subsequent management decisions were discussed at several specialized cancer centers, and it was ultimately recommended that the patient undergo local resection of the colonic metastasis, as this was the only identified site of recurrent neoplasm. Preoperative marking of the site was accomplished on repeat endoscopic evaluation with repeat biopsy confirmation of the site. In June 2016, laparoscopy with a robotically assisted low anterior resection was performed and a previously unidentified small bowel metastatic lesion was noted in the jejunum. The small bowel metastasis was resected and confirmed to be SCC with lymphovascular invasion. The sigmoid resection confirmed metastatic SCC at the base of a deep diverticulum with 3 of 4 positive lymph nodes and clear margins of resection. Postsurgically in July 2016 the patient was enrolled in a trial with pembrolizumab and is currently undergoing systemic immunotherapy. Repeat CT/PET imaging in October 2016 demonstrated unremarkable colocolonic and small bowel anastomotic sites without evidence of any new metastatic disease.

Discussion

SCC is a common malignancy with several potential primary locations, including the oropharynx, nasopharynx, lung, esophagus, cervix, and anus, with metastasis typically involving regional lymph nodes [8]. Cutaneous SCC constitutes up to 20% of non-melanoma skin cancers, with principal epidemiologic risk factors that include UV exposure, age, and phenotypic variations (including fair skin, blue eyes, and Northern European origin) [9]. Other less common but significant risk factors include prior therapy with immunosuppressive agents and immunosuppressed populations such as transplant recipients [10]. In general, the spread of metastatic cutaneous SCC occurs via lymphatics, with occasional distant metastases to organs [11]. Primary colonic SCC has been described in case reports [12, 13] and several small series [14] and has been estimated to constitute up to 0.2% of primary colon cancers [15]. However metastatic colonic involvement, though reported to rarely occur with lung [5, 6], esophageal [4], and cervical primary cancers [7], has not been reported from a cutaneous SCC. A single case of a synchronous metastatic SCC to the colon was reported by Ito et al. in 2016 [16]. However, their patient presented with concurrent cervical lymph node involvement, no identifiable primary site, and a colonic submucosal mass. The diagnosis was established based only on surgical resection and not mucosal biopsies, in contrast to the currently reported patient in whom a very subtle mucosal abnormality was identified arising within a diverticular orifice. In addition, this is the first reported case to date of a previously treated cutaneous SCC to manifest solely as a colonic metastasis. The secondary metastatic findings in this case are also noteworthy. Discovering the colonic lesion prompted laparoscopic surgical resection, which revealed a second gastrointestinal lesion in the small bowel. Though uncommon, the presence of a gastrointestinal metastatic lesion in this setting should prompt consideration to exclude other synchronous lesions and the need for possible additional systemic therapy.

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Author Contributions

Brian Schwartz: manuscript preparation and literature search. Mitchell Schwartz: editing, attending gastroenterologist of the patient reported, article guarantor.

Statement of Ethics

The authors have no ethical conflicts to disclose.

Disclosure Statement

The authors declare that there are no conflicts of interest or conflicts of financial support. Patient consent was graciously obtained for publication purposes.

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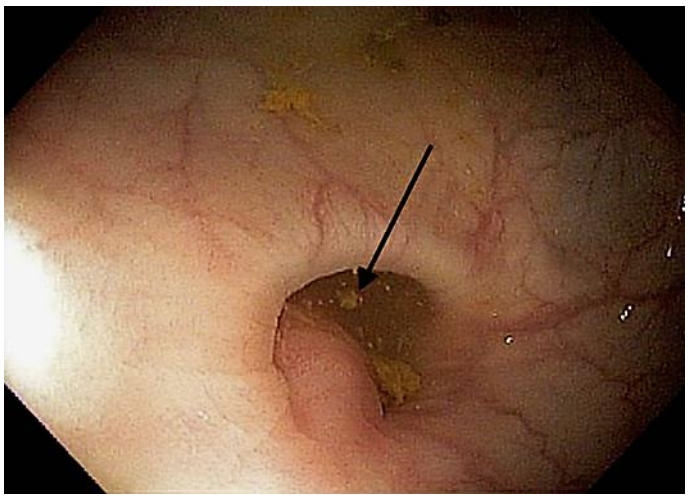

Fig. 1. Colonic diverticulum in the sigmoid colon with nodular polypoid mucosa present within the diverticular orifice (arrow).