

GASTRIC ADENOCARCINOMA PRESENTING AS CUTANEOUS METASTASIS

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Abstract

Skin is an uncommon site for metastasis of visceral malignancies. Cutaneous metastasis from gastric adenocarcinoma is very rare with variable presentations ranging from ulcers to nodules suggesting a poor clinical outcome with limited treatment options. These lesions may present as the first symptom of an internal malignancy or may develop later in the disease process. We report a case of multifocal and multiple cutaneous metastasis in a patient with gastric adenocarcinoma.

Keywords: gastric adenocarcinoma, cutaneous metastasis, nodules.

Introduction

Cutaneous metastasis of internal malignancies is a rare occurrence with an incidence of 0.7 to 10.4%[1]. Breast, lung and colorectal adenocarcinomas are the most frequent to metastasize to skin and indicate rapid progression with poor clinical outcome[2]. Carcinomas of the upper gastrointestinal tract metastasizing to the skin are very rare[3]. We report a case of gastric adenocarcinoma with metastasis to skin at the time of diagnosis.

Case History

A 55 year old female presented to the surgery department with complaints of multiple swellings on the right side of the neck since two weeks. An erythematous swelling was noted on the right side of ala of

the nose (Figure 1). Examination revealed a non tender nodule behind the right mandible surrounded by multiple satellite nodules and another nodule in the right parotid region. No skin changes were seen in these nodules. A history of epigastric pain along with vomiting and burning sensation, which increased following food intake being present, was elicited since six months. Ultrasound of abdomen was normal. On upper gastrointestinal scopy multiple ulcers along the lesser curvature of stomach extending till gastroesophageal junction were seen. Gastric biopsies from the pre pyloric ulcer revealed adenocarcinoma showing malignant glands lined by mucicarmine positive columnar malignant cells (Figure 2) while the adjacent mucosa

showed H. Pylori induced active chronic gastritis. Excision biopsy from the nodule from the neck showed metastatic

adenocarcinoma (Figure 3). In view of metastatic disease, the patient will receive chemotherapy and radiotherapy.



Figure 1: Erythematous swelling on the right side of ala of the nose

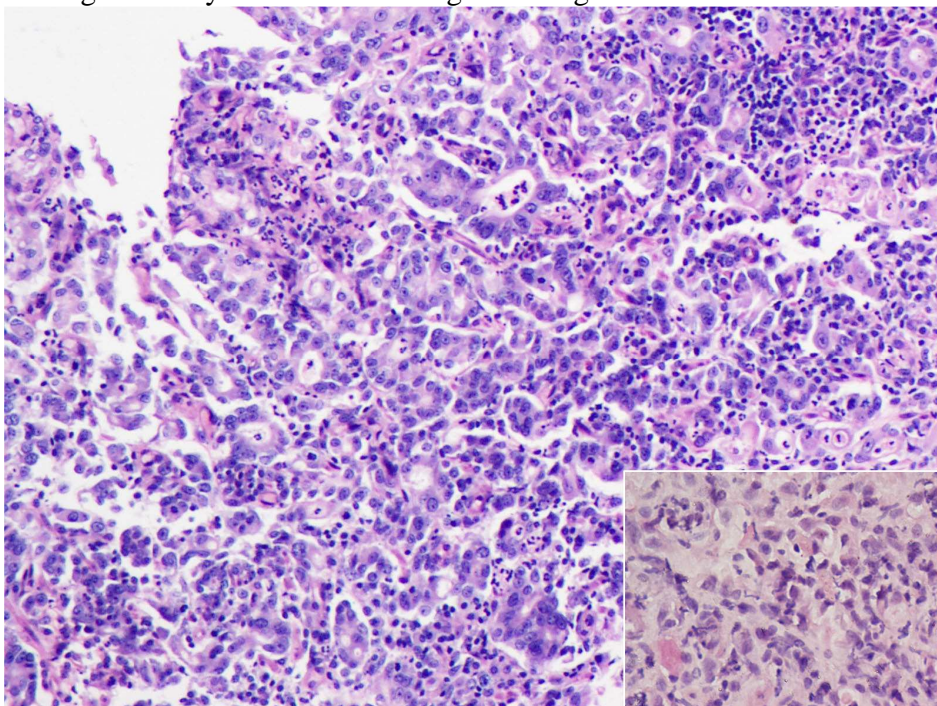


Figure 2: Gastric biopsy showing a well differentiated adenocarcinoma (H&E, X20). Inset: Mucicarrine positive malignant cells (X40).

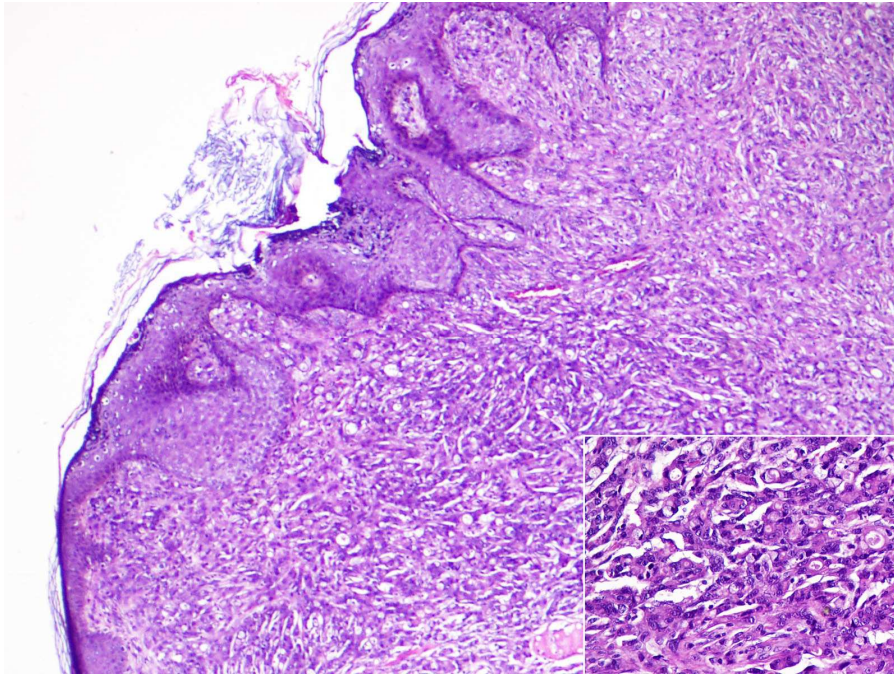


Figure 2: Skin nodule showing metastatic adenocarcinoma ((H&E, X20). Inset (H&E, X40)

Discussion

Metastasis to the skin may occur prior to, simultaneously or during the treatment of primary malignancy [3]. The most common type of malignancy to metastasize to skin in males is lung cancer while in women, it is breast carcinoma [2]. Metastasis from colonic carcinoma and melanoma are common in both sexes. Cutaneous metastasis as initial presentation is commonly seen in malignancies of the kidney, lung and ovary [4].

Metastasis of a primary malignancy to different anatomic locations could be due to mechanical factors such as the lymphatic drainage and anatomic proximity or could be site specific due to selective affinity of the tumor cells to a particular organ. Sometimes, the pattern of distribution of cutaneous metastasis can be non-selective with no role of either mechanical factor or tumor sensitivity [4]. These metastatic deposits may spread via the lymphatics, blood, direct extension or implantation during surgery [3].

Gastric adenocarcinoma metastasizing to the skin is unusual accounting for approximately 6% of all cutaneous metastasis in males and 1% in females [2,5]. These patients can present with solitary or multiple nodules involving the skin of the abdominal wall most commonly, but can also involve the neck, chest, back, axilla or fingertips. The involvement of skin near the umbilicus, known as Sister Mary Josephs nodule, is the most common site of cutaneous metastasis. Skin metastasis to face is extremely rare. These patients can also present with cellulitis like lesions or alopecia [3, 4, and 6]. Our patient presented with multifocal painless nodules on the face and neck.

The presence of cutaneous metastasis, in patients with unknown primary, may reveal the diagnosis on histopathological study. The metastatic deposit is most often similar to the primary site; however it may vary in the level of differentiation [1]. The present case has similar histopathological features of

the tumor in both the stomach and skin nodules.

Differential diagnosis of metastatic adenocarcinoma of the skin, especially in the event of an unknown primary on clinical examination, includes cysts, lipomas, neurofibroma and even cellulitis whereas mucinous eccrine and apocrine adenocarcinoma can also be considered on microscopic examination. A thorough clinical evaluation, histopathological examination and immunohistochemical analysis aids in accurate diagnosis [1, 7, and 8]. In our case primary skin adenocarcinomas were ruled out due to the simultaneous diagnosis of gastric adenocarcinoma.

Treatment protocols for patients with cutaneous metastasis are usually palliative with chemotherapy, radiotherapy or surgical excision [1]. The prognosis of such patients is grim with survival rates of less than one year, with an average of 11.4 weeks (range – 2 to 24 weeks), following diagnosis of metastatic disease. The presence of multiple skin lesions makes the survival of these patients even shorter [1, 2].

To conclude, the presence of dermatologic lesions such as nodules, ulcers or erythema may be an indicator of an internal malignancy and should be examined with high vigilance. Early diagnosis of cutaneous metastasis enables appropriate staging along with prompt and meaningful palliation before rapid progression and development of widespread visceral metastasis.

References

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