RESIDENT COMPETITION RESEARCH ARTICLES

Cutaneous Metastasis from Gastric Carcinoma, an Uncommon Clinical Presentation

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ABSTRACT

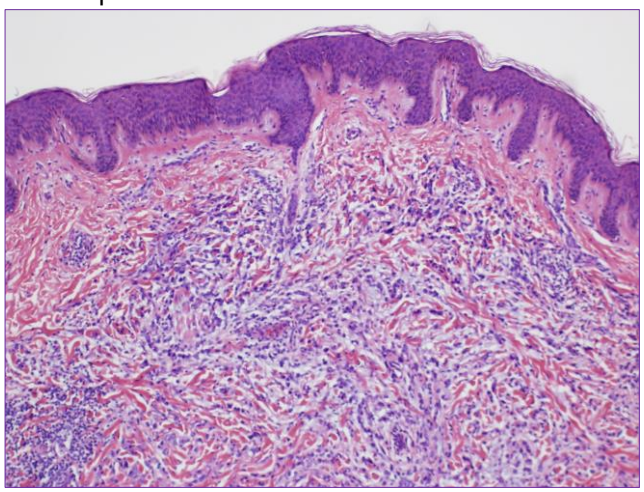
Cutaneous metastases are a late event associated with poor prognosis. Here we report a case of gastric carcinoma associated cutaneous metastasis in a patient who reported a history of an unspecified malignancy under remission. This case report serves to highlight cutaneous metastases as a rare late complications of malignancies, including those that may have been previously considered in remission, associated with poor prognosis.

CASE REPORT

A 43-year-old well appearing Japanese-American female was referred by a local medical oncologist for evaluation of a new onset truncal lesion. She reported a past medical history of a previous malignancy that was now in remission. No additional details were available. Clinical examination revealed an isolated mobile pink plaque on the upper back (Figure 1). The lesion measured 19mm and was asymptomatic, well circumscribed, with no secondary changes. A punch biopsy was obtained which showed malignant cells infiltrating collagen bundles. The infiltrating cells were arranged both individually and in an “Indian file” like pattern (Figure 2). At higher magnification, typical signet ring cells with eccentrically located hyperchrormatic nuclei were observed. Infiltrating cells stained positive for CAM5.2 and negative for estrogen receptor. A diagnosis of metastatic gastric carcinoma (mGC) was established and wide resection of the lesion with clear margins was obtained. Unfortunately, she succumbed to her disease within one year of this diagnosis.

Figure 1. Asymptomatic lesions on the back.

Figure 2. Hematoxylin and eosinophil staining with infiltrating cells arranged individually and in an “Indian file” like pattern.



DISCUSSION

In general, cutaneous metastases often present at a late disease stage and are associated with diffuse metastatic disease and poor prognosis. Cutaneous metastases occur in 0.6 to 10.4% of cancer patients.[1] The most common sources of skin metastases in women are breast, colon cancer, and melanoma whereas the leading causes in men are melanoma, lung, and colon cancer.[2,3] Even more rarely, cutaneous metastases are the initial presentation of occult internal malignancy, occurring in only 0.8% of patients.[4] In these cases, the most likely primary malignancies are lung, kidney, and ovaries.[4] The mechanisms that predispose certain malignancies to metastasize to skin are unclear. Gastric cancer (GC) accounts for 6% of all skin metastases in males and only 1% in females.[5]

Although incidence rates have been declining, GC is the fifth most common malignancy in the world with about 1 million new cases diagnosed annually and the third most common cause of cancer related death worldwide. The incidence of GC is highly dependent on ethnicity, diet, and infection history, in particular by *H. Pylori* and HPV. Incidence is tenfold higher in Asia, Eastern Europe and parts of Central and South American countries than in Western countries, possibly linked to the prevalence of H. Pylori in those regions. Also, incidence is twofold higher in men than women.[4,6] Different risk factors are linked to GC of different areas of the stomach: distal and antral cancers are associated with H. pylori, alcohol, and low fruit/high consumption of process meats, which are common in East Asia, whereas proximal cancers (cardia) are linked to obesity and tumors of the gastroesophageal junction with Barrett's esophagus, which is more common in non-Asian countries.[4,6] The survival rate for GC is among the lowest of all solid malignancies: 5-year survival rate of about 30% for GC and 3.1% for advanced GC. Analysis of the US NCI's Surveillance, Epidemiology, and End Results (SEER) showed median overall survival of 6 months in patients younger than 44 years of age and of 3 months in patients older than 75.[4,6]

Management of mGC is challenging. Patients with locally advanced or mGC should be started on systemic treatments as these have been shown to increase survival and quality of life as compared to supportive care alone.[7] Combinations of platinum and fluoropyrimidines with or without anthracycline or taxanes are the preferred treatments.[4,6,7] Molecular targeting is also being investigated. In particular, trastuzumab has shown promising results in treatment of Her-2 positive mGC. (7) The role of surgery in mGC is controversial. In specific, the REGATTA study showed no survival advantage with palliative gastrectomy plus chemotherapy as compared to chemotherapy alone, suggesting that palliative resection yielded no benefits. However, a subset analysis revealed that

patients with GC in lower gastric bodies had relatively favorable outcomes, suggesting that surgical intervention may be beneficial for some mGC patients.[8]

CONCLUSION

The appearance of new cutaneous lesions on patients with a history of malignancy, even remote, should be thoroughly investigated to rule out cutaneous metastases. This case report heightens the awareness of this rare presentation associated with poor prognosis.

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