Case Report

Unusual presentation of cutaneous metastasis to the neck from the primary gastric adenocarcinoma: A case report

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ABSTRACT

Cutaneous metastasis to the neck from gastric adenocarcinoma is an unusual site of presentation. This is a case report of a 70-year-old male who underwent gastrectomy for a gastric adenocarcinoma 1 year ago. He has now presented with cutaneous metastasis over the neck as nodules and sclerodermal plaques. Fine-needle aspiration cytology from the nodules revealed signet ring cell adenocarcinomatous deposit. This case has been reported for its unusual presentation. Since gastric adenocarcinoma usually metastasizes to the anterior abdominal wall, perineum, and the umbilicus (Sister Mary Joseph nodule), and the cutaneous metastasis to the neck is an unusual site of presentation.

Key words: Cutaneous metastasis, Gastric adenocarcinoma, Signet ring cell

INTRODUCTION

Cutaneous metastasis is defined as deposition of tumor in the skin from a distant location. It represents approximately 2% of all cases. The scalp is considered the most common site of metastasis because of its rich vascularity.[1,2]

Clinically, most metastases are seen as nodules or plaques. Most often the metastasis is seen adjacent to the primary site. Melanoma appears to be the most frequent primary tumor to metastasize. Other primary sites of carcinomas such as lung, breast, gastrointestinal tract (GIT), thyroid, and genitourinary tract are also well known to metastasize to the skin. Leiomyosarcoma and mesothelioma very rarely metastasize to the skin. In all cases of cutaneous metastasis, the history and clinical findings are helpful in confirming the diagnosis.[3-8]

CASE REPORT

Here is a case of a 70-year-old male, farmer who presented with the complaints of diffuse swelling over the anterior aspect of the neck as nodules and sclerodermatic plaques (Figure 1) associated with pain of 2 months duration. The largest nodule measured about 8 cm × 5 cm and smallest measured 2 cm in diameter. There was history of gastrectomy done 1 year ago for unknown cancer; reports were not available.

Fine-needle aspiration study was performed, which revealed hypercellular smear composed of discohesive clusters of malignant cells with signet ring cell morphology (Figure 2). Signet ring cells are cells with intracytoplasmic mucin which pushes the nucleus to the periphery (Figure 3). Hence, the diagnosis of cutaneous signet cell adenocarcinomatous metastatic deposit to the neck probably from the stomach was given.

DISCUSSION

Cutaneous metastasis from stomach and pancreas usually occur before the discovery of the primary tumor. The usual sites of metastasis from gastrointestinal carcinomas are the abdominal wall, perineum, and umbilicus (Sister Mary Joseph nodule). In one series, 10% of metastasis to abdominal wall occurred in the umbilicus, and 28% of those tumors were of gastric origin.[1] Esophageal carcinomas occasionally

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Figure 1: Diffuse neck swelling presenting as nodules and sclerodermoid plaques

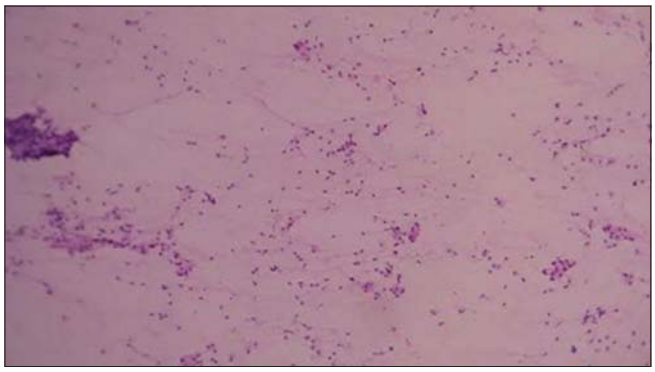

Figure 2: Low power view (H and E, 100): Hypercellular smear composed of discohesive cells with signet ring cell morphology. Arrow indicates glandular structures

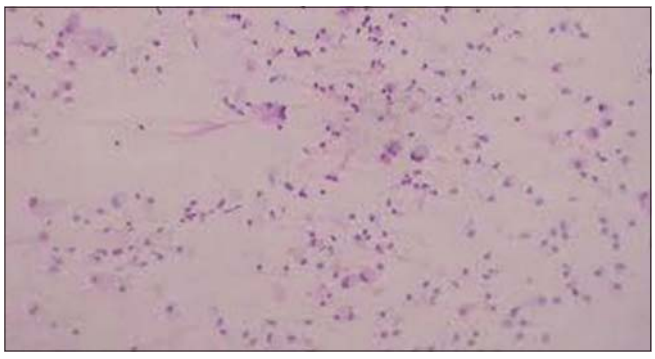

Figure 3: High power view showing signet ring cells (H and E, 400)

metastasize to the skin. These are usually squamous cell carcinomas that metastasize to the upper trunk and neck as single or multiple nodules. Metastasis of the esophageal adenocarcinomas has also been reported.[2] Adenocarcinomatous deposits are by far the most common variant of cutaneous metastasis with the breast being the most frequent source (up to 23% of cutaneous metastasis most of which occur in women).[3,5-8]

Lung and large intestine are also important sources of metastatic adenocarcinoma deposit. Other primary sites include the stomach, prostate, pancreas, endometrium, thyroid, ovaries, and endocervix. They present as nodular deposits composed of diffuse infiltrate of undifferentiated cells or can present with epidermotropism and confusion with a superficial spreading melanoma can ensue.[4,7]

Typical of a breast metastasis is the presence of linear dissection of tumor cells among adjacent collagen bundles (stacked penny appearance). Similar appearances may be seen with a number of other tumors including those of the prostate, stomach, pancreas, and small cell carcinoma.[2,3,6]

Cutaneous metastasis is defined as deposition of tumor in the skin from a distant location. It represents approximately 2% of all cases. The scalp is considered the most common site of metastasis because of its rich vascularity. Clinically, most metastases are seen as nodules or plaques. Most often the metastasis is seen adjacent to the primary site. Melanoma appears to be the most common primary tumor to metastasize. Other primary sites of carcinomas, such as lung, breast, GIT, thyroid, are also well known to metastasize to the skin. Metastasis from gastric carcinoma may occur at any distant site, but the umbilical region is perhaps more common. Signet morphology may present in the stomach. Gastric, pancreatic and gall bladder carcinomas that metastasize to the skin usually present as nodules, sclerodermoid plaques, or Sister Joseph nodules.[1-4]

CONCLUSION

Stomach metastasis is usually anaplastic, infiltrating carcinomas with variable cellularity, a loose stroma and varying proportions of signet ring cell may be seen. Metastatic adenocarcinomatous deposit from the stomach to the neck is an unusual site.

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Received: 12 Sep 2015; **Revised:** 23 Dec 2015; **Accepted:** 07 Jan 2016