Carcinoma En Cuirasse as an Initial Manifestation of Gastric Cancer: New Case Report

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Abstract

Carcinoma en Cuirasse (CEC) is an extremely rare and dramatic form of cutaneous metastases (CM); characterized by a scleroderma-like clinical appearance. The skin is an uncommon site for distant metastasis; when it is present the most origin are breast, lung and colon. We report a rare case of CEC pattern of CM secondary to gastric malignancy in a 45-year-old male patient; the interesting part being that skin Metastasis was the first-presenting sign, which on further histopathological and immunohistochemical evaluation led to the diagnosis of serious hidden gastric carcinoma.

Keywords: Carcinoma en Cuirasse, cutaneous metastases, cutaneous metastases.

INTRODUCTION

Cutaneous metastases of visceral malignancies are uncommon, constituting about 2% of all skin tumours [1]. It is even rarer to have cutaneous lesions as the first mode of clinical presentation in such malignancies. Usually sites of primaries include breast, lung, colorectum, kidney, ovary, and head and neck [2]. Skin metastasis from gastric adenocarcinoma is particularly rare, with a reported incidence of 0.8% and They usually occur late in the course of the disease [3].

We report an unusual clinical-diagnostic sequence of a patient presenting a cuirasse lesion in abdominal skin and was later diagnosed to have a gastric adenocarcinoma.

CASE REPORT

A 45-year-old man presented with a 4-month erythematous and indurated skin lesions of the back Neck. The lesion was initially small and gradually progressed.

The patient denied any other dermatological conditions, had no family and personal history of malignant neoplasms and did not report such symptoms like fever, dysphagia, hematemesis, or melena. Clinical examination revealed one defined erythematous plaques indurated measuring approximately 5x6 cm. A pink-colored polypoidal growth was present over the right indurated plaque (Figure 1). No other skin lesions were seen elsewhere in the body and No mass was palpable per abdomen.

Histological examination of the lesional skin biopsy revealed a normal epidermis but diffuse infiltration of the dermis by atypical cells, arranged singly and in glandular pattern in a fibrous stroma. On immunohistochemistry, these cells were positive for cytokeratins 7 (CK7) (Figure 2) and epithelial membrane antigen (EMA) but negative for estrogen and progesterone receptor (ER/PR), carcinoembryonic antigen (CEA), prostate specific antigen (PSA), leukocyte common antigen (LCA), and the melanocytic markers S100 and HMB45. The appearance was that of a mucin-producing adenocarcinoma (ADC), metastatic to skin. The mucin-producing SRCS were diastase-resistant periodic acid-Schiff (PAS)- and mucicarmine-positive, suggesting gastric origin.

Tomography of the abdomen showed an carcinomatous lymphangitis and liver metastases without gastric thickening or mass. Endoscopic findings revealed an ulcerative growth of size 14x10 mm on the lesser curvature of the stomach. The results of the Gastric biopsy is similar to findings seen on skin
biopsy, suggesting moderately differentiated SRC carcinoma.

Figure 1: CM over the Neck in a CEC

Figure 2: A-Photomicrograph showing diffuse infiltration of dermis by an adenocarcinoma (H&E, x40), B-Immunohistochemically: tumour cells are immunopositivity for CK 7 (H&E, x30)

**DISCUSSION**

Visceral malignancies metastasising to skin is a relatively rare in clinical practice, with an overall incidence ranging from 2% [4]. Lung cancer is the most common source of cutaneous metastasis in men and breast cancer in women [4]. Cutaneous metastases, though relatively rare, may be the first sign of an occult internal malignancy.

Cutaneous metastasis is seen in 0.8% to of gastric cancers and constitutes 6% of all cutaneous metastases [5]. Their topography is generally abdominal. Nevertheless, other rarer localizations have been described such as head and neck, armpits, limbs and chest wall [6].

Localization to the back of the neck is very rarely seen from carcinoma of the stomach, with only a few cases reported in the world literature [7].

Histopathological examination is very essential to establish the diagnosis and can supply a clue to the possible primary site based on certain morphological and immunohistochemical features. Signet ring cells, though usually observed in adenocarcinomas arising from the stomach, colon, breast, prostate or lung, may be seen in many primary skin tumours [6].

Presence of signet ring cells with intracellular mucin and immunopositivity for CK7 suggested a gastric primary in our case.

CMs usually appear several months or years after the diagnosis of the primary tumor, and only in very exceptional cases are they a presenting sign of the neoplastic process [8].

CM can occur as a result of lymphatic or hematogenous dissemination of a tumor, or by direct infiltration [9]. Skin metastasis is still a poor pronostic sign; with an average survival time of less than one year.
The treatment depends on their size and location, but still palliative, with limited impact on survival in many cases.

**Conclusion**

Carcinoma en Cuirasse (CEC) from primary gastric cancer is an extremely rare form of cutaneous metastases (CM); they can be metachronous or synchronous and can occur anywhere in the body, not necessarily in contiguity to primary site. However, any unexplained skin lesion should be biopsied for distinction between primary and metastatic tumors of skin. The detection of CM can change the staging, prognosis, and treatment of the patient.

**Declaration of interest:** The authors report no conflicts of interest.

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