Cutaneous metastatic colorectal adenocarcinoma mimicking lymphangioma

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Abstract

Colorectal cancer is a fatal disease that is steadily increasing. Herein, we report a 36-year-old male with a seven-month history of colon adenocarcinoma, who presented with a painless, exophytic, bilateral scrotal mass, mimicking lymphangioma in shape. To our knowledge, cutaneous metastasis mimicking lymphangioma is rarely described in the literature.

Introduction

Cutaneous metastases are very important dermatological manifestations because of their prognostic value. Internal malignancies can present with a broad diversity of cutaneous manifestations. The frequency of cutaneous metastasis is approximately 1-10% in patients with internal malignancies, sometimes serving as the initial sign (1). There is a diversity of clinical presentations ranging from papules to plaques, nodules, and ulcers (1). Melanomas and breast carcinomas are the most common causes of cutaneous metastases, followed by lung, oropharyngeal, and colorectal tumors (2).

About one in five patients with colorectal carcinoma present with metastatic disease, with the predominant metastatic sites being the liver, lymph nodes, lungs, and peritoneum (3). According to our literature review, the skin metastasis morphology of colorectal cancer was mostly nodules, plaques, and ulcers (4). In this article, we report a new rare presentation of colorectal adenocarcinoma in a 36-year-old male who presented with bilateral enlargement of the scrotums, misdiagnosed as lymphangioma. Pathological examination revealed that these lesions were of metastatic adenocarcinoma origin, and the patient was referred for chemotherapy.

CASE PRESENTATION:

A 36-year-old male patient presented to our dermatology clinic for painless, progressive enlargement of both scrotums over the last few months. His past medical history included colon adenocarcinoma, which was diagnosed seven months before and treated with chemotherapy and radiotherapy. The patient mentioned that he started complaining of these bilateral masses one month following the 25th and final radiotherapy session. Examination revealed a painless, non-tender, exophytic, bilateral scrotal mass, similar to a lymphangioma in form and shape. Punch biopsy was done with the differential diagnoses of lymphangioma and warts. Surprisingly, the histopathological examination revealed metastatic adenocarcinoma morphologically compatible with a large bowel origin. The patient was referred to their oncologist to restart chemotherapy.

Discussion

Cutaneous metastases are infrequent presentations of internal malignancies, usually associated with a poor prognosis (5). Epidemiologic statistics can be beneficial in determining the type of encountered metastasis; for instance, melanoma and breast carcinoma are the most common malignancies that are associated with cutaneous metastases in women, whereas melanoma, head and neck carcinoma, lung and colon cancer are the predominant sources of metastases to the skin in men (5). The clinical presentations of cutaneous metastases vary from papules to plaques, nodules, ulcers, or even inflammatory eruptions (6). Most cases are single painless lesions limited to a single anatomical distribution (6). The classical presentation that is most commonly mentioned in the literature is a skin-colored to blue-black, firm, painless nodule (5). To promptly and correctly diagnose a cutaneous metastasis and improve the prognosis, we need a high index of suspicion and a low threshold for performing skin biopsy (7). For this reason, histopathological examination and immunohistochemical studies should be performed as soon as possible to start proper treatment in such cases (7). In most of the studied cases, the pathological findings were similar to the primary origin, with infiltrate localization in the dermis (7).

In our patient, the clinical presentation of cutaneous metastasis was similar to lymphangioma, which is rarely mentioned in the literature. Fortunately, a biopsy was taken quickly, and the patient was promptly referred for restarting chemotherapy, which may improve his prognosis and survival.

Treatment of cutaneous metastases is considered challenging, especially if widespread (8). The used options include excision, radiotherapy, and chemotherapy, in addition to electrochemotherapy (ECT), which is rapidly emerging (8). The treatment of cutaneous metastases is critical, especially in improving a patient's quality of life (8).

The possibility of cutaneous metastasis should be entertained, and histological studies should be conducted for an oncology patient with underlying internal malignancy who develops any suspicious lesions (9).

In conclusion, early diagnosis of cutaneous metastasis is critical and can improve the disease outcome (10). Therefore, a cutaneous metastasis should be considered when encountering any new painless exophytic lesions mimicking lymphangioma, especially in male patients with a history of colorectal adenocarcinoma. With this new case report and with the multiple clinical presentations of cutaneous metastases, dermatologists should maintain a low threshold for performing a skin biopsy.

Key Clinical Message

Early diagnosis of cutaneous metastasis is very important and can improve the disease outcome. A cutaneous metastasis should be considered when encountering any new painless exophytic lesions mimicking lymphangioma.

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Figure legend

Figure 1 A/B:

Bilateral exophytic plaques on both scrotal sides

Figure 2:

Acanthotic epidermis and full thickness dermal involvement by an infiltrative neoplasm composed of atypical epithelial cells with hyperchromatic vesicular nuclei and moderate eosinophilic cytoplasm, producing large glandular structures with central necrosis and neutrophilic infiltration. Lymphatic vessel invasion is seen. Stroma is inflamed and desmoplastic.



