

Cutaneous metastatic colorectal adenocarcinoma mimicking lymphangioma

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Colorectal cancer is a fatal disease that is continuously increasing. Herein, we report a 36-year-old man with a seven-month history of colon adenocarcinoma, who presented with a painless, exophytic, bilateral scrotal mass that resembled lymphangioma in shape. The histopathological examination revealed metastatic adenocarcinoma, which was morphologically compatible with large bowel origin. To the best of our knowledge, cutaneous metastasis mimicking lymphangioma has rarely been described in the literature. Early diagnosis of cutaneous metastasis is very important and can improve the disease prognosis. A cutaneous metastasis should be considered when encountering any new painless exophytic lesions mimicking lymphangioma.

Keywords: metastasis, colonic neoplasms, chemotherapy, lymphangioma, cutaneous manifestation

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INTRODUCTION

Cutaneous metastases are extremely important dermatological manifestations due to their prognostic value. Internal malignancies can present with a broad diversity of cutaneous manifestations. The frequency of cutaneous metastasis in patients with internal malignancies ranges from 1 to 10%, which might sometimes serve as the initial sign¹. Clinical manifestations range from papules to plaques, nodules, and ulcers¹. Melanomas and breast carcinomas are the leading causes of cutaneous metastases, followed by lung, oropharyngeal, and colorectal tumors².

About one out of every five patients with colorectal carcinoma present with metastatic disease, with the liver, lymph nodes, lungs, and peritoneum being the most predominant metastatic sites³. According to the findings of previous studies, the skin metastasis morphology of colorectal cancer was primarily nodules, plaques, and ulcers⁴. Herein, we presented a rare case of colorectal adenocarcinoma in a 36-year-old man, who presented with bilateral

scrotal enlargements that were misdiagnosed as lymphangioma. Pathological examination confirmed that the lesions were metastatic adenocarcinoma origin, and the patient was referred for chemotherapy.

CASE PRESENTATION

A 36-year-old man presented to our dermatology clinic with a painless, progressive enlargement of both scrotums during the last few months. The patient's history dates back to seven months when he started complaining of abdominal pain during defecation with apple jelly secretions. A colonoscopy with biopsy was done, and he was diagnosed with colon adenocarcinoma. The tumor was measured at 15 cm, and the oncologist started chemotherapy. Unfortunately, after the second session of chemotherapy, the patient began complaining of palpitations and a lower level of consciousness, prompting the doctor to discontinue the chemotherapy and begin radiotherapy. Three months later, after the 25th session of radiotherapy, the patient complained



Figure 1. Bilateral exophytic plaques on both scrotal sides (a and b).

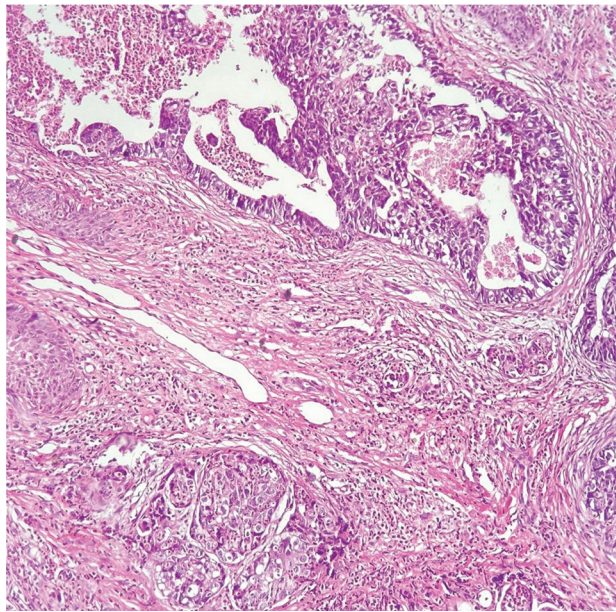


Figure 2. Acanthosis epidermis and full-thickness dermal involvement by an infiltrative neoplasm composed of atypical epithelial cells with hyperchromatic vesicular nuclei and moderate eosinophilic cytoplasm, producing large glandular structures with central necrosis and neutrophilic infiltration. Lymphatic vessel invasion is seen. Stroma is inflammatory and desmoplastic (H&E, × 40).

of bilateral scrotal masses, and he was referred to our dermatology clinic. Examination revealed a painless, non-tender, exophytic, bilateral scrotal mass, similar to a lymphangioma in form and shape (Figure 1). A punch biopsy was done with the differential diagnoses of lymphangioma, verruca vulgaris, and metastasis. The histopathological examination revealed acanthotic epidermis and full-thickness dermal infiltration with atypical epithelial neoplastic cells with neutrophilic infiltrate. Lymphatic vessel invasion was noted with desmoplastic and inflamed stroma (Figure 2). He was diagnosed with metastatic adenocarcinoma, which was morphologically compatible with a large bowel origin. The patient was referred to his oncologist to resume chemotherapy treatment.

DISCUSSION

Cutaneous metastases are infrequent presentations of internal malignancies, usually associated with a poor prognosis⁵. Epidemiologic statistics can be beneficial in determining the type of encountered metastasis; for instance, melanoma and breast carcinoma are the most prevalent malignancies that are associated with cutaneous metastases in women. However, in men, melanoma, head and neck carcinoma, lung, and colon

cancer are the predominant sources of metastases to the skin⁵. The clinical presentations of cutaneous metastases vary from papules to plaques, nodules, ulcers, or even inflammatory eruptions². The majority of cases are single painless lesions limited to a single anatomical distribution². The classical presentation that is most commonly mentioned in the literature is a skin-colored to blue-black, firm, painless nodule⁵. To diagnose a cutaneous metastasis promptly and correctly and enhance the prognosis, a high index of suspicion and a low threshold for performing a skin biopsy was required⁶. As a result, histopathological examination and immunohistochemical studies should be performed as soon as possible to begin appropriate treatment in such cases⁶. In most of the investigated cases, the pathological findings were consistent with the primary origin, with infiltrate localization in the dermis⁶.

In our patient, the clinical presentation of cutaneous metastasis was comparable to lymphangioma, which was rarely mentioned in the literature. Fortunately, a biopsy was taken quickly, and the patient was promptly referred for resuming chemotherapy, which might enhance his prognosis and survival.

Treatment of cutaneous metastases is considered challenging, especially if they are extensive⁷. Excision, radiotherapy, and chemotherapy are frequently utilized treatments, as well as electrochemotherapy (ECT), which is rapidly emerging⁷. The treatment of cutaneous metastases is crucial, especially in improving a patient's quality of life⁷.

The possibility of cutaneous metastasis should be considered, and histological studies should be conducted for an oncology patient with underlying internal malignancy, who develops any suspicious lesions⁸.

CONCLUSION

Early diagnosis of cutaneous metastasis is critical and can enhance the overall prognosis⁹. 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 the numerous clinical presentations of cutaneous metastases, dermatologists should maintain a low threshold for performing a skin biopsy.

Authors contributions

MSD was involved in the diagnosis and management of the patients. AR reported the result of the histopathological evaluation. FA, RD, PH, and AK did the literature review and drafted the manuscript. FA was responsible for the final editing of the manuscript and coordinated the study. All authors read and approved the final manuscript.

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Patient consent for publication

Written informed consent was obtained from the patient's family for publication of this case report and any accompanying images.

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