

A rare clinical manifestation of rectal adenocarcinoma and synchronous scalp metastasis: A case report

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In this case report, our aim was to emphasize that cutaneous involvement can be seen at the time of diagnosis or during the clinical course of visceral organ cancers in general and in colorectal cancers particularly. We also aimed to demonstrate that cutaneous lesions occurring in patients under follow up for visceral organ cancers could be metastases. A rapid progressing scalp lesion was detected in a newly diagnosed rectal cancer patient and the tru-cut biopsy revealed adenocarcinoma metastasis. This patient died due to a myocardial infarction during neoadjuvant chemotherapy. Cutaneous metastatic lesions in colorectal cancers must be evaluated as a sign of advanced disease and treatment protocols should be determined accordingly.

Key Words: Rectal adenocarcinoma, cutaneous involvement, scalp metastasis

INTRODUCTION

Excluding primary cancers of the skin, skin involvement are seen at a rate of approximately 10% at the time of diagnosis or during clinical follow-up of visceral malignancies, and in 0.6% of cases, it presents as the first manifestation of the disease.

Skin involvement of visceral cancers can occur by hematogenous, lymphogenic or by direct invasion and they usually present as nodules, ulceration, cellulitis-like lesions or fibrotic processes. Skin involvement is seen most commonly in breast cancer in women, and in lung cancer in men. In the course of gastrointestinal cancers, skin involvement is observed in about 15% of the cases. Although colorectal cancer usually metastasizes to the liver and lungs, the skin may be involved in about 5% of the cases, and they constitute the seventh most common cancer in women and the third in men with skin involvement (1-5). As with other visceral organs, skin involvement is considered as a sign of advanced stage disease in colorectal cancer (3, 6-8). The location of skin involvement in colorectal cancer surgery is often abdominal, it is believed to occur due to preoperative implantation (1, 2, 9). Nevertheless, colorectal cancer can cause skin involvement, at the beginning of or during the course of the disease beyond its known biological behavior at any stage without the involvement of any other visceral organs.

Herein we report a very rare case of rectal adenocarcinoma, presenting with isolated scalp metastases without any other distant organ involvement.

CASE PRESENTATION

An 84 year-old female presented to our department with complaints of rapidly enlarging lump in the skin and rectal bleeding. She had a previous medical history of hypertension and congestive heart failure. On physical examination a 3 cm in size, semi-mobile, painless swelling was observed in the left occipital region (Figure 1). The colonoscopy performed for evaluation of her rectal bleeding revealed an ulcerative-vegetating mass, located at the middle 1/3 rectum, filling half the lumen. The lesion was diagnosed as adenocarcinoma on biopsy. Biopsy of the sudden onset, rapidly growing scalp lesion was performed and was reported as adenocarcinoma metastasis. Cranio-thoraco-abdomino-pelvic CT showed a lesion within the scalp, and diffuse thickening of the rectal wall (Figure 2). The patient was transferred to the oncology clinic for neoadjuvant chemo-radiotherapy with a diagnosis of stage 4 rectal cancer, and she died due to myocardial infarction.

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Figure 1. Scalp metastasis on physical examination

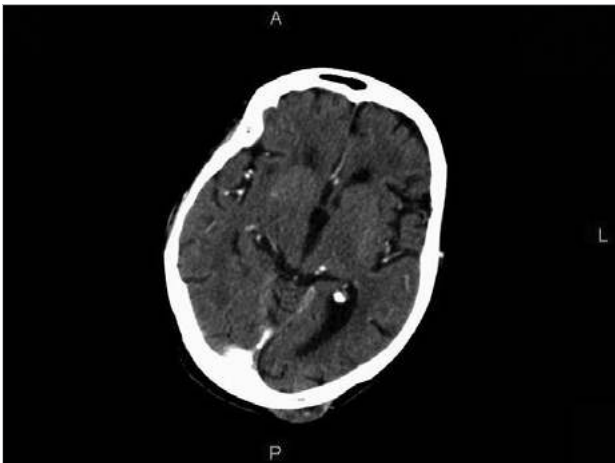


Figure 2. Tomographic view of scalp metastasis

DISCUSSION

In patients diagnosed with visceral organ cancer, metastatic cutaneous metastases may be found at the time of diagnosis or during the clinical course, especially in patients with metastatic disease. Lookingbill et al. (5) reported in 1990, a 5% rate of skin involvement amongst 7316 cancer patients, and Krathen et al. (10) reported a rate of 5.3% in their 2002 meta-analysis involving a database of cancer patients and autopsy series. When metastatic cancer patients are evaluated, Lookingbill et al. (9) reported a rate of 10% for skin involvement among 4020 patients in their 1993 study, and Kauffman et al. (11) found this ratio as 0.7 to 9%. Schoenlaub et al. (12) reported the average life expectancy in 200 patients with skin involvement as 6 months and Lookingbill et al. (9) reported a mean survival of 18 months in patients with cutaneous involvement. Given this information, skin involvement can be interpreted as a sign of short survival time.

Skin involvement can be seen in about 5% of patients with colorectal cancer while scalp lesions are quite rare. In the literature, two cases of rectal cancer with simultaneous scalp metastases at diagnosis have been reported. On histopathological examination of scalp involvement, one patient had an adenocarcinoma while the other one had a small cell carcinoma (13, 14). Our case is the second patient reported in the literature with a scalp involvement at the time of diagnosis of primary rectal adenocarcinoma, additionally our patient is separated

from the other two patients with lack of other visceral organ involvements.

Skin involvements of rectal cancers usually appear as subcutaneous or intradermal small nodules, dark brown or violet in color, and they can be confused with cysts, lipomas, neurofibromas, or alopecia due to these characteristics (9, 10). However, as in our patient, they may appear as a solitary, large lesion with normal skin color. Skin involvement of colorectal cancer usually arises at a mean of 4.9 after resection of the primary tumor. Extremely rarely, as in our case, it may also be present at the time of diagnosis and the presence of cutaneous metastases may also be considered as a poor prognostic sign (15).

Overall, in visceral organ cancers and particularly in colorectal cancer skin involvement can be detected during clinical course. Skin involvement can be seen at the time of diagnosis or during the course of treatment, and is a sign of advanced stage. Metastases on abdominal skin can often be found in colorectal cancer, whereas scalp lesions are rare. Therefore, in patients with newly diagnosed or in treatment for cancer, newly formed nodules in or under the skin, should raise suspicion of metastatic disease, and a careful physical examination, and if necessary a biopsy should be performed. In addition, patients being treated for other visceral organ cancer or for colorectal cancer can be trained with early diagnosis of un-healing skin wounds, swellings and other skin changes and treatment can be arranged accordingly.

CONCLUSION

Metastatic disease should be kept in mind both in newly diagnosed colorectal cancer patients with simultaneous skin or subcutaneous nodules and in patients undergoing treatment of colorectal cancer with newly formed skin lesions.

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