

Cutaneous Metastasis and Rectum Neoplasia: Case Report

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Metástases Cutâneas e Neoplasia de Reto: Relato de Caso

Metástasis Cutâneas y Neoplasia Rectal: Relato de Caso

Daiane Pretto¹; Fernanda Formolo²; Caroline Marsilio³

ABSTRACT

Introduction: Skin metastases are neoplasms that affect the dermis or subcutaneous cell tissue and may be an indicator of an unknown neoplasm with a poor prognosis. Skin metastases in rectal adenocarcinoma are considered rare. **Case report:** An 80-year-old woman, hypertensive and diabetic, had abdominal pain and hematochezia, reporting a family history of cancer. Colonoscopy was performed with biopsy results for adenocarcinoma. One year later, she received neoadjuvant therapy and concomitant radiation therapy for four months, with good response to treatment. However, she reported a fast-growing mandibular lesion, with the gastrointestinal tract as the primary site according to the biopsy. In reassessment CT scans, several small nodules in subcutaneous tissue of the lower abdomen, breast and lung were also diagnosed. A new biopsy of the breast nodules and immunohistochemistry were performed, procedures that suggested the rectum as the primary site of the lesions. Therefore, palliative chemotherapy was started and the patient presented a satisfactory response to skin lesions in the second cycle of antineoplastic treatment. The project was approved by the Institutional Review Board of Hospital Pompeia through report the opinion nº 311.052. **Conclusion:** This case emphasizes that progressive or unresponsive skin lesions after conventional therapy can be the first manifestation of advanced visceral cancer and should be properly investigated. Thus, it is clear that, through an early diagnosis, it is possible to change the prognosis of the disease and its treatment.

Key words: Skin Neoplasms; Rectal Neoplasms; Adenocarcinoma; Neoplasm Metastasis.

RESUMO

Introdução: As metástases cutâneas são as neoplasias que acometem a derme ou o tecido celular subcutâneo e podem ser um indicador de neoplasia desconhecida de mau prognóstico. Metástases cutâneas em adenocarcinoma de reto são consideradas raras. **Relato do caso:** Mulher de 80 anos de idade, hipertensa e diabética, apresentou dor abdominal e hematoqueia, relatando histórico familiar de câncer. Realizou colonoscopia com resultado de biópsia para adenocarcinoma. Um ano depois, recebeu terapia neoadjuvante e radioterapia concomitante por quatro meses, com boa resposta ao tratamento. Porém, relatou lesão mandibular de crescimento rápido, com o trato gastrointestinal como sítio primário de acordo com a biópsia. Em tomografias de reavaliação, foram diagnosticados também vários nódulos diminutos em tecido subcutâneo de abdome inferior, mama e pulmão. Foi realizada nova biópsia dos nódulos de mama e imuno-histoquímica, procedimentos que sugeriram o reto como sítio primário das lesões. Sendo assim, foi iniciada quimioterapia paliativa e a paciente apresentou resposta satisfatória das lesões cutâneas logo no segundo ciclo do tratamento antineoplásico. O projeto foi aprovado pelo Comitê de Ética em Pesquisa do Hospital Pompeia sob número de parecer 311.052. **Conclusão:** Este caso enfatiza que lesões na pele de crescimento progressivo ou sem resposta após terapia convencional podem ser a primeira manifestação de câncer visceral avançado e devem ser apropriadamente investigadas. Dessa forma, fica claro que, por meio de um diagnóstico precoce, é possível mudar o prognóstico da doença e o seu tratamento.

Palavras-chave: Neoplasias Cutâneas; Neoplasias Retais; Adenocarcinoma; Metástase Neoplásica.

RESUMEN

Introducción: Las metástasis cutâneas son neoplasias que afectan la dermis o el tejido subcutáneo y pueden ser un indicador de neoplasia desconocida con mal pronóstico. Las metástasis cutâneas en el adenocarcinoma rectal se consideran raras. **Relato del caso:** Una mujer de 80 años, hipertensa y diabética, presentaba dolor abdominal y hematoqueia, e informaba antecedentes familiares de cáncer. La colonoscopia se realizó con resultados de biópsia para adenocarcinoma. Un año después, recibió terapia neoadjuvante y radioterapia concomitante durante cuatro meses, con buena respuesta al tratamiento. Sin embargo, informó una lesión mandibular de rápido crecimiento, con el tracto gastrointestinal como el sitio primario según la biópsia. En las tomografías de reevaluación, también se diagnosticaron varios nódulos pequeños en el tejido subcutáneo de la parte inferior del abdomen, mama y pulmón. Se realizó una nueva biópsia de los nódulos mamaros y la inmunohistoquímica, procedimientos que sugirieron el recto como el sitio primario de las lesiones. Por lo tanto, se inició la quimioterapia paliativa y el paciente presentó una respuesta satisfactoria a las lesiones cutâneas en el segundo ciclo de tratamiento antineoplásico. El proyecto fue aprobado por el Comité de Ética e Investigación del Hospital Pompeia a través del dictamen número 311.052. **Conclusión:** Este caso enfatiza que las lesiones cutâneas progresivas o que no responden después de la terapia convencional pueden ser la primera manifestación de cáncer visceral avanzado y deben investigarse adecuadamente. Por lo tanto, está claro que, a través de un diagnóstico temprano, es posible cambiar el pronóstico de la enfermedad y su tratamiento.

Palabras clave: Neoplasias Cutâneas; Neoplasias del Recto; Adenocarcinoma; Metástasis de la Neoplasia.

¹University of Caxias do Sul (UCS). Hospital Pompeia of Caxias do Sul. Caxias do Sul (RS), Brazil. Orcid iD: <https://orcid.org/0000-0001-5852-2184>

²UCS. Clinical Research Site of Hospital Pompeia of Caxias do Sul. University Center of Serra Gaúcha (FSG). Caxias do Sul (RS), Brazil. Orcid iD: <https://orcid.org/0000-0002-2030-9860>

³Clinical Research Site of Hospital Pompeia of Caxias do Sul. FSG. Caxias do Sul (RS), Brazil. Orcid iD: <https://orcid.org/0000-0003-4721-5503>

Corresponding author: Fernanda Formolo. Av. Júlio de Castilhos, 2163 – Centro. Caxias do Sul (RS), Brazil. CEP 95010-005. Email: fernanda.formolo@pompeia.org.br



INTRODUCTION

Metastasis is defined as a neoplasm lesion resulting from the spreading of another neoplasm separated from the primary tumor¹. Skin metastasis is characterized as a neoplasm involving the dermis or the subcutaneous cellular tissue² and is encountered only in 0.7% to 10.4% of all the patients with cancer³. These cutaneous lesions have different presentations, sometimes simulating benign lesions⁴. In most of the cases, it occurs late in the course of the disease, but can be a sign of an unknown neoplasm⁵. Therefore, a high index of clinical suspicion is critical for the diagnosis of skin metastatic lesions because when present, is an isolated factor of poor oncologic prognosis⁶.

The Institutional Review Board of Hospital Pompeia approved the study, through the approval report number 311,052.

CASE REPORT

Female, 80 years old patient at diagnosis, reported appearance of hematochezia associated to increasing abdominal pain in the beginning of 2017. The existing comorbidities were arterial hypertension and non-insulin dependent diabetes mellitus, she reported having quit tobacco use for more than 20 years and family cancer history (son with rectal cancer, sister with breast cancer, another sister with stomach cancer and brother with kidney neoplasm). The colonoscopy conducted in this same year showed rectum friable steno infiltrating lesion revealed in adenocarcinoma biopsy. Later, staging was established, and absence of remote disease was revealed (cT3cN1M0). Nearly one year after the diagnosis, colostomy was performed, evidencing the need of adjuvant therapy with fluorouracil and concomitant radiotherapy during four months. After this period, a new colonoscopy was conducted, showing good response to the treatment. However, four months later, the patient reported fast growing left submandibular lesion (Figure 1). Incisional biopsy of this lesion and immunohistochemistry were performed, favoring the gastrointestinal tract as primary site. In reevaluation tomographies, several diminutive nodules were diagnosed in lower abdomen subcutaneous tissue, one located in the back with dimensions of 2.6 x 2.2 cm and other located in the right breast, with 2.9 x 2.9 cm and small sparse pulmonary nodules. Biopsy of breast nodules and immunochemistry were performed again, suggesting rectum as primary site of the lesions. Consequently, palliative chemotherapy was initiated four months after the onset of the submandibular lesion.

The patient's cutaneous lesions responded satisfactorily after the second cycle of the antineoplastic treatment.



Figure 1. Left submandibular lesion – Cutaneous metastasis

Source: Author's collection.

When this report was drafted in December 2019, the patient had already been diagnosed for 20 months and cutaneous metastasis diagnosis for 15 months, she continues in palliative chemotherapy and presenting good response to the treatment and preserved quality of life.

DISCUSSION

Colorectal cancer is the third neoplasm most commonly diagnosed worldwide, with estimate of 1.8 million new cases in 2018^{7,8}; it is multifactorial, therefore the etiology is influenced by genetic, environmental factors and lifestyle-related⁹. The hereditary factors as cancer family history and intestine inflammatory diseases are but a small proportion of the variation observed in the global burden of the disease^{8,10}. Lifestyle-related risk factors are modifiable and include the use of alcoholic beverages, low intake of fruits and vegetables, high intake of processed food and red meat, obesity, smoking and physical inactivity^{7,8,11,12}.

In Brazil, in 2017, 9,207 deaths by colorectal cancer occurred in men and 9,660 in women^{7,8,13} and for each year of the triennium 2020-2022, 20,520 new cases of colorectal cancer in men and 20,470 in women are expected. These figures correspond to an estimated risk of 19.64 new cases at each 100 thousand men and 19.03 for each 100,000 women. It is considered the third most frequent neoplasm in men and the second in women,

except non-melanoma skin cancer in the national context^{8,14}.

The occurrence of skin cutaneous as first manifestation of metastatic disease is rare and indicates a disease in advanced stage¹⁵ and poor prognosis. Nearly 60% of skin metastasis are adenocarcinoma and the most frequent primary sites producing metastasis are breast, gastrointestinal tract and lung¹⁶ and more rarely, pancreas, parotid gland, amygdala, melanoma, ovary and uterus neoplasms¹⁷. Those with worse diagnosis occur in patients with ovary, lung and upper digestive tract mainly. The majority occurs in sites close to the primary tumor and the most common are painless and firm⁶.

In a study performed with 209 patients with metastasis, the most affected region was the anterior chest wall (31.94%) followed by the abdominal region (20.73%) and scalp (14.81%); breast cancer is the main responsible for skin metastasis in women (63.19%) and lungs (33.84%) in men⁴. Despite imaging and immunochemistry techniques, the location of the primary tumor cannot be determined in 5% to 10% of the cases^{4,18}. Because of the progress of cancer therapy, life expectancy of patients with skin metastasis increased, but metastasis continues to be a determining factor of poor prognosis¹⁹.

CONCLUSION

This case emphasizes that recently appeared skin lesions with progressive growth or uncured after conventional therapy can be the first manifestation of advanced visceral cancer and must be correctly investigated. Thus, it is clear that through early diagnosis it is possible to change the prognosis of the disease and its treatment. The health professionals must pay attention to clinical signs, raising the suspicion, valuing the clinical interview and steering the investigation. The earlier the diagnosis, the better the result of the treatment will be. Therefore, a complete clinical exam must be conducted always and every nodule with persistent growth or indurated plaques must be submitted to biopsy to reject skin metastasis. Despite the dismal prognosis of the patient, she continues with good response to chemotherapy and preserved quality of life. Since articles about this theme are scarce, the present study is relevant because it described a case considered rare and its respective conducts and may potentially guide other physicians in their clinical practice when confronted with similar scenario.

CONTRIBUTIONS

Daiane Pretto contributed substantially for the conception and design of the study, gathering, analysis

and interpretation of the data, wording and critical review. Fernanda Formolo and Caroline Marsilio contributed substantially for the wording and critical review. All the authors approved the final version to be published.

DECLARATION OF CONFLICT OF INTERESTS

There is no conflict of interests to declare.

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