
Treating Cutaneous Metastasis of Breast Cancer with Topical Imiquimod

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INTRODUCTION: Cutaneous metastasis of breast cancer carries a poor prognosis, invokes a poor quality of life, and increases mortality by increasing one's risk of bleeding and infection. Current therapies include systemic chemotherapy, surgical resection and radiation. These treatments are invasive and can have toxic side effects.

CASE REPORT: A 50-year-old African-American woman was diagnosed with left breast ductal carcinoma in situ (DCIS) and was treated with left total mastectomy. 6 years later, she was diagnosed with stage IV breast adenocarcinoma (ER/PR positive and HER-2 negative) with recurrence and metastasis in multiple lymph nodes. She then completed chemotherapy with concurrent radiation therapy with good clinical and radiographic response. 4 years after breast cancer recurrence, she noted skin hardening, pain and hyperpigmentation over her left chest wall, with increasing lymphatic masses in her left neck and left supraclavicular area. PET-CT demonstrated cervical, supraclavicular, mediastinal and axillary lymphadenopathy with increased uptake in the left upper lung, sternum, and left chest wall consistent with breast cancer recurrence and metastasis. Despite chemotherapy, skin lesions continued to worsen with burning pain and became hard with frequent ulcerations.

To treat her metastatic skin lesions to the upper left chest wall and left supraclavicular area, she was started on topical imiquimod 5% cream to her skin lesions twice per day for 5 days a week. Within 4 months of starting topical imiquimod cream, the lesions decreased in size, thickness, and pigmentation, with resolution of ulceration as evidenced by serial photographic and clinical documentation. After improvement of skin lesions within 4 months of use, she started to use imiquimod on an as-needed basis, according to her symptoms and size of her lesions while undergoing systemic chemotherapy treatment. Our case demonstrates the longest interval between initial diagnosis of the patient's primary breast cancer and eventual cutaneous metastasis (10 years) with successful treatment with topical imiquimod. This case adds to the growing body of literature demonstrating that topical imiquimod cream is a treatment option for cutaneous metastasis of breast cancer. Imiquimod has been described in recent literature to have anti-tumor properties and ability to induce a pro-immunogenic tumor microenvironment. The regression and improvement of our patient's skin lesions after starting on imiquimod was clinically significant and further demonstrates the efficacy of topical imiquimod. It holds excellent promise as a treatment option for cutaneous metastasis of breast cancer in conjunction with systemic immunomodulatory therapies and chemotherapy for symptomatic and cosmetic management.

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