

Permanent chemotherapy-induced alopecia after hematopoietic stem cell transplantation treated with low-dose oral minoxidil

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Permanent chemotherapy-induced alopecia (pCIA) is the absence of hair regrowth after more than 6 months of treatment discontinuation. Data on the pathophysiology, treatment and prevention of pCIA are scarce. pCIA was first reported following hematopoietic stem cell transplantation with busulfan therapy, and it has since been linked to a number of chemotherapeutic agents, used to treat a variety of cancers, and transplant types. We describe a 41-year-old woman diagnosed with non-Hodgkin lymphoma and treated with chemotherapy. After treatment, she experienced complete hair loss and then spontaneous full regrowth. Two years later, due to therapy-related acute myeloid leukemia, she was treated with cytarabine, followed by allogeneic hematopoietic stem cell transplantation, and experienced total alopecia not improving after 18 months. A punch biopsy of the scalp skin revealed no inflammation or fibrosis. There was no response to oral corticosteroids, and minimal response to topical minoxidil solution after 10 months. The diagnosis of pCIA was made, and she was treated with oral minoxidil tapering up to 5 mg resulting in complete hair regrowth. A few cases of pCIA improvement after oral minoxidil have been published, but to the best of our knowledge this is first case of complete regrowth. Given the growing number of cancer survivors and the lack of a well-established treatment, more research on the efficacy of oral minoxidil in this patient population is warranted.