

Reversible Hypopigmentation with Pazopanib

Abstract

Tablet Pazopanib known to cause Hypo pigmentation and Hyperpigmentation as per various literature reports. We report here a case of reversible hypopigmentation with Pazopanib in a patient treated for spindle cell sarcoma. Patient did not have any clinical symptoms except for cosmetic significance.

Keywords: *Pazopanib, hypopigmentation, reversible, tyrosine kinase inhibitor*

A 25-year-old male patient was diagnosed as spindle cell sarcoma of left thigh. As per standard line of treatment, he underwent surgery, chemotherapy, and radiotherapy. After 1 year of disease-free survival, the patient presented with lung nodules. This was suggestive of metastatic disease. He completed 2nd line of chemotherapy for the same and started on maintenance therapy with tablet Pazopanib 800 mg daily from December 2015. After 3 months of this treatment, the patient developed blonde discoloration of skin and hair [Figure 1]. Starting with scalp hair, whole body skin and hair has changed to blonde color by the end of 8 months. These changes remained till the discontinuation of the tablet. There was only change in color and no clinical symptoms related to that. Patient has taken total 12 months of treatment with Pazopanib and stopped after that, because



Figure 1: Hair and skin color changes on tablet Pazopanib

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of progressive disease. Patient regained his skin and hair color back to normal, gradually over a period of 3 months after discontinuation [Figures 2 and 3].

Pazopanib inhibits angiogenesis and tumor growth by targeting VEGFR 1-3, PDGFR- α - β , and C-kit.^[1,2] In Literature, 30%–44% of patients have developed reversible hair pigmentation with Pazopanib.^[3-5] This usually starts at 6 weeks and may go on increasing till 6 months of treatment. Both hypopigmentation^[1,4,6] and hyperpigmentation^[5] have been reported but later incidence is less. C-kit and stem cell factor are required for melanocyte proliferation to melanin production during anagen phase of hair cycle.^[7] Inhibition of C-kit by tyrosine kinase inhibitor (TKI) (Pazopanib) will result in failure of melanocyte differentiation and its melanin production. This hair color changes was also been reported with other TKI's such as imatinib, dasatinib, and



Figure 2: Normal skin color after stopping tablet Pazopanib

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Figure 3: Normal hair color after stopping tablet Pazopanib

sunitinib.^[8] Vega *et al.*,^[7] has reported two Mexican patients with synovial sarcoma, developed hypopigmentation on treatment with Pazopanib. Various phase I and phase II randomized clinical trials^[9] in renal cell carcinoma,^[10] nonsmall cell lung cancer,^[11] and breast^[12] cancer treated with Pazopanib have reported all grade hair color changes in 109 (38%), 4 (6.6%), and 14 (18%) patients, respectively. This is one of the clinical case reports to make aware about this side effect of Pazopanib to the treating oncologist.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Conflicts of interest

There are no conflicts of interest.

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