

Visual Treats in Dermatology

Pazopanib-induced canities subita

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A 40-year-old woman presented with complaints of sudden whitening of scalp hair for 2-week duration. She was recently diagnosed with a case of metastatic renal cell carcinoma started on pazopanib and received six cycles when she noticed rapid whitening of the scalp hair. On examination, there was diffuse depigmentation of scalp hair over the scalp, associated with poliosis of the eyebrows and eyelashes [Figure 1a and b]. Hence, a diagnosis of pazopanib-induced rapid hair depigmentation or canities subita was made.

Hair pigmentation is regulated by receptor tyrosine kinase c-kit and its interaction with stem cell factor or steel factor. Mutation in the c-kit gene is known to cause an autosomal dominant inherited condition known as piebaldism characterized by white forelock and poliosis with vitiligo-like symmetrical depigmentation.^[1] Pazopanib is a recently approved drug for metastatic renal cell carcinoma which is a multikinase inhibitor including inhibition of receptor tyrosine



Figure 1: (a and b) Diffuse whitening of scalp hair noted along with eyebrow and eyelash poliosis.

kinase c-kit causing sudden whitening of the scalp hair akin to canities subita seen in alopecia areata diffusa.^[2] Similar hair changes have been reported with other tyrosine kinase inhibitors such as sunitinib and imatinib. These hair changes are temporary with the return of pigmentation usually seen with drug stoppage, suggesting the temporary cessation of pigmentation as the cause.^[3]

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent.

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Conflicts of interest

There are no conflicts of interest.

Use of artificial intelligence (AI)-assisted technology for manuscript preparation

The authors confirm that there was no use of Artificial Intelligence (AI)-assisted technology for assisting in the writing or editing of the manuscript and no images were manipulated using AI.

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