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## Hypopigmentation of the Skin and Hair Associated with Dasatinib Therapy: A Case Report

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### Hypopigmentation of the Skin and Hair Associated with Dasatinib Therapy

We present the case of a 48-year-old male who initially presented with fever and left upper abdomen discomfort, subsequently diagnosed with Chronic Myeloid Leukemia – chronic phase (CML-CP) with high Sokal score (1.31) and started on Dasatinib (100 mg/day) therapy. Patient responded well to Dasatinib (6 months BCR-ABL undetectable). Although compared to baseline pigmentation, a notable change in facial skin tone and scalp hair color, along with generalised hypopigmentation over the body was observed after 6 months of Dasatinib therapy (figure 1).

Cutaneous adverse reactions are commonly seen with tyrosine kinase inhibitors (TKIs). Imatinib, another TKI, is frequently associated with mucocutaneous side effects encompassing both hypo- and hyperpigmentation [1]. In contrast, Dasatinib has relatively few cutaneous side effects, primarily manifesting as nonspecific maculopapular rashes, skin exfoliation, and irritation [2]. However, pigmentary changes in the skin and hair are considered rare with Dasatinib therapy. Though, few reports have documented cases of hypopigmentation in the skin and hair due to Dasatinib treatment [2,3,4]. The mechanism underlying this phenomenon is believed to involve tyrosine kinase inhibition through blockade of the c-Kit/SCF signal transduction pathway by dasatinib, which plays a key role in melanocyte physiology [5].

**Keywords:** Chronic Myeloid Leukemia, Dasatinib, Hypopigmentation, Tyrosine Kinase Inhibitors

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a) Figure 1 : Baseline Pigmentation (facial) of patient

b) Figure 2 : Noticeable facial hyperpigmentation seen a four months of dasatinib therapy

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