

# Imatinib-associated hyperpigmentation, a side effect that should be recognized

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**Introduction & Objectives:** Imatinib mesylate is a tyrosine-kinase inhibitor used as the first-line treatment in chronic myeloid leukemia patients who are not candidate for allogeneic bone marrow transplantation. The most frequently reported drug-related side effects are edema, nausea, vomiting, muscle cramps, musculoskeletal pain, diarrhea and rash.

Imatinib treatment is often associated with hypopigmentation, but only a few cases of mucocutaneous hyperpigmentation are described in literature. We are reporting an additional case of mucocutaneous blue hyperpigmentation in a patient affected by chronic myeloid leukemia and treated with imatinib since 2003.

**Material & Methods:** A review of the available literature regarding the hyperpigmentation related to imatinib was performed and one additional case was analysed.

**Results:** In our case imatinib therapy was well tolerated for several years and it led to an excellent hematological and cytogenetic response. However, the patient gradually developed an intense blue hyperpigmentation that involved the oral mucosa and part of the skin. Other causes of hyperpigmentation were excluded.

**Conclusions:** Since 2001, when imatinib was approved from Food and Drug Administration for chronic myeloid leukemia, some cases of secondary hyperpigmentation were reported. This rare side effect should be recognized by the physicians. Moreover, the patient should be informed about this benign event before starting the therapy. Currently, no treatment is required for this condition and there is not indication to discontinue imatinib treatment. Further insight into the mechanisms of the pigmentary alterations caused by this drug is suggested for better treatment and prevention of these manifestations.