

Hydroxyurea Induced Nail Pigmentation

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Photograph showing predominantly distal pigmentation of nails of both upper and lower limbs



Closeup photograph of nails of right hand fingers showing pigmentation

A young female of age 25 years presented with complaints of pain and dragging sensation in abdomen with associated history of weight loss, weakness and lethargy. On examination she had marked pallor and massive splenomegaly. Rest of the clinical examination was unremarkable. Blood and bone marrow aspiration reported it as a case of chronic myeloid leukemia. Philadelphia chromosome was positive in 50% of the examined chromosomes in metaphase. Patient was put on hydroxyurea, 3 gms daily in three divided doses with other supportive measures. Patient was carefully followed up with twice weekly WBC counts and dose of hydroxyurea reduced accordingly. After few weeks of therapy, we noticed dark brown pigmented discolouration of both upper and lower limbs nails, particularly the distal half (Fig.1,2). Also seen in the picture is pigmentation due to mehndi on her left hand nails. Hydroxyurea is commonly used in the treatment of chronic myeloid leukemia, polycythemia, and rarely for severe psoriasis vulgaris. It acts by interfering with DNA synthesis by inhibiting enzymes ribonucleoside diphosphate reductase. Cutaneous side effects of this drug include alopecia, diffuse hypopigmentation, onychodystrophy (nail pigmentation), poikiloderma, skin atrophy and rarely leg ulcers. Other chemotherapeutic agents like bleomycin and 5-Fluorouracil may also cause onychodystrophy.

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