

# Melanonychia Blue Lunula: Result of Hydroxyurea Treatment

## Abstract

Hydroxycarbamide is used in the treatment of Essential Thrombocytosis (ET) and other myeloproliferative disorders [1]. Melanonychia is one of the cutaneous abnormalities including nail changes that could develop with long-term treatment with hydroxycarbamide [2]. Women have a tendency to melanonychia secondary to hydroxycarbamide usage [3]

**Keywords:** Hydroxy urea; Melanonychia; hydroxycarbamide; Essential Thrombocytosis

## Case Report

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## Case study

**Case 1:** 49-year-old male patient diagnosed JAK-2V617F positive Polycythemia Vera. After 11 months of treatment with 1000mg/day Hydroxyurea (HU), blue lunula and longitudinal melanonychia was seen in fingers and face (Figure 1).



**Figure 1:** Melanonychia of the upper extremity hand-nails and face findings.

**Case 2:** 63-year-old female patient diagnosed JAK-2V617F positive ET. After use of 1500 mg/day HU in 4 months; blue-black pigment changes in bilaterally fingernails-blue lunula transverse melanonychia occurred. (Figure2). Patients were done to rule out other factors that cause melanonychia. After discontinued HU treatment, male patient's melanonychia findings regressed within 3 months, for female patients it was 4 months. Melanonychia induced by drugs can be caused by the activation of nail matrix melanocytes. It can present longitudinal, transverse or diffuse pigmentation in the nail plate [4]. HU can rarely cause transverse and longitudinal melanonychia of both finger and toe nails. The occurrence of such a rare adverse effect with a common drug has prompted this report.



**Figure 2:** Blue lunula in nails and face findings.

## References

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