

Hydroxyurea Induced Longitudinal Melanonychia: A Picture Presentation

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Abstract

This is a picture presentation of myeloproliferative disorder developing to longitudinal melanonychia as a side effect of hydroxyurea.

Keywords: Melanonychia, hydroxyurea, side effect.

Introduction

Hydroxyurea is a cytotoxic agent. It is used in patients with myeloproliferative disorders such as essential thrombocytosis. Longitudinal melanonychia is a rare side effect of long term hydroxyurea therapy^{1, 2}. Longitudinal melanonychia has been reported in 10-20% of Japanese individuals³. Other causes of longitudinal melanonychia include liver diseases⁴, benign melanocyte hyperplasia and nail apparatus malignancy⁵.

Report of the case

A 67 year old male patient was admitted with abdominal pain and distention. He had a history of myeloproliferative disorder since 4 months ago and was taking hydroxyurea since then. His drug history also included warfarin, lasix and aldactone. Physical examination showed abdominal distention and longitudinal brown-black discoloration of hands and feet nail plates (Figures 1A, B and C). Abdominal sonography was performed and revealed ascites, hepatosplenomegaly and portal vein thrombosis. Laboratory findings included, WBC:8500/ μ L, Hb:10.1 g/dl, MCV:86.4 fl, and platelet count:845,000/ μ L. Blood sugar, AST, ALT, bilirubin (total and direct), renal function tests, iron and TIBC, calcium and phosphor were all in normal ranges. The diagnosis of hydroxyurea induced longitudinal melanonychia was made.



Figure 1A: Discoloration of hand nail plates.



Figure 1B: Discoloration of left foot nail plates.



Figure 1C: Discoloration of right foot nail plates.

Conclusion

In this case of myeloproliferative disorder (most probably essential thrombocytosis), we found hydroxyurea induced longitudinal melanonychia of nails in both hands and feet.

References

- 1- Saraceno R, Teoli M, Chimenti S. Hydroxyurea associated with concomitant occurrence of diffuse longitudinal melanonychia and multiple squamous cell carcinomas in an elderly subject. *Clin Ther*. 2008;30(7):1324-9.
- 2- Delmas-Marsalet B, Beaulieu P, Teillet-Thiebaud F, Jary L, Teillet F. Longitudinal melanonychia induced by hydroxyurea: four case reports and review of the literature. *Nouv Rev Fr Hematol*. 1995;37(3):205-10.
- 3- Baran R, Kechijian P. Longitudinal melanonychia (melanonychia striata): diagnosis and management. *J Am Acad Dermatol*. 1989;21(6):1165-75.
- 4- Salem A, Gamil H, Hamed M, Galal S. Nail changes in patients with liver disease. *J Eur Acad Dermatol Venereol*. 2010;24(6):649-54.
- 5- Dominguez-Cherit J1, Roldan-Marin R, Pichardo-Velazquez P, Valente C, et al. Melanonychia, melanocytic hyperplasia, and nail melanoma in a Hispanic population. *J Am Acad Dermatol*. 2008;59(5):785-91.