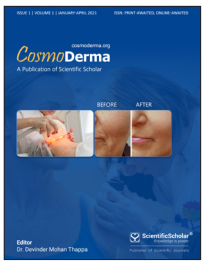
ScientificScholar®
Knowledge is power
Publisher of Scientific Journals

www.cosmoderma.org

CosmoDerma



Visual Treats in Dermatology

Chemotherapy-induced nail discoloration

Deepak Yumnam[1], Amarjit Moirangthem[2]

Departments of [1]Dermatology, Venereology and Leprosy and [2]Pediatrics, All India Institute of Medical Sciences, Rishikesh, Uttarakhand, India.

***Corresponding author:**
Deepak Yumnam,
Department of Dermatology,
Venereology and Leprosy,
All India Institute of
Medical Sciences, Rishikesh,
Uttarakhand, India.

deepakyumnam@gmail.com

Received : 27 September 2022
Accepted : 10 October 2022
Published : 26 October 2022

DOI
10.25259/CSDM_109_2022

Quick Response Code:

An 8-year-old boy, diagnosed case of acute myeloid leukemia, was treated with Berlin-Frankfurt-Munich 2009 regimen which includes cytarabine, etoposide, and idarubicin. After 4 weeks of commencing the regime, the patient presented to the dermatology clinic for hyperpigmented bands on the nails (chromonychia). Nail examination showed a transverse, 2–4 mm broad, brownish band (black arrow in [Figures 1 and 2]; melanonychia) across the entire nail breadth, distal, and parallel

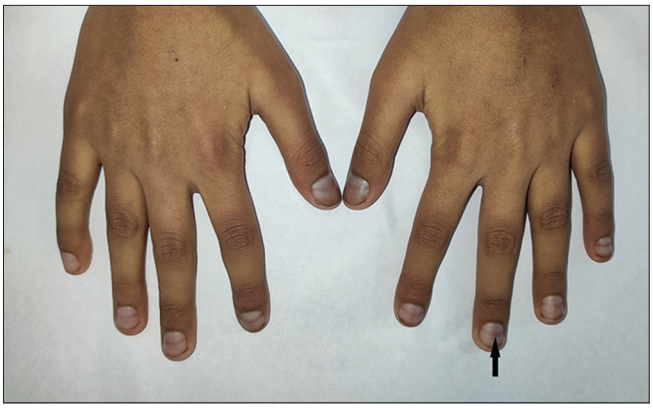


Figure 1: Transverse brownish band all over the fingernails (melanonychia; black arrow).

Figure 2: Transverse brownish band all over the toenails (melanonychia; black arrow).

to the lunulae which are non-blanchable and non-palpable with smooth overlying nail surface on the nail plates of all fingers and toes [Figures 1 and 2]. These transverse lines moved distally with nail growth and finally disappeared after 6 months of stoppage of chemotherapy. Melanonychia is the brownish-black discoloration of nails due to the deposition of melanin. It can be diffuse, longitudinal, or transverse. Chemotherapeutic agents including etoposide, cytarabine, and idarubicin have all been recognized to cause melanonychia.[1,2] Other chemotherapeutic agents reported are bleomycin, cyclophosphamide, daunorubicin, dacarbazine, 5-fluorouracil, hydroxyurea, methotrexate, and vincristine.[3] Chemotherapy can also cause other nail changes such as Mees line, Muehrcke's line, Beau's line, onycholysis, and paronychia.[3] Drug-induced nail abnormalities result from toxicity to the matrix, nail bed, or nail bed blood vessels. Nail changes after chemotherapy are one of the distressing side effects, early recognition is necessary to reduce anxiety among patients and avoid any dispensable workup.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

REFERENCES

1. Gupta A, Parakh A, Dubey AP. Chemotherapy induced nail changes. Indian J Dermatol 2008;53:204-5.
2. Borecky DJ, Stephenson JJ, Keeling JH, Vukelja SJ. Idarubicin-induced pigmentary changes of the nails. Cutis 1997;59:203-4.
3. Saraswat N, Sood A, Verma R, Kumar D, Kumar S. Nail changes induced by chemotherapeutic agents. Indian J Dermatol 2020;65:193-8.

How to cite this article: Yumnam D, Moirangthem A. Chemotherapy-induced nail discoloration. CosmoDerma 2022;2:100.