



## “Why are my fingernails discoloured?”

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A 35-year-old East Indian female presents to a clinic with concerns regarding the darkening of pigmented bands on the fingernails of both her hands. She is otherwise healthy, on no medications and has no drug allergies. There is no family history of melanoma.

### 1. What is the most likely diagnosis?

- Melanoma
- Underlying nevus
- Racial longitudinal melanonychia
- Addison's disease
- Vitamin B12 malnutrition

### 2. What are some causes of pigmented nail bands?

- Chemotherapy medications
- Melanoma
- Racial pigmentation
- Underlying pigmented nevus
- All of the above


### 3. How would you manage this patient?

- Observation and follow-up, if any changes
- Nail plate avulsion
- Biopsy the nail matrix at several loci
- Distal phalangeal amputation
- Topical antifungal for four weeks



Longitudinal melanonychia is the presence of a brown or black pigmented stripe along the length of the nail plate and is commonly noted in dark-skinned individuals; with age, there is an increase in the number of fingernails and toenails that are affected. An underlying nevus is the most common cause in Caucasians who present with pigmented nail bands. Other uncommon causes include:

- Addison's disease,
- pituitary tumors,
- cytotoxic medications (e.g., hydroxyurea, doxorubicin, etc.),
- infections,
- vitamin B12 malnutrition and
- melanoma if noted in a single nail.

Increased darkening around the base of the nail, a change in the size, shape and color of an existing band, or the development of a new single dark band are concerning signs for melanoma and require evaluation by a dermatologist. 

“Case in Point” is a series of interesting cases and diagnoses to help general practitioners sharpen their skills. Submissions and feedback can be sent to [diagnosis@sta.ca](mailto:diagnosis@sta.ca).

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