

Clinical Image

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Mees' lines transverse leukonychia

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Case presentation

A 56-year-old man was admitted to the hospital for acute decompensated heart failure and acute kidney injury. He had a history of smoking, hypertension, and obesity. He was diagnosed with acute myocardial infarction and received medical treatment. During his stay, he noticed the appearance of transverse, white, 2 mm wide, non-blanchable lines on the nails of all of his fingers and toes, which persisted over the following days and progressively migrated with the growth of the nail (Figures 1 and 2). These findings were compatible with a diagnosis of Mees' lines.

Discussion

Mees' lines are also known as transverse leukonychia, Aldrich-Mees' or Reynolds lines [1-3]. Were first described by Mees in 1919 secondary to arsenic intoxication [1], but they can occur with chemotherapy, paraquat, trauma, renal failure,

Hodgkin disease, sickle cell anemia, heart failure and infectious diseases (leprosy, tuberculosis, malaria, herpes zoster, COVID-19) [1,2].

They are resulted from an insult to the nail matrix that can cause transient paraqueratosis of the ventral nail plate without cessation of the nail matrix growth. The lines can present as a retrospective indicator of a pathologic state because their onset is correlated with a systemic insult [2]. Mees' lines disappear after the causative agent has ceased [1]. The main differential diagnoses are Muehrcke's lines (they are blanchable and do not migrate with nail growth) and Beau's lines (which are depressions in the nail plate) [3].

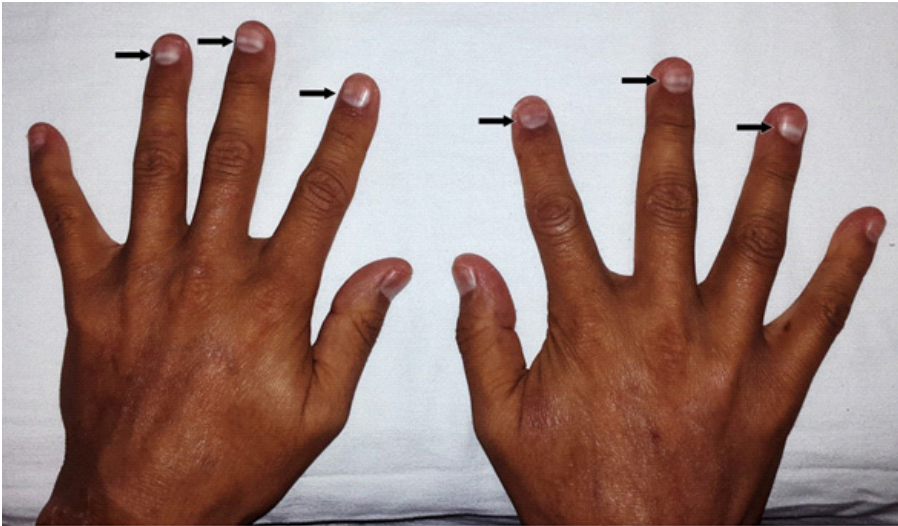


Figure 1: Transverse leukonychia on the fingers (arrows).



Figure 2: Transverse leukonychia, close.

Declarations

Conflicts of interest statement: No conflicts of interest.

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Consent: No identifying markers include as part of medical images. No consent required.

References

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