



Case #78

NAME Educational Activities Committee

Submitted by Dr. Laura Labay (EAC member, NMS labs)



1. A 44-year-old cachectic woman undergoing chemotherapy for breast cancer was found unresponsive at home. At autopsy a 3 cm mass was identified in the right breast with metastases to the chest wall. What is the reason for the appearance of her fingernails?

- Mee's lines due to heavy metal toxicity
- Defensive injuries
- Paclitaxel administration
- Leukonychia due to trauma
- Bacterial infection

Answer...

C. Paclitaxel administration (72.35% responses)

Taxane (paclitaxel) chemotherapy is used in the treatment of some cancers. The most common side effects involve the nail bed and causing subungual hemorrhage and onycholysis (separation of the fingernails from the nail bed).

Other responses:

A. Mee's lines due to heavy metal poisoning (14.5% responses)

Mees' Lines are a change that occurs in the color of the nail with no palpable ridges, typically described as white bands traversing the nail bed, running parallel to the lunula across the entire nail bed of the individual. This finding is seen in arsenic, thallium, or other heavy metal poisoning.

B. Defensive wounds (0.9% responses)

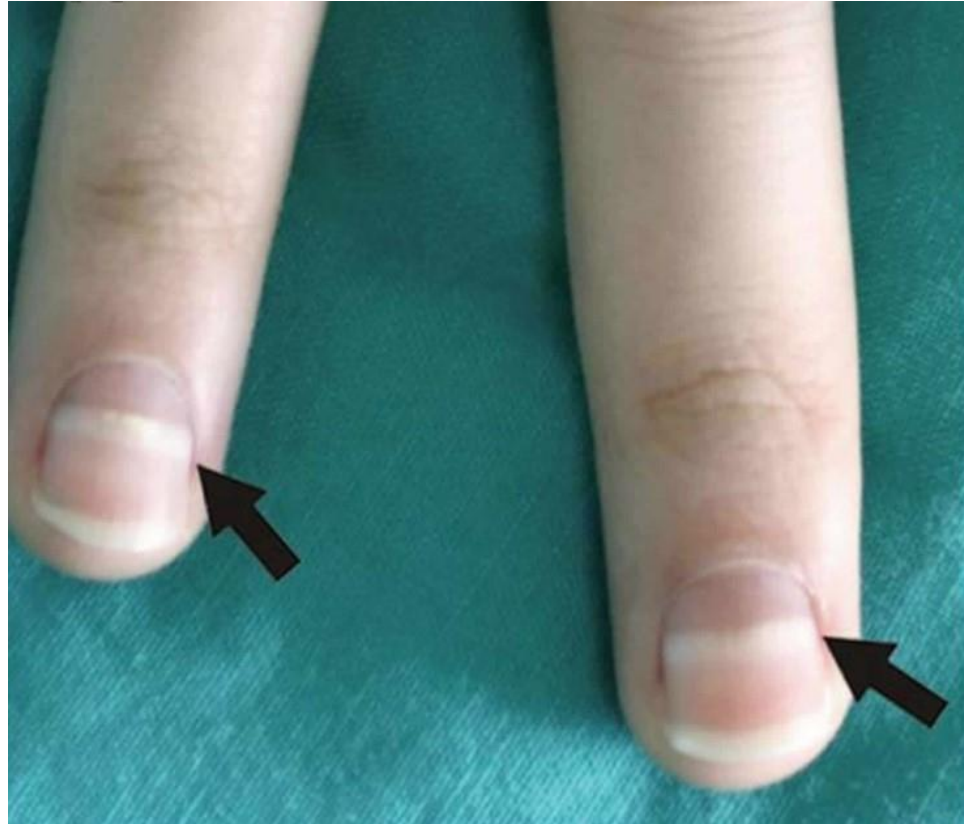
Defense wounds may present as nail bed contusions with one or more nails being bent back or broken. Defense wounds are often found on the hands and forearms, where the victim has raised them to protect the head and face or to fend off an assault. The appearance and nature of the wound may vary with the type of weapon used and the location of the injury.

D. Leukonychia due to trauma (2.24% responses)

Leukonychia is the most common form of nail discoloration and is described as an opaque white discoloration. Many morphological presentations exist, but all forms can be temporary or permanent, monodactylous or polydactylous. Monodactylous leukonychia most likely is caused by local factors involving that digit, while polydactylous indicates a systemic factor.

E. Bacterial infection (10.01% responses)

The main sign of a bacterial infection is a red, swollen area around the nail, often at the cuticle or at the site of a hangnail or other injury. Pus may be present.



Mee's lines (<https://healthjade.net/mees-lines/>)

References

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