

(Refer to page 77)

ANSWER: BEAU'S LINES – NAIL PIGMENTATION CHANGES SECONDARY TO THE CHEMOTHERAPY.

Beau's lines are deep grooved lines or indentations that run from side to side on the nail plates of the fingers or toes. This condition of the nail was named by a French physician, Joseph Honoré Simon Beau (1806–1865), who first described it in 1846.^{1,2} Beau's lines should not be confused with Muehrcke's lines (white or pale bands parallel to the lunula but without indentations) strongly indicator of hypoalbuminemia and Mees' lines (similar to Muehrcke's lines) but typically without involvement of the thumbs.^{1,2}

The appearance of Beau's lines results from disruption of nail keratin synthesis (nail growth) due to severe illnesses, trauma or infection. Beau's lines can also be associated with many other conditions including chemotherapy.^{2,3}

Average fingernail growth rate is faster than that of toenails (3.47 vs. 1.62 mm/month, $p < 0.01$); < 0.1 mm/day for nails and < 0.05 mm/day for toe nails.⁴ Beau's lines grow out with the nail and eventually disappears between three to six months, unless

the matrix is re-injured. The associated pigmentation is due to chemotherapy. Skin and nail pigmentation is a well known side-effect of 5 fluorouracil and oxaliplatin.⁵ These changes typically will settle after completion of chemotherapy and regrowth of the nail. This patient was reassured and continued with his chemotherapy.

REFERENCES

- 1: Khalid Al Aboud. [Medical eponyms linked to nails](#). *Our Dermatol Online*. 2012;3(4):379-381. [Accessed on 7 June 2020].
- 2: Tosti A, Baran R, Dawber RPR. The nail in systemic diseases and drug-induced changes. Baran and Dawber's diseases of the nails and their management. 3rd ed. Oxford Blackwell Science. 2001;223–324.
- 3: Chu NS, Wu IC, Chen LT, Chin YY. Letter to Editor: [Beau's lines in nails: An indicator of recent Docetaxel and 5-FU use.](#) *Kaohsiung J Med Sci*. 2018; 34:181-3. [Accessed on 7 June 2020].
- 4: Yaemsiri S, Hou N, Slining MM, He K. Growth rate of human fingernails and toenails in healthy American young adults. *J Eur Acad Dermatol Venereol*. 2010; 24:420-3.
- 5: Saraswat N, Neema S, Sengar K. [Pigmentary adverse effects of chemotherapeutic agents](#). *Pigment Int*. 2019;6:24-8. [Accessed on 7 June 2020].