Beau’s lines
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DESCRIPTION
A 55-year-old male, who received three cycles of rituximab, cyclophosphamide, doxorubicin, vincristine and prednisolone chemotherapy for diffuse large B cell lymphoma, presented with well-defined ridges on fingernails. History was unremarkable for any local symptoms and similar nail changes in the past. On examination, parallel transverse linear depressions were appreciable in all the fingernails and toenails (figure 1) representing Beau’s lines. He was reassured regarding their reversible nature. Three months after the completion of chemotherapy, nail changes completely disappeared.

Beau’s lines are caused by temporary disruption in the growth of proximal nail matrix. Nail changes are commonly reported by patients receiving anticancer therapy (approx. 23%); vincristine, hydroxyurea, paclitaxel, etoposide, daunorubicin, bleomycin, cyclophosphamide, dacarbazine and methotrexate have been the commonly implicated drugs. Whereas preferential involvement of nailplate and nailbed by cytotoxic chemotherapeutic agents is known, the targeted anticancer drugs may lead to periangual lesions.1 Additionally, febrile illness, severe malnutrition, trauma, pemphigus and Raynaud’s disease are also frequently associated with Beau’s lines.1 2 Palpable depression and non-blanchability differentiate Beau’s lines from Mee’s lines (true leukonychia), Muehrcke’s lines (apparent leukonychia) and melanonychia. Magnitude and duration of the insult can be estimated from the depth and longitudinal width of Beau’s lines, respectively. Nail plate grows by 1 mm in approximately 6–10 days, and therefore, the distance between Beau’s lines and proximal nail fold can provide rough assessment of the timing of the insult.3 It resolves in 3–6 months after chemotherapy. Use of cryotherapy, sunscreens, multivitamins and steroids has shown limited benefit in prevention of chemotherapy-related nail changes.

Learning points
► Beau’s lines are fairly common nail changes in patients on chemotherapy.
► Beau’s lines harbingers variety of medical disorders (benign and malignant).
► A cause should be searched and once removed it resolves completely.

Contributors
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REFERENCES