Spatio-temporal evolution of onychomadesis in a child with missed Kawasaki disease

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A 4.5-year-old boy presented with shedding of the left index fingernail. He had fever 6 weeks back with rash, oral mucosal erythema, red cracked lips, and periungual skin peeling. At presentation (6 weeks into the illness), his fingernails showed different stages of onychomadesis; right index, left middle, and left little fingernails had just begun to separate, displaying a transverse white discoloration resembling leukonychia (red arrows in Fig. 1a); frank onychomadesis of right thumbnail (black arrow in Fig. 1a); and left index fingernail already shed off with a residual transverse groove (blue arrow in Fig. 1a). Investigations (at presentation to us, i.e., 6 weeks into the illness) showed thrombocytosis ($450 \times 10^9/L$) and elevated C-reactive protein (18 mg/L). Kawasaki disease was diagnosed, and he was treated with intravenous immunoglobulin (2 g/kg) and aspirin (4 mg/kg/day). At 2 weeks of follow-up (8 weeks into the illness), nails which had just started to separate developed frank onychomadesis and right thumb nail had shed off leaving behind a transverse groove similar to left index finger. His 2-dimensional echocardiography showed normal coronaries on all visits, and aspirin was stopped at 6 weeks of follow-up (12 weeks into the illness). At this time all fingernails had healed completely (without any transverse grooves).

Onychomadesis in children can be a sequel of Kawasaki disease [1, 2]. It is prudent to inquire for symptoms suggestive of Kawasaki disease in children who present with onychomadesis.

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HN: Writing of initial draft of manuscript, editing and revision of manuscript at all stages of its production, management of patient

AKJ: Evaluation, management and follow-up of the patient and editing of manuscript, critical revision of the manuscript at all stages of production and final approval

Compliance with ethical standards

Disclosures None.

Ethical approval and informed consent As this manuscript pertains only to a case report and analysis of data from previously reported patients published in the literature, specific ethics approval is not mandated. An informed consent was taken from parents of the child before inclusion into the manuscript.

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Fig. 1 Temporal evolution of onychomadesis in various fingernails. **a** Photograph of both hands showing onychomadesis at different stages in various finger nails. **b** Right index finger at presentation with a transverse white discoloration resembling leukonychia striata. **c** Right thumbnail at presentation with frank onychomadesis. **d** Left index fingernail at

presentation with a transverse groove, resembling Beau's line, resulting from onychomadesis. **e** Left middle fingernail at presentation. **f** Right thumbnail at 2 weeks of follow-up, with temporal similarity to left index fingernail. **g** Onychomadesis of left middle fingernail. **h** Onychomadesis of left little finger