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Green nail syndrome

Giovanni Corsello and Davide Vecchio
Department of Sciences for Health Promotion and Mother and Child Care, Pediatric Unit, University of Palermo, Palermo, Italy

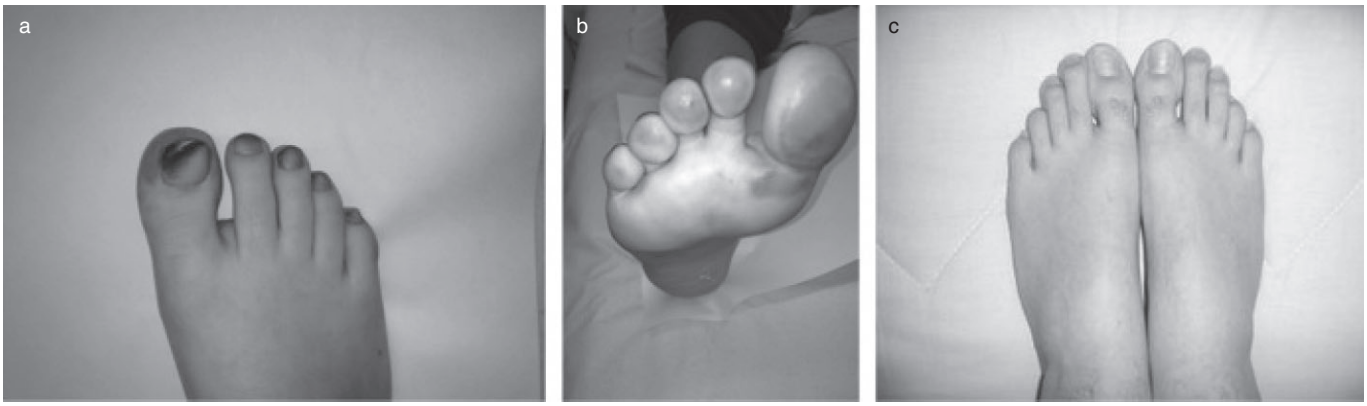

Fig. 1 (a) Green discoloration of the right toenails; (b) edudative/erythematous skin lesions; (c) after 5 weeks of treatment.

A 8-year-old boy with HIV infection due to perinatal exposure was admitted to the Pediatric Department because of green discoloration of the right toenails (Fig. 1a). Exudative/erythematous skin lesions on the lower surface at sites of pressure burden, and probably co-generated by the extensive use of unventilated athletic shoes, were also noted (Fig. 1b). At the time of diagnosis the patient was under combined antiretroviral therapy: CD4 cell count was 576 cells/μL and HIV-RNA was >100 000 copies/mL.[1] Mycological examination of the affected nail scrapings was done, and fungal infection was excluded on microscopy and culture. Bacteriology indicated *Pseudomonas aeruginosa* on Gram stain and culture of the exudate and ungual fragments. Green nail syndrome is a paronychial infection caused by *P. aeruginosa*, a Gram-negative bacterium.[2] This condition clinically presents as a greenish-black, greenish-brown or greenish-yellow discoloration of the nail. Furthermore *P. aeruginosa* has a characteristic sweet, fruity odor due to its production of trimethylamine and pyocyanin, a greenish-blue pigment that diffuses into the underside of the nail plate, accounting for the green discoloration characteristic of this condition.[2,3] Although commonly seen, the treatment for this disorder remains challenging, and is quite complex in HIV infection, due to the lack of controlled studies assessing systemic or topical treatments.[4,5] Based on immunological status, the patient was treated topically with neomycin/polymyxin B galenic unguentum applied twice daily, rubbing it gently onto the affected nails and the surrounding skin. Complete resolution was achieved within 5 weeks (Fig. 1c).

Correspondence: Davide Vecchio, MD, Department of Sciences for Health Promotion and Mother and Child Care, Pediatric Unit, University of Palermo, via Alfonso Giordano, 3, 90127 Palermo, Italy. Email: davide.vecchio@unipa.it

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