



FAMILY PRACTICE IMAGES

Goldman-Fox syndrome as presentation of onychomycosis superinfection

Síndrome de Goldman-Fox como presentación de onicomycosis sobreinfectada

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A 42-year-old woman, otherwise healthy, consulted for greenish discoloration of three fingernails for the last two months with occasional purulent discharge. The patient reported working as a cook with often maceration of both hands. Physical examination revealed greenish discoloration of the nail plate of fourth nail on the left hand and of third and fourth nails on the right hand, with associated laterodistal onycholysis of the latter (Figs. 1 and 2). A bacterial nail culture was positive for *Pseudomonas aeruginosa* and a fungal nail culture was positive for *Candida parapsilosis*. Treatment with itraconazole and ciprofloxacin was initiated with disappearance of nail discoloration on the six-week follow-up visit.

Green nail discoloration or Goldman-Fox syndrome is classically related to *P. aeruginosa* nail infection. Nail discoloration occurs due to the bacterial production of pyoverdine and pyocyanin. Eventual coexistence of onychomycosis has been reported, acting as a predisposing factor in most cases.¹

As a conclusion, we present a case of chloronychia resulting from co-infection by *P. aeruginosa* and *C. parapsilosis*. The clinical approach of this syndrome should include ruling out coexisting onychomycosis in order to ensure adequate treatment as well as avoiding future recurrences.

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Figure 1 Overview of both hands showing greenish coloration of the nail plate of fourth nail on the left hand and of third and fourth nails on the right hand.



Figure 2 Detail of the third and fourth digits of the right hand showing yellowish-greenish discoloration with associated laterodistal onycholysis of the latter.

Ethical considerations

Patient written consent was obtained for publication and center protocols for the processing of patient information were respected.

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Conflict of interest

The authors have no conflict of interest to declare.

Reference

1. Schwartz RA, Kapila R. The Goldman-Fox syndrome: treating and preventing green pseudomonas nails in the era of COVID-19. *Dermatol Ther.* 2021;34:e14624, <http://dx.doi.org/10.1111/dth.14624>.