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Transient Yellow Finger Nails Discoloration: Two Different Causes

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Abstract

Background: Nail disorders comprise approximately 10% of all dermatological conditions. Abnormalities in the color of nails are called unguinal dyschromia or chromonychia. Unguinal dyschromia may be endogenous or exogenous. Yellow discoloration of nails has been reported during recent years as separate observation related to drug administration, during hemodialysis and associated with pulmonary diseases as yellow nail syndrome. **Case Reports:** A 23-year-old female patient was diagnosed with yellow nails induced by application of a specific nail polish. A 67-year-old man presented with transient nail discoloration as a result of the exacerbation of his chronic pulmonary disease. **Conclusion:** Our cases illustrate transient yellow discoloration of finger nails associated with the use of nail polish, and with an acute episode of chronic bronchitis, with full recovery in the absence of any treatment. [GMJ. 2015;4(1):53-55]

Keywords: Nail; Discoloration; Yellow Nail; Unguinal Dyschromia

Introduction

Yellow discoloration of nails has been reported during last years as separate observations related to drugs administration: quinaqrine in a patient with cutaneous lupus erythematosus [1], during hemodialysis [2], after topical use of 5-fluorouracil for the treatment of nail psoriasis [3], induced by temsirolimus [4], carbamazepine [5] and associated with pulmonary diseases like yellow nail syndrome. [5,6]

We present two cases of transient yellow discoloration of finger nails of a young woman and an older man.

Case Presentation

Case 1

A 23-year-old female student came to Dermatology Clinic seeking for advice for a yellow aspect of her nails, observed one month prior to consultation. She was a healthy person, with no history of recent diseases or drug intake. On close examination of her hands, the surface of nails was bright yellow, with no hyperkeratosis, and no other modifications of nails or of the tissue around them. (Figure 1) Direct mycological test and culture for fungus were negative and usual lab investigations proved to be within normal range. She

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Figure 1. Yellow Discoloration After Using Nail Polish.



Figure 2. Yellow Nails and Hyperkeratosis in a Man with Chronic Bronchitis During Exacerbation of Obstructive Airway Disease.

recalled using an intense red nail polish one week before, which after being removed left the nail with a slight yellow appearance. The yellow color of the nails became more obvious in the following days, prompting the patient to ask for a medical appointment. An allergy test was not performed because nail polish was no longer available.

A direct effect of nail polish to nails was presumed, no treatment was recommended, just follow-up. The new aspect of nails, one month later, showed the separation of distal normal part of the nails and the proximal yellow one caused by the application of nail polish.

Case 2

A 67-year-old man, known for many years of chronic bronchitis, was hospitalized in Pneumology Hospital for exacerbation of his pulmonary disease. Symptomatic treatment and antibiotics were prescribed for ten days with rapid recovery. During hospitalization but more so after leaving hospital, the patient noticed a yellow discoloration of his finger nails with proximal hyperkeratosis. (Figure 2). Repeated mycological examinations failed to isolate any fungus. No treatment was prescribed and the patient was monitored monthly. Nail discoloration proved to be transient, probably as a result of the exacerbation episode of his chronic pulmonary disease.

Discussion

Nail disorders comprise approximately 10% of all dermatological conditions. [7] Color abnormalities of nails are known as unguis dyschromia or chromonychia. Pigment may accumulate due to overproduction (such as melanin), storage as copper, haemosiderin, drugs, or by surface deposition. Unguis dyschromia may be endogenous or exogenous. If pigment is due to an endogenous source, discoloration follows the shape of lunula, and if source is exogenous, discoloration follows the contour of the proximal nail fold. [8] Dyschromia can affect one, several or twenty nails depending on the cause, which may be congenital, dermatological, drug side effect, trauma, systemic diseases, benign and malignant tumors, infectious diseases. [8] Nail dyschromia may be white, black, green, brown, yellow, red, and blue, gray, purple and so on. Yellow color can be seen in yellow nail syndrome, onychomycosis, dye shoes, and jaundice. [8, 9]

In our cases, the cause was transient, but in patients with chronic pulmonary disease it may be recurrent.

Brzezinski et al. described yellow nail syndrome in 3 cases [6], in patients who had systemic disease: chronic cough, chronic si-

nusitis, rheumatoid arthritis, diabetes, lymphedema of the face, and oedema of legs.

Piraccini et al diagnosed yellow nail syndrome in 21 patients; average age was 57 ± 12.3 years at the time of diagnosis. In most patients yellow nail syndrome involved all 20 nails [10]. Sixteen patients had chronic respiratory manifestations and 6 had lymphedema; 12 patients had other concomitant diseases.

Conclusion

Our cases illustrate transient yellow discoloration of finger nails associated with the use of nail polish, and with an acute episode of chronic bronchitis, with full recovery in the absence of any treatment.

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