lateral nail groove, since they do not adhere to subungual tissue. Diffusion of the drug into the lateral nail area probably results mainly from take-up of an antifungal within the newly formed nail, via the matrix. To test our hypothesis, we took 400 mg itraconazole daily for 1 week. On the 8th day we cut 56 mg of the distal margin and 23 mg of the lateral edges of the fingernails to be sent to Janssen Research Foundation. The concentration of itraconazole in the distal margin was 1,013 ng/g but only 677 ng/g in the lateral edges. This difference supports our premise.

Consequently, the physician may want to supplement systemic therapy with surgical partial nail avulsion or keratinolysis (urea avulsion) when the lateral edge of the nail plate is mycotic, or to consider combination therapy with one of the new transungual drug delivery systems.

REFERENCES


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DISCOLORATION OF THE NAIL PLATE DUE TO THE MISUSE OF AMOROLFINE 5% NAIL LACQUER

Sir,

Amorolfin is a broad-spectrum antimycotic drug, inhibiting biosynthesis of ergosterol. It is available as a nail lacquer at a concentration of 5%. The penetration of amorolfin through human nail is 20–100 mg/cm² (1,2). The vehicles contain triacetin, butyl acetate, methylene chloride and methylmethacrylate polymer. A bluish discoloration of the nail plate (3), or a yellow-brown discoloration of the distal portion of the nail plate (4), has been reported after the use of nail hardeners.

We here present cases of chromonychia due to the daily use of amorolfin 5% nail lacquer.

CASE REPORTS

Case 1

A 25-year-old female patient presented with a 1-week history of bluish discoloration of the nail plate of two fingernails, on her left hand. Two months previously, due to a positive nail culture with Trichophyton rubrum involvement, amorolfin 5% nail lacquer had been prescribed once weekly. By mistake, the patient was using the lacquer on a daily basis, and 60 days later, she noticed a bluish colour on her nail plates (Fig. 1). Discontinuation of the nail lacquer led to resolution of the nail plate discoloration, after 2 months.

Case 2

A 53-year-old female patient with T. rubrum on her fingernails was treated with the amorolfin 5% nail lacquer. The patient, by mistake, was using the medication on a daily basis, and 75 days later, she noticed a yellow-brown discoloration of the nail plate (Fig. 2). Two months after discontinuation of the nail lacquer, the chromonychia had disappeared.

Case 3

An 18-year-old male patient with T. rubrum on the toenails was treated by us, with amorolfin 5% nail lacquer. Two months later, we found that by mistake the patient was using the lacquer on a daily basis. No discoloration of the nail plate was noticed.

DISCUSSION

Two of the patients suffered from onychomycosis of the fingernails and these were the ones who developed the nail plate discoloration. The third patient did not develop chro-
Immunological Features of Chronic Adult Paracoccidioidomycosis: Report of a Case Treated with Fluconazole

Sirs,

Imported paracoccidioidomycosis constitutes an interesting diagnostic problem. First, it may not occur to the patient (unless otherwise prompted) to report a stay in endemic areas many years previously. Second, the clinical picture of the mucosal lesions caused by Paracoccidioides brasiliensis may be confused with lesions due to other disorders (1). Here, we report a case of paracoccidioidomycosis which had been latent for over 50 years. We discuss the clinical and immunological aspects of this case.

CASE REPORT

A 72-year-old male was referred to the Maxillofacial Surgery Service of our hospital for extirpation of a tumoral mass of the upper jaw, following clinical diagnosis of epidermoid carcinoma. At the age of 22 the patient had had a stomach ulcer surgically removed. At the age of 65, he had undergone surgery for polyloid carcinoma of the colon. He presented an ulcerated lesion in the upper left jaw, extended to the lip mucosa and the nasal grave. The lesion had first been noted 6 months previously and had turned very painful, affixed to deep planes, infiltrated and with dirty bottom. Histological examination revealed a chronic granulomatous reaction, with epitheloid cells and giant cells. PAS staining revealed PAS-positive elements, suggesting a mycotic aetiology. The patient was thus referred to our Dermatology Service.

A complete mycological study was carried out. Giemsa staining of a smear revealed the presence of yeast-like structures. Histological examination in our laboratory confirmed the previous findings, showing PAS-positive yeast-like structures with multiple budding characteristics of P. brasiliensis. Cultures were performed on Sabouraud agar, developing filamentous colonies at 25°C and yeast-like colonies at 37°C. Immunodiffusion test results were positive for P. brasiliensis antigen up to the dilution 1/1024.

Routine tests were normal. Standard multitest for cellular immunity (tetanus, diphtheria; streptococcus, protein, tuberculin, glycerol, candidin, trichophytin) gave negative results. The paracoccidioidin skin test was not carried out. Peripheral lymphocyte counts revealed an abnormally high CD4/CD8 ratio, though NK cell numbers were within the normal range.

The X-ray examination revealed a diffuse interstitial pulmonary disorder, with basal bronchiectasis. In addition, the frontal and parietal sinuses showed thickened soft tissue, particularly on the left side. Computer tomography of the upper jaw revealed a mass of soft tissue on the left sinus.

Oral treatment with fluconazole (200 mg/day) was commenced, and marked improvement was observed within 15 days. Within 2 months we obtained the whole clinical cure. The treatment was continued for another 4 months. By the end of treatment, radiographic findings