NAIL DISORDERS

CLINICAL, DERMOSCOPIC AND TREATMENT PROFILE OF ONYCHOMYCOSIS IN TUNISIA

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Introduction: Onychomycosis is the most prevalent nail disease, amounting to about 50% of all onychopathies. The diagnosis and treatment of onychomycosis are still a challenge in Tunisia.

Objective: The aim of the study was to investigate the clinical, dermoscopic and treatment profile of onychomycosis in Tunisia.

Material and methods: We conducted a prospective, descriptive and analytical study enrolling all patients with mycologically proven hand and nail onychomycosis, between April 2016 and July 2017. Dermatoscopy was performed for patients with positive fungal culture.

Results: Onychomycosis was suspected in 184 patients (118 women and 66 men). The direct microscopy was positive in 94.5% of the samples, with a sensitivity of 91.3%. The fungal culture was positive in 63.8% of patients. The most frequent fungal species were T Rubrum 96,8% on the toenails and C Albicans on the fingernails (49%). Distal and lateral subungual onychomycosis was the most frequent clinical subtype (58.8%), followed by proximal subungual onychomycosis (23.5%), superficial onychomycosis (8.8%) and mixed onychomycosis (9.9%). Dermoscopic findings were subungual keratosis (70.3%), distal subungual longitudinal striae (79.4%), 'Spikes' of the proximal margin of an onycholytic area (59.5%), transverse superficial leukonychia (29.7%), linear hemorrhage (13.5%) and chromonychia. Subungual keratosis was associated with T Rubrum fungal species (94% vs 34%, p=0.012). Terbinafine and fluconazole were prescribed to 66.3% and 33.7% of patients respectively. Treatment duration was significantly higher with fluconazole (8.7 vs 3,1 months, p=0,04) leading to higher clinical cure rates (38.2% vs 24.3%)

Conclusions: Specific dermoscopic findings of onychomycosis are subungual keratosis, distal subungual longitudinal striae and jagged edge of onycholytic areas (spikes). Detection

of these signs is simple and can, in some cases, help to avoid mycology. In low income countries like Tunisia, fluconazole could be considered an appropriate treatment option for onychomycosis.