

SUMMARY AND CONCLUSIONS

The nail by its peculiar structure, is a site of many infections. One of the commonest infections affecting the nail is onychomycosis. It accounts for one - third of all fungal infections, with an incidence of 2% to 13%.

The high incidence of onychomycosis, nowadays, is accounted for by the frequent use of immunosuppressive agents, the immune deficiency diseases with AIDS on the top of the list and patients with diabetes mellitus with longer life expectancy than in the past, all these factors and many other predisposing factors have increased the incidence of onychomycosis.

The aim of this work was to know the most prevalent causative agents of onychomycosis, which in our patients were found to be predominantly caused by candida, together with dermatophytes; as trichophyton mentagrophytes, trichophyton volaceum and trichophyton rubrum.

A total of forty patients with mycologically proven onychomycosis were chosen for the study. The mycological studies carried out were namely; direct microscopic examination and culture on the Sabauroud's agar medium.

Selected cases were subjected to electron microscopic examination of their nail clippings. Scanning electron microscopy and transmission electron microscopy were used for the examination. The fungal elements were visualized together with changes in the ultrastructure of the nail plate. These changes were mainly increased thickness of the nail corneocytes together with loss of the smooth texture of the cells.

Until recently, treatment of onychomycosis, was very disappointing to the patients and very discouraging to dermatologists. Topical antifungal applications, were insufficient, oral griseofulvin was unsuccessful especially for toenails. Ketoconazole could not be used for long periods for its relative hazardous effects.

The new oral antifungals, now available, namely itraconazole, fluconazole and terbinafine, have changed completely the look to onychomycosis. Onychomycosis now, is a treatable and curable disease.

In our study, the group of patients receiving oral fluconazole 150 mg / week for 24 - 36 weeks showed normally growing nails in 98% of them 12 months after therapy. The improvement of symptoms was marked 6 months after the start of treatment.

Patients on itraconazole 200 mg twice daily for 1 week for 12 months showed rapid improvement in symptoms and signs within 4 months of the start of treatment.

With patients receiving oral terbinafine 250 mg / d for 24 - 48 weeks, improved symptoms and signs were marked in about half the patients, while the rest showed only mild to moderate improvement.

Laboratory findings, showed no significant changes in the blood picture, liver and renal function tests. Also, no adverse symptoms were reported by any of the patients, that were worthy of discontinuation of therapy.

It is clear that these drugs, although costly, are very effective in treatment of onychomycosis.