



INFECTIOUS DISEASES (BACTERIAL, FUNGAL, VIRAL, PARASITIC, INFESTATIONS)

## A STUDY OF CLINICO-MYCOLOGICAL CORRELATES OF ONYCHOMYCOSIS

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**Background:** Onychomycosis (OM) is defined as the infection of the nail plate by a fungus. It is the commonest nail disorder in clinical practice associated with significant morbidity and a long lasting treatment with antifungals.

**Objective:** To study the clinico-mycological profile of Onychomycosis in a tertiary care hospital at Lucknow, India

**Materials and Methods:** This was a cross-sectional, observational study, conducted for a period of 24 months, from February 2017 to February 2019 and a total of 100 patients were enrolled. Untreated cases of onychomycosis and cases who did not receive oral and topical antifungals during the previous 6 months and 1 month respectively were included in the study. The culture media employed were Sabouraud's Dextrose Agar (SDA) with cycloheximide (0.5 g/l) and Dermatophyte Identification Media (DIM) with cycloheximide (0.5g/l).

**Results:** 37% samples were found to be positive by direct KOH microscopy and 88% positive on culture. Males were infected more than females (1.75:1) and the commonest age group which was affected was between 21-30 years. Finger nails were affected more frequently than toe nails and Distolateral Subungual Onychomycosis (DLSO) was the most common clinical subtype seen in 60% patients. The etiological agents were classified as Dermatophytes (55.6%), Yeasts (23.8%), and Non-dermatophytes (NDM) (14.7%) based on culture positive reports. *Trichophyton rubrum* was isolated as the most common causative organism (47.7%).

**Conclusion:** This study emphasized the need for performing both a direct examination and culture to improve sensitivity and specificity. Since onychomycosis can cause physical, psychological and occupational problems, the clinico-epidemiological data can be helpful in development of preventive, diagnostic and treatment strategies.

**Keywords:** Onychomycosis, Dermatophytes, Non-dermatophytes, Yeast, *Trichophyton*

