NAIL DISORDERS

# NEW DERMOSCOPY (ONYCHOSCOPY) FINDINGS IN THE DIAGNOSIS OF PRIMARY ONYCHOMYCOSIS- A CROSS SECTIONAL STUDY

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Introduction: Clinically suspected onychomycosis (OM) needs laboratory confirmation as it requires prolonged systemic treatment. Onychoscopy is a rapid, non-invasive, and office-based tool. Its utility in OM is yet to be explored.

Objectives: To identify and describe diagnostic features of OM by onychoscopy

Materials and Methods: Hundred consenting patients who were suspected with OM by clinical examination were selected for the study. After a detailed history and examination of all nails, clinical-photographs were taken; onychoscopy was performed. The nail clipping/punch biopsy was subjected to KOH examination, culture and histopathology (H&E and PAS).

Results: OM was confirmed by KOH, culture and/or histopathology in 88 patients.
We identified for the first time and classified leukonychia into
1. White fluffy shadows: Cloudiness/cotton-like white shadow, which appeared to be present at different levels of the nail plate and was better appreciated on polarising mode.
2. Transverse striate pattern: Horizontally placed white striate opacities seen on non-polarising onychoscopy in all clinical variants of OM.
3. Homogenous opacity: Uniform opacity involving a part of the nail plate or the entire surface of nail plate was seen in all clinical variants.
We also appreciated a new feature and named it lamellar micro-splitting. It appeared as lamellar splitting/ onychoschizia on onychoscopy but was not appreciable on naked-eye-examination. This feature being a surface finding was appreciated on non-polarising onychoscopy. Lamellar micro-splitting was seen in 9/ 11 (81.8%) cases of TDO (p= 0.05).
We also analysed the previously described onychoscopic features like onycholysis (96.6%), spiked pattern (86.4%), chromonychia (85.2%), subungual hyperkeratosis (85.2%), distal irregular termination (81.8%), ruins aspect (59.1%) and longitudinal striae (25%).

Conclusion: Onychoscopy being an office-based procedure can be used as a quick adjunct to diagnose OM, till time-consuming investigations are awaited.