Tinea Mimicking Ichthyosis: A Case Report

Introduction:
Ichthyosis refers to a group of disorders characterized by persistent noninflammatory scaling. Dermatophytosis, on the other hand, is a common fungal infection of the skin. While both conditions are frequently encountered in clinical practice, the association between ichthyosis and dermatophytosis is rarely reported. This case report presents a patient with tinea infection who exhibited ichthyosis-like skin changes.

Case Report:
A 43-year-old male patient presented with widespread tinea infection, primarily affecting the forearms. The patient displayed well-defined ichthyotic scaly plaques on both forearms. Mycological examination revealed the presence of septate hyaline hyphae, and culture confirmed the growth of Trichophyton rubrum. The patient was treated with oral terbinafine 250 mg once daily for 120 days, resulting in significant improvement in skin scaling and the ichthyosis-like presentation.

Discussion:
Patients with ichthyosis may be more susceptible to chronic dermatophytosis due to various factors. These factors include defects in the skin barrier, compromised cell-mediated immunity (which is responsible for immune defense against T. Rubrum), and delayed shedding of keratin, which facilitates persistent fungal infection. Dermatophyte infections typically present as round patches with erythematous scaling and circinate edges, resulting from keratin destruction and the host’s inflammatory response. The clinical similarities between dermatophytosis and ichthyosis can sometimes lead to misdiagnosis, especially if an individual already has a known diagnosis of ichthyosis. Therefore, in patients with ichthyosis experiencing unexplained exacerbation of pruritus, it is essential to consider and exclude an underlying fungal infection through direct mycological examination.
Conclusion:

Dermatologists should be aware that dermatophytosis can manifest as ichthyotic plaques, mimicking the appearance of ichthyosis itself. Clinicians should maintain a high index of suspicion for fungal infections in patients with ichthyosis who experience worsening pruritus. Allylamines, such as terbinafine, appear to provide a better clinical response in these cases. Timely diagnosis and appropriate antifungal treatment are crucial for managing these overlapping conditions effectively.