Title: The Clinical Odyssey of Atypical leprosy presentations

Introduction:Leprosy has traditionally been categorized along a spectrum, ranging from tuberculoid to lepromatous forms, as well as encompassing histoid, pure neuritic variants and reactional states. Nevertheless, this classification remains somewhat reductive, as the disease may present with atypical and obscure clinical manifestations, thereby complicating the accurate diagnosis.

Objectives: The study aims to underscore the atypical clinical presentations of leprosy that manifest across entire disease spectrum.

Materials and methods: This study details 10 rare presentations of leprosy over a 3-year period from 2021-2024, in which clinical diagnosis was substantiated by histopathological confirmation.

Results: The first patient presented with generalized pruritus along with multiple erythematous excoriated papules and nodules, resembling prurigo nodularis. The second patient had multiple discrete to confluent patches with poikilodermatous changes which closely mimicked mycosis fungoides. The third patient had multiple annular erythematous plaques with central clearing and peripheral scaling similar to erythema annulare centrifugum. The fourth patient presented with generalized ichthyosis along with enlargement of bilateral inguinal and femoral lymph nodes giving rise to groove sign. The fifth patient had multiple lesions of anetoderma on neck and back, without any history of antecedent lesions. The sixth patient had multiple scaly nodules on scrotum along with scaling and fissuring on preputial skin. The seventh patient complained of well circumscribed smooth patch of hair loss present over the bilateral shin and arms, very closely resembling alopecia areata. A paediatric patient presented with photosensitive erythematous patches along with focal areas of crusting on cheeks and pinna. Two patients in the study had macrocheilia of which one had

concomitant pedal oedema while the other complained of redness and watering from bilateral eyes.

Conclusion: This study seeks to elucidate the spectrum of atypical leprosy presentations that necessitate distinct consideration for precise and prompt diagnosis, thereby mitigating the risk of debilitating sequelae in this otherwise manageable infectious disease.