

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

CLINICAL AND HISTOPATHOLOGICAL ASSESSMENT OF THE EFFICACY, SAFETY AND TOLERABILITY OF MULTIDRUG THERAPY (MDT) FOR THE TREATMENT OF PAUCI BACILLARY HANSEN'S DISEASE: AN OPEN LABEL LONGITUDINAL STUDY

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Background: Leprosy, a chronic infectious disease often results in residual skin lesions and nerve impairment after treatment completion. WHO recommends fixed duration multidrug therapy (MDT) irrespective of lesional status. There is paucity of literature on clinical and histopathological features of treated leprosy.

Objectives: To prospectively assess the efficacy, safety and tolerability of MDT-PB regimen and observe its effects on clinical and histopathological features in pauci-bacillary leprosy

Methods: 86 new cases of paucibacillary (PB) leprosy diagnosed by clinic-pathological correlation and SSS were administered standard WHO PB-MDT for 6 months. Patients were reviewed at 3rd month, 6th month of therapy, and 3 months post-therapy for their clinical and histopathological assessment.

Results: Amongst 86 new cases of PB-leprosy 78 patients (mean age 31.74 ± 12.2 years, M:F 1.53:1) completed the study as per protocol. 16% patients recovered completely, although 76.7% patients had a residual patch at the end. Number of lesions was reduced significantly 2nd follow-up onwards and size of lesions 1st follow-up onwards (Friedmann's ANOVA, $p < 0.001$ with Post-hoc Dunn's test $p < 0.05$). Nerve palpability also reduced significantly ($p < 0.0001$, McNemar's test) at treatment completion. Histological improvement was appreciable; lymphocytic infiltration reduced significantly 2nd follow-up onwards ($p < 0.05$, Chi-square) and presence of granuloma 1st FU onwards ($p = 0.0039$, McNemar's test). Only 7 patients complained of occasional, uneventful epigastric pain towards the end.

Conclusion: Qualitative histo-morphological changes in correlation with clinical inactivity can suggest termination of therapy. Some features viz. degree of lymphocytic infiltration, granuloma etc. may also indicate the status of treatment. Thus the standard WHO MDT-PB



regimen is effective, safe and well-tolerated.

Keywords: Histopathological changes, Paucibacillary, treated leprosy.

