

INFLAMMATORY SKIN DISEASES (OTHER THAN ATOPIC DERMATITIS & PSORIASIS)

LICHEN PLANUS SEVERITY INDEX – PROPOSAL OF A NEW SYSTEM TO DEFINE SEVERITY OF LICHEN PLANUS

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Introduction: Lichen planus (LP) is a very common chronic inflammatory disorder. There is no scoring system to judge severity of cutaneous LP.

Objective:

- a. Outline a system to define the severity of cutaneous Lichen Planus, Lichen Planus Severity Index (LPSI).
- b. Assess the LPSI for inter-observer reliability and reproducibility

Material & Methods: Steps to calculate score: There are 5 morphological types of lesions seen in LP, namely, erythematous papule, violaceous papule, violaceous plaque, hyperpigmented hypertrophic papule and plaque and post inflammatory hyperpigmentation, which are given a severity factor. Sum of all the products gives lesion severity score. Product of lesion severity score with a Body Surface Area (BSA) factor gives final LPSI.

Participants: The consensus group included 2 dermatologist and 2 dermatology residents with special interest in LP and a statistician. Results of consensus group were compared with a preliminary reproducibility group of 2 dermatologists and 4 dermatology residents. Later, reliability assessment was carried out by 2 groups:

- 1.) 21 dermatologists scored 20 photographs of 4 patients of LP after being trained to use LPSI.
- 2.) 7 doctors evaluated 10 live patients including 3 experts from consensus group and 4 randomly selected physicians. The physicians were blind to scores assigned by experts.

Results: There was no significant difference between scores of consensus group and preliminary reproducibility group. Both groups showed high reliability on assessment (Group 1: Cronbach alpha = 0.92, Group 2: Cronbach alpha = 0.99)

Conclusion: LPSI is a new, simple, reproducible tool to grade severity of LP, which can be used widely to improve the accuracy of scientific discussions about the severity of LP and consequently design standard treatment algorithms