

CORRESPONDENCE

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Grading of Severity of Leprosy

TO THE EDITOR:

There needs to be a satisfactory semi-quantitative system of grading leprosy disease processes clinically. For studying the relationship of disease with metabolic and biochemical changes in different systems of the body it is necessary to quantitate both. So far no suitable index of reporting severity of leprosy exists. Macular, nodular and total lesion indices have been used for assessment of treatment response to drugs, but for purposes of correlative research the severity of disease process as a whole needs to be graded.

This communication is aimed at describing a new five point scale (0 to 4) for recording severity of disease process. Different criteria have been recommended for various types of leprosy.

Maculoanesthetic leprosy. The disease could progress perpendicularly producing raised lesions but then it is no more called maculoanesthetic leprosy. It may extend peripherally involving a wider area or fresh lesions could appear. It is therefore recommended that the total surface area of all the maculoanesthetic lesions on the body should be the basis of grading:

- 1+ total involved surface area not exceeding one sq cm.
- 2+ total involved surface area not exceeding 9 sq cms.
- 3+ involved area between 9 and 25 sq cms.
- 4+ more than 25 sq cms area of skin involved or there are neuropathic changes like trophic ulcers with even smaller skin area involvement.

Tuberculoid leprosy. In general there are only few patches in this type of leprosy. The severity of the disease could be assessed by noting the degree of elevation of the border and the patch.

- 1+ hypopigmented or erythematous patch only slightly elevated at the border or part of the border.

- 2+ patch or patches having uniformly thickened border with depressed (less thickened) central zone.
- 3+ patches markedly thickened with tender and thickened nerve.
- 4+ there is desquamation of patch or patches and/or nerve abscess and/or trophic ulceration.

Lepromatous leprosy. An early lesion in lepromatous leprosy is a macule. These gradually become more infiltrated and become plaques. The progress of disease further results in formation of nodules which may ulcerate:

- 1+ only macular infiltration.
- 2+ raised plaques with no or scanty nodules.
- 3+ nodular lesions in abundance with or without slight deformity.
- 4+ marked infiltration of skin with nodules, ulcerations or marked deformities and/or bony involvement.

Borderline (dimorphous) leprosy. Clinical picture in borderline leprosy is extremely variable and its grading is based on its place in the clinical spectrum between the two polar forms of leprosy, i.e., lepromatous and tuberculoid:

- 1+ up to six patches, asymmetrical with more than three having well-demarcated borders.
- 2+ up to 12 patches and rest as above.
- 3+ large areas of skin involvement with multiple patches. Majority having ill-defined borders.
- 4+ picture approaching lepromatous type. The lesions are almost symmetrical. Some odd lesions still have well-defined borders or part of a border.

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