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Healing ulcers and preventing their recurrences in the diabetic foot.

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Abstract Fifteen percent of people with diabetes develop an ulcer in the course of their lifetime. Eighty-five percent of the major amputations in diabetes mellitus are preceded by an ulcer. Management of ulcers and preventing their recurrence is important for the quality of life of the individual and reducing the cost of care of treatment. The main causative factors of ulceration are neuropathy, vasculopathy and limited joint mobility. Altered bio-mechanics due to the deformities secondary to neuropathy and limited joint mobility leads to focal points of increased pressure, which compromises circulation leading to ulcers. Ulcer management must not only address the healing of ulcers but also should correct the altered bio-mechanics to reduce the focal pressure points and prevent recurrence. An analysis of 700 patients presenting with foot problems to the Diabetic Clinic of Ganga Hospital led to the stratification of these patients into four classes of incremental severity. Class 1 - the foot at risk, Class 2 - superficial ulcers without infection, Class 3 - the crippled foot and Class 4 - the critical foot. Almost 77.5% presented in either Class 3 or 4 with complicated foot ulcers requiring major reconstruction or amputation. Class 1 foot can be managed conservatively with foot care and appropriate foot wear. Class 2 in addition to measures for ulcer healing would need surgery to correct the altered bio-mechanics to prevent the recurrence. The procedures called surgical offloading would depend on the site of the ulcer and would need an in-depth clinical study of the foot. Class 3 would need major reconstructive procedures and Class 4 would need amputation since it may be life-threatening. As clinicians, our main efforts must be focused towards identifying patients in Class 1 and offer advice on foot care and Class 2 where appropriate surgical offloading procedure would help preserve the foot.

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