Utility of WIfI foot assessment tool in a Sri Lankan setting; an initial experience

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Introduction: Potential for limb salvage and wound healing in a lower limb ulcer depends on degree of ischemia, wound grade and superadded foot infection.

Objectives: Our objective was to assess the feasibility of applying WIfI classification system to stratify patients presenting with limb ulceration according to risk of undergoing amputation and benefit of revascularization.

Methods: Fifty four consecutive patients with ulcerated limbs presenting over two months to the University unit at the National Hospital were staged according to the Society for Vascular Surgery(SVS) Wound, Ischemia, and Foot Infection (WIfI) classification system.

Results: The median age was 64 (39-93), and 42 (79%) patients were males. Diabetes (87%), hypertension (53%), ischemic heart disease (14%), cerebrovascular disease (13%), chronic renal disease (13%) were identified risk factors. Smoking was reported among 35%. Median Anterior Tibial Artery(ATA), Posterior Tibial Artery(PTA), Toe pressures, Ankle Brachial Index, Pole test values of the affected side lower limbs were 114.5mmHg, 107.5mmHg, 41mmHg, 0.87 and 85cm respectively. Values for the contralateral limb were 140mmHg, 120mmHg, 74mmHg, 1.0 and 85cm respectively. 84% of ATA and 90 % of PTA pulses were not palpable on the affected side. Grades of ischemia were; none (23.3%), mild (27.9%), moderate (18.6%), severe (30.2%), grades of infection were none (20.9%), mild (37.2%), moderate (39.5%), severe (2.3%), and wound grades were 0(0%), 1(20%.9), 2(39.5%), 3(39.5%). Estimated risk of amputation were high (65.1%), moderate (11.6%), low (11.6%), very low (11.6%) and estimated benefit of revascularization were high (46.5%) moderate (23.3%), low (7.0%), very low (23.3%).

Conclusions: Application of WIfI system was useful to prioritize patients with eminent limb loss for urgent intervention. Toe pressure assessment for diabetic foot ulcer stratification should become a common practice.