

Return to Sports and Physical Activities after Minimally Invasive Distal Linear Metatarsal Osteotomy for Hallux Valgus

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Abstract

Background: The minimally invasive distal linear metatarsal osteotomy (DLMO) procedure for hallux valgus has achieved good clinical outcomes comparable with those obtained by conventional surgical techniques. We evaluated participation in specific sports and physical activities with respect to clinical outcomes among patients with hallux valgus who underwent DLMO.

Methods: This retrospective study involved 28 patients who underwent DLMO for hallux valgus for May 2010 to February 2020. The return to sports and physical activities was assessed using a newly developed sports activity questionnaire and the International Physical Activity Questionnaire-Short Form. Clinical outcomes were assessed using the Japanese Society of Surgery of the Foot (JSSF) hallux scale.

Results: Twenty-one patients (75%) were active in a sports activity preoperatively and/or postoperatively, and these 21 patients participated in 17 different sports activities. Four in 5 patients who performed a sports activity preoperatively were able to return to their sports activity postoperatively. The total metabolic equivalent-minutes per week and physical activity categories were not significantly different between the preoperative and postoperative periods. The changes in the JSSF scores showed no associations with the changes in the sports activity participation level or return to sports activity.

Conclusions: Patients were able to continue participation in sports activities, and the physical activity showed no change. These findings suggest that DLMO is a viable treatment option for hallux valgus in active patients.

Key words: hallux valgus, sports activity, physical activity, distal linear metatarsal osteotomy