The Effectiveness of Modified Weil Osteotomy in Freiberg’s Disease
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Summary: Modified Weil osteotomy is believed to be a useful method for treatment of Freiberg’s disease and results in great improvement of pain and function through shortening of relatively long metatarsal and restoration of metatarsophalangeal joint congruency.

Background: Many kinds of metatarsal osteotomies have been described for the treatment of Freiberg’s disease. The purpose of this study is to evaluate the clinical outcomes of modified Weil osteotomy in treatment of Freiberg’s disease. The modified Weil osteotomy is composed of two components; shortening metatarsal osteotomy to offload the metatarsal head and dorsal closed wedge osteotomy of metatarsal bone for restoration of metatarsophalangeal joint congruency.

Materials and Methods: From November 2001 to July 2008, nineteen patients (twenty feet) of Freiberg’s disease treated surgically, followed up over 15 months were included in this study. The average age of patients was 33.6 years (range, 17 to 62 years), the mean follow-up period was 46.4 months (range, 15 to 95 months). Clinical outcomes were evaluated with Visual Analogue Scale (VAS), American Orthopaedic Foot and Ankle Society (AOFAS) score, range of motion of metatarsophalangeal joint which was analyzed according to the Smillie’s classification and patients’ subjective satisfaction.

Results: The VAS improved from 6.2±1.4 to 1.4±1.5 at last followup (p