Abstract
Posterior pilon fractures are rare injuries and have not yet gained well recognition. The purpose of this study was to present the treatment outcome for patients with posterior pilon fractures treated with buttress plate. Method: In this retrospective study we identified patients with posterior pilon fractures of the distal tibia who had undergone open reduction and internal fixation at our institute. Between January 2007 and December 2009, 10 patients (mean age, 46.5 years) who had undergone buttress plating via either a posterolateral approach or a dual posterolateral-posteromedial approach, were selected. All 10 patients were available for follow-up. The clinical outcome was evaluated with the American Orthopaedic Foot and Ankle Society (AOFAS) ankle-hindfoot score and the visual analogue scale (VAS). The radiological evaluation was performed using the osteoarthritis-score (OA-score). Results: Satisfactory reduction and stable fixation were accomplished in all patients. At a mean follow-up of 36.2 months, all patients had good radiological results and showed satisfactory clinical recovery. The mean AOFAS score was 87.8, the mean OA-score was 0.6, and the mean VAS scores during rest, active motion, and weight-bearing walking were 0.6, 0.8, and 1.4, respectively. Conclusion: Buttress plating for posterior pilon fractures gave satisfactory clinical outcomes. It also ensured rigid fixation which in turn enabled earlier postoperative mobilization. Level of Evidence IV, Retrospective Study.

Keywords
Tibial fractures, Ankle injuries, Internal fixators, Bone plates.