Outcomes of proximal femoral locking-plate fixation for pathological fractures of the proximal femur

Kongkhet Riansuwan, M.D.; Somkiat Jivasomboonkul, M.D.; Rapin Phimolsarnti, M.D.; Chandhanarat Chandhanayingyong, M.D.; Apichat Asavamongkolkul, M.D.

Department of Orthopaedic Surgery, Faculty of Medicine Siriraj Hospital, Mahidol University, Bangkok, Thailand

Objective: To study treatment outcomes of proximal femoral locking-plate fixation of pathological fractures of the proximal femur in terms of clinical results, implant failure, and surgical complications.

Patients and Methods: From 2007 to 2012, 16 patients (17 femurs) with a diagnosis of impending or existing pathological fracture of the proximal femur were treated with proximal femoral locking-plate fixation at our institution. Data collected included operative duration, estimated blood loss, ambulatory status, events of hardware failure, and postoperative complications.

Results: Seventeen femurs (13 existing pathological and four impending fractures) in 16 patients were included. Mean follow-up was 15.6 months (range, 1-66 months). No patient developed oxygen desaturation or cardiac arrest during the intraoperative or postoperative period. Twelve of 16 patients (75%) could walk with or without an assistive device at the time of final follow-up. No hardware failure occurred.

Conclusion: For pathological fracture of the proximal femur, proximal femoral locking-plate fixation is a treatment option that results in fewer perioperative and postoperative cardiopulmonary events and surgical complications. Most patients can ambulate with or without an assistive device at final follow up.