Background: We aimed to present the radiological and clinical results of Kirschner-wire (K-wire) fixation and low-profile plate-screw fixation applied to unstable proximal phalangeal fractures without extension to the joint.

Methods: Clinical and radiological data of 22 patients who underwent fixation with open reduction and low-profile 1.5-mm titanium mini plate and unlocked screws and 18 patients who underwent fixation with K-wire due to closed, unstable extra-articular proximal phalangeal fractures were retrospectively examined. All evaluation and statistical analyses were based on sixth postoperative month evaluation parameters. Active and passive metacarpophalangeal joint and interphalangeal joint range of motions, total joint range of motion, measurement of grip strength for fractured and healthy hands, visual analog scoring, disabilities of the arm, shoulder, and hand scores, measurement of distance between the pulpa and palmar curve in the operated finger, Belsky score, reoperation, and complications were evaluated.

Conclusion: Plate-screw osteosynthesis in the extra-articular, unstable fractures of the proximal phalanx, which is “small” compared with the body but has a “major function” for the hand and upper extremity, allows for rigid fixation, short immobilization, and early motion in spiral/oblique-fragmented fractures. K-wire fixation, an alternative treatment modality, applied to selected fracture patterns with appropriate indications can achieve good–excellent results radiologically and functionally.