The result of the treatment in osteoporotic ankle fractures with small fragment using claw plate in elderly
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Introduction/Purpose: Osteoporotic fractures in ankle have often included small bone fragments and were very unstable. There had been tried to fix them for anatomical reduction, using variable methods. However, it was not easy to keep the reduction, especially in elderly. The purpose of this study was to evaluate the results of the treatment in ankle fractures with small fragment using claw plate in elderly.

Methods: The nineteen patients with ankle fractures, which included the small fragments, from January 2012 to July 2014 were evaluated retrospectively. All patients were more than 65 years and had osteoporosis. The authors have been tried to fix it using claw plate in all cases. The mean follow up period was 15 months (range, 12 month to 18 month).

The claw plate was designed to catch the small fragment and made of tubular plate or locking tubular plate with bending it after cutting the distal end of them. It had two different hooks to keep the reduction and the fragment.

Functional outcome scores were obtained using Olerud Molander Ankle score (OMA), VAS, and American Orthopedic Foot and Ankle Society (AOFAS) score at 2, 3, 6, 9, 12 month after the operation, when each patient underwent a physical examination and radiography.

There was evaluated statistically by SPSS 19.0

Results: There were no complication, such as metal failure and loss of reduction. AOFAS score improved from 56.4±3.1 at 2 month to 93±1.5 at 12 month (p=0.01). The VAS improved from 6.2±0.9 at 2 month to 1.2±0.8 at 12 month (p=0.001). OMA score improved from 15.5±0.2 at 2 month to 75±2.5 at 12 month (p=0.001).

There was significant difference, statistically.

There was obtained the bony union in 3 months after the operation in all cases

Conclusion: We suggested that the claw plate is the alternative method to fix the osteoporotic ankle fracture with small fragments in elderly, without complications