

Multidisciplinary Approach to Prevent Secondary Fractures After Geriatric Hip Fractures: What Has Changed After This Approach?

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Purpose: Proximal femoral fractures have increased significantly with the increasing average lifespan. The risk of contralateral hip fracture after first hip fracture is reported more than twice. Recently, a multidisciplinary approach around a core of fracture liaison management to prevent secondary fracture after geriatric hip fracture is spreading. In this study, we investigated what has changed after this approach.

Methods: We started this multidisciplinary approach called N-POP (Nishinomiya support service of Prevention for secondary Osteoporotic Proximal femur fracture) on January 2019. We investigated 149 patients over 65 years of age who had surgery for hip fracture. 69 patients (control group: C group) were before this approach (January-December 2018) and 80 patients (N-POP group) were after this approach (January-December 2019). The days from admission to surgery, admission period, medication for osteoporosis at discharge and follow-up, and another fracture during follow-up were investigated. Student t test and χ^2 examination were performed.

Results: The days from admission to surgery were 1.5 days in N-POP group, 1.8 days in C group; admission period is 28 days in N-POP group, 31 days in C group. There were no differences in these periods of both groups. 72 patients of N-POP group had medication for osteoporosis at discharge, while 14 patients in C group had medication. There was a significant difference between groups ($P < 0.001$). 11 patients have not visited outpatient clinic (3 patients died) in N-POP group after discharge and also 11 patients have not come to outpatient clinic in C group (2 patients died). Medication at follow-up was 65 of 69 patients in N-POP group and 18 of 58 patients in C group. There was also significant difference in both groups ($P < 0.001$). Another fracture occurred in 10 of 67 patients in N-POP group and 5 of 45 patients in C group. There was no difference between groups ($P = 0.52$).

Conclusion: Medication for osteoporosis was much improved in this approach. However, occurrence of another fracture was not prevented.