Hip fracture patients with dementia

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The number of demented patients with hip fracture is increasing as the population ages. Alzheimer type dementia has been reported to increase the risk of hip fractures with an odds ratio of 6.9 - 2.18. Some 20 - 30% of hip fracture patients are diagnosed with dementia before they suffer the fracture. In Central Finland, only 40% of independently living patients had normal cognitive function two weeks after hip fracture operation.

Demented patients with hip fracture have higher mortality and are more likely to need long term residential care than patients dementia. Mini mental without state examination scores correlate strongly with the activities of daily living scores and the instrumental activities of daily living scores at the time of the fracture. Delirium, malnourishment, inadequate medication for pain, polypharmacy, and delayed mobilisation are common among hip fracture patients with dementia.

Multifactorial multidisciplinary and intervention programs are needed to prevent and to treat delirium and other complications. Successful rehabilitation requires caring for the physical, social, and psychosocial needs of the patients. Demented patients with hip fractures benefit from practising daily living activities throughout the day, early mobilisation and discharge with physiotherapy continued in the familiar surroundings at home, individualised family counselling, and collaboration with the families and home care. In a randomised trial (Huusko et al. BMJ 2000) geriatric assessment and intensive rehabilitation after hip fracture in patients with mild or moderate dementia diminished the length of hospital stay. Patients with mild dementia in the geriatric rehabilitation group were as successful as patients with normal cognitive function in returning to independent living. One year after hip fracture, significantly fewer patients with moderate dementia in the geriatric rehabilitation group were in institutional care (Figure 1). The median length of hospital stay was calculated from the day of the surgery to the day of discharge lasting at least two weeks. The median length of hospital stay of patients with moderate dementia was 29 days in the intervention group and 46 days in conventional care (p=0.002). In patients with moderate dementia the corresponding figures were 47 days and 147 days (p=0.042).

Intensive, multidisciplinary geriatric rehabilitation should be considered for hip fracture patients with mild or moderate dementia.



Figure 1. Institutional and independent living of hip fracture patients with moderate dementia (MMSE 12 - 17) one year after hip fracture in multidisciplinary geriatric rehabilitation (GORU) and in conventional care.