

GR-HIP: Geriatric Rehabilitation of patients after HIP fracture; a study design

Introduction:

After the acute hospital phase, patients with hip fracture are either discharged home or to inpatient geriatric rehabilitation, where they are treated by a multidisciplinary team. The effect of quality and intensity of treatment as well as important (age-related) characteristics on functional outcome and quality of life are poorly studied. In addition, informal caregivers have an influence in the daily care and supervision of the patients with a hip fracture during the rehabilitation period.

Methods:

This study has a mixed-methods approach with a large inception cohort and qualitative data-collection from elderly care physicians, physical therapists, patients, and primary caregivers. Patients are included after hospital admission at Haaglanden Medical Centre (Bronovo Hip Fracture Centre) with a hip fracture. They will be followed-up at six weeks, three months and twelve months in the outpatient clinic or place of residence during home-visits.

Data collection includes:

Usual care

- Patients: demographic characteristics, comorbidity, functional abilities, cognitive abilities, quality of life, measures on sarcopenia and fracture risk

Additional measurements

- Patients: health care use, psychological measures on coping, fear of falling, loneliness
- Informal caregivers: quality of life, healthcare use, psychological measures on coping, loneliness, depression, proxy fear of falling and caregiver burden

Inclusion criteria (Patients)

- Unilateral proximal femur fracture
- Age ≥70 year
- Admitted to Haaglanden Medical Centre (Bronovo Hip Fracture Centre) with a proximal femoral fracture
- Only patients eligible for geriatric rehabilitation upon discharge

Exclusion criteria (Patients):

- Age <70 year
- Previously residing in a nursing home
- Pathological hip fracture
- Unwilling to give informed consent
- Unable to give informed consent
- Insufficient mastery of the Dutch language
- Previously included in the study

Inclusion criteria (informal care givers)

- Family member or other natural person who normally provides the daily care or supervision of the patient with a hip fracture.

Exclusion Criteria (informal care givers)

- Insufficient mastery of the Dutch language
- Unwilling to provide informed consent
- Unable to provide informed consent

Data collection

Outpatients follow-up at Haaglanden Medical Centre (Bronovo Hip Fracture Centre) or home visits					
6 weeks		12 weeks		12 months	
Usual Care	Additional Measurements	Usual care	Additional Measurements	Usual care	Additional Measurements
KATZ-ADL FESI7 6CIT HHS EQ-5D-5L SPPB Complications Garvan PMS	HADS DJG loneliness	KATZ-ADL FESI7 6CIT HHS EQ-5D-5L SPPB Complications PMS	Health care use FFMI HGF Accelerometer HADS DJG loneliness Lawton iADL	KATZ-ADL FESI7 6CIT HHS EQ-5D-5L SPPB Complications PMS	Health care use HADS DJG loneliness
Additional questionnaires for informal care givers combined with outpatient follow-up or home visits					
6 weeks		12 weeks		12 months	
EQ-5D-5L CSI HADS DJG loneliness Fesi-7 proxy		EQ-5D-5L CSI HADS DJG loneliness Fesi-7 proxy		EQ-5D-5L CSI HADS DJG loneliness Fesi-7 proxy	



Results and Key conclusions

In this study, we aim to determine which variables predict successful as well as non-successful rehabilitation and explore effective treatment programmes with the purpose of developing good practice care-pathways. In order to develop these care-pathways, it is important to gather information on patient-related factors, healthcare use during and after admission to post-acute geriatric rehabilitation wards as well as caregiver burden and quality of life.

Planning:

- November 2018 - November 2020 inclusion of patients and their informal caregivers
- November 2021 end study after last follow up
- November 2021 start analysis of data