

HIP4Hips: High intensity physiotherapy following hip fracture surgery is safe and effective in reducing hospital length of stay

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Background – Rising rates of hip fracture in an ageing population, and the associated increasing cost, are significant problems for the hospital system and the community. This study aims to investigate the effect of an intensive physiotherapy program on patients with isolated hip fractures on function and length of stay (LOS).

Method – This study was a prospective randomised controlled trial at The Alfred hospital, Melbourne. Between March 2014 and January 2015, all patients > 65 years with isolated hip fractures were screened for inclusion. Patients were excluded if admitted from high level care or sustained subtrochanteric/pathological fractures. Patients were randomised into 1) usual care (UC) - daily physiotherapy or 2) intensive physiotherapy (IP) - UC plus two additional treatments daily. Outcome measures included post-operative day (POD) 5 functional scores (modified Iowa Level of Assistance scale and Timed Up and Go), hospital LOS, discharge destination, complications, readmissions and six month outcome measures.

Results – Ninety-two patients were recruited with 46 patients randomised to each group. All patients had POD 5 and discharge data collected. A 10 day difference ($p=0.02$) in the entire hospital LOS (acute and inpatient rehabilitation) was found when comparing the UC (37.6 days) and the IP groups (27.6 days), with a decreased LOS in the acute hospital of 1.4 days ($p=0.08$). A non-significant improvement in both Day 5 functional measures was seen. Pain scores and amount of opioid medication taken post operatively was not different between the groups and there was no difference in complications or readmissions.

Conclusions – The results of this study show that hip fracture management can be further enhanced by an intensive physiotherapy program in the acute hospital setting. This program was able to decrease hospital LOS without increased complications or readmissions

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