

**(35) Functional recovery following the Dynamic Hip Screw versus the Gotfried Percutaneous Compression Plate: a randomised controlled prospective study**

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**Objective:** Compare functional recovery following an intertrochanteric hip fracture fixated with either the Dynamic Hip Screw (DHS) or the Gotfried Percutaneous Compression Plate (PCCP).

**Method:** Fifty-nine patients (mean age 80.6, SD 5.48) were randomly assigned to either the DHS or PCCP surgical procedure and were assessed 2 and 12 weeks post-injury by a researcher blind to the type of surgery undertaken. Outcome measures were: functional recovery, pain at night and during ambulation, walking speed, stair ascending and descending speed, use of assistive devices, postural sway, and weight-bearing capabilities.

**Results:** At two weeks post injury, the groups were comparable in most parameters. Yet only the PCCP group were able to significantly shift weight onto the operated extremity ( $p=0.006$ ). The PCCP group also reported less pain during ambulation ( $p=0.05$ ). While both groups improved significantly in all measures by three months post injury, they did not reach their pre-injury level of independence. At three months, the PCCP group ambulated with less supportive assistive devices ( $p=0.05$ ), and demonstrated enhanced recovery of basic activities of daily living in comparison with the DHS group.

**Conclusions:** The results indicate a comparable recovery following the DHS and PCCP surgical approaches in most parameters. However, the PCCP procedure demonstrates certain advantages in term of early pain alleviation, and recovery of basic activities of daily living and functional ambulation three months post injury.

Keywords: Hip fracture, surgery, functional recovery  
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