

노인재활

발표일시 및 장소 : 10 월 26 일(금) 14:45-14:55 Room C(5F)

OP2-2-4

Correlation between mechanography and clinical parameters 6 months after hip fracture surgery

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Objective

To demonstrate the correlation between mechanography and clinical parameters in the elderly after hip fracture surgery.

Methods

A longitudinal follow-up study was conducted in university hospitals for 33 patients in 3 months and 22 patients in 6 months after hip fracture surgery. Subjects aged 65 years and more completed measurements on Berg balance scale (BBS), K-FRAIL scale, Functional Ambulation Category (FAC), KOVAL stage, and hand grip strength (HGS). Romberg test with center of foot pressure (COP) and chair rise test (CRT) maximal power (W/kg) were also conducted using the Leonardo mechanography[®].

Results

BBS revealed significant correlations with COP area ($r=-0.521$, $p=0.002$) and COP pathway length ($r=-0.456$, $p=0.008$) 3 months after hip fracture surgery. Also, the BBS showed significant correlations with COP area ($r=-0.694$, $p<0.001$) and COP pathway length ($r=-0.692$, $p<0.001$) 6 months after surgery. The maximal power during CRT did not show significant correlation with the BBS, KOVAL, FAC, K-FRAIL and HGS in 3 and 6 months after hip fracture surgery.

Conclusion

The study revealed significant correlation between mechanography and the BBS for balance evaluation in the elderly after hip fracture surgery. Not only the clinical assessment with the BBS but the objective test with mechanography may be required for quantitative follow-up functional measurement.