Influence of two positioning concepts on passive range of motion, vegetative parameters and comfort on acute stroke patients

- First results -

Abstract

Objective: To evaluate the effect of different concepts of positioning on the passive mobility of the hips and shoulders and on some vital parameters on acute stroke patients.

Design: Randomized controlled trial, researcher blind to the intervention

Setting: Neurological Stroke Unit

Subjects: A sample of 12 severely handicapped patients (modified rankin scale 5) suffering from first acute stroke

Intervention: Patients randomly assigned for “Positioning in Neutral” or “Conventional Positioning” rested for 2 hours in 30° side-lying on or away from the hemiplegic side or in supine once in each on three consecutive days.

Main outcome measure: Passive range of motion (pROM) of hip flexion

Secondary outcome measures: pROM of shoulder flexion and external rotation, blood pressure, heart rate, breathing frequency

Results: Two different concepts of positioning do not cause significant differences in the passive mobility of the hips and shoulders. The mobility both of the hips and shoulders of those patients who rested in the Neutral Positioning improved significantly whilst there was no significant change in the Conventional Positioning group. Heart rate, blood pressure and breathing frequency does not change in both groups.

Conclusion: As the sample size is small, final appraisal is not possible. Positioning is a simple and inexpensive strategy, worth for further evaluation.