The Effect of Bed Rest after Lumbar Puncture on Incidence of Post Lumbar Puncture Headache: A Randomized Controlled Study

Attawit Charoensri¹  Pirada Witoonpanich²

¹Department of Medicine, Faculty of Medicine Ramathibodi Hospital, Mahidol University, Bangkok 10400, Thailand, ²Division of Neurology, Department of Medicine, Faculty of Medicine Ramathibodi Hospital, Mahidol University, Bangkok 10400, Thailand

Background: Post lumbar puncture headache (PLPH) is a common complication after lumbar puncture (LP). Previous studies showed that the incidence of PLPH from former study is about 30% of patients undergoing LP for diagnosis. Bed rest after LP for 4-6 hours is routinely performed in order to decrease the occurrence of PLPH, despite lack of benefit from clinical trial.

Objective: To compare the incidence of PLPH between routine bed rest and early ambulation after LP.

Methods: This study enrolled patients who underwent LP at the outpatient department of medicine, Ramathibodi Hospital, Mahidol University. Those without well cooperated and bed bound status were excluded. Patients were randomized into early ambulation group and routine 4-hour supine position group. Background characteristics were recorded and the standard LP method was done. Incidence of PLPH was compared.

Results: Of 65 patients, there were 34 (52.3%) in the early ambulation group and 31 (47.7%) in the routine 4-hour supine position group. Background characteristics were not different between the two groups. Incidence of PLPH were 10.8% overall, with 11.8% in early ambulation group and 9.7% in 4-hour supine position group. There was no statistically significant difference in the incidence of PLPH between both groups (P=0.786).

Conclusion: The incidence of PLPH was not different between the early ambulation and the routine 4-hour supine position groups.

Keywords: Post lumbar puncture headache, PLPH, Early ambulation, Lumbar puncture