

DISABILITY OF HEADACHE ACCORDING TO THE PRESENCE OF EXERCISE

Soo-Jin Cho¹, M Chu², HS Moon³, JW Park⁴

¹Neurology, Dongtan Sacred Heart Hospital, Hallym University College of Medicine, South Korea

²Neurology, Hallym University Sacred Heart Hospital, Hallym University College of Medicine, South Korea

³Neurology, Kangbuk Samsung Hospital, Sungkyunkwan University School of Medicine, South Korea

⁴Neurology, Uijeongbu St. Mary's Hospital, The Catholic University of Korea College of Medicine, South Korea

dowonc@naver.com

Exercise or physical activity is not only a trigger of headache but also a recommended behavioral therapy in migraine. We want to know the influence of exercise on the severity and disability of headache and investigated it using smartphone application-based electronic headache diary (SHD).

Migraine patients with average 2-14 headache days per month were recruited and were asked to write the occurrence, severity, duration, triggers of headache, and intensity and duration of exercise on SHD. Disability of headache by HIT-6 was assessed at the baseline and 3 months after initial visit. From 62 participants who kept the diary until the end of the study, diary data for 4,579 days were analyzed. Of these, 1,099 headache days (336 migraine, 763 non-migraine headaches) were recorded. Exercise as a risk factor for headache was listed in 3 patients on baseline survey and in 7 patients upon SA-E diary. Headaches on the day with exercise were less impaired (disability 34% vs 50%, $p=0.001$) and less usage of abortive medication (51% vs 65%, $p=0.0002$), but had similar intensity and duration compared to the headache day without exercise by analysis using 1099 headache days. Worsening of HIT-6 score more than 1 point was present in 19.0% (8/42). Proportion of worsening of HIT-6 was less frequent among patient with GPA than those without GPA (14% vs. 20%, $p=0.001$). GPA was not well performed among episodic migraineurs. This study suggested protective effect of exercise on disability of headache and no influence of headache on the exercise time.