PREDICTORS OF ISCHEMIC INFARCTION IN PATIENTS WITH ISOLATED VERTIGO

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Background and Objectives

Although isolated vertigo is common problems in emergency room (ER), the initial distinction between central and peripheral vertigo in isolated vertigo is not easy. This study aims to evaluate the predictors of ischemic infarction in patients with isolated vertigo.

Materials and Methods

The definition of isolated vertigo is vertigo without focal neurologic deficit except nystagmus and postural instability with unknown etiology. Diffusion weighted images were obtained 171 isolated vertigo patients.

Results

Among 170 patients, 25 patients had acute lesions on DWI. Twelve out of 25 patients with stroke were impossible of standing without assistance including 5 patients of lateropulsion. Ocular lateropulsion in 2 patients with stroke and gaze evoked nystagmus in two were observed. Central vertigo mimicking peripheral vertigo were 13 out of 25 patients and 4 of them had a catch-up saccade on head thrust test. Nine central vertigo patients had a spontaneous unidirectional horizontal nystagmus. Seventy-six out of 145 patients without stroke had a spontaneous horizontal nystagmus and 53 patients had a catch-up saccade. Three peripheral vertigo patients had GEN and 26 patients were impossible of standing including 5 lateropulsion. Lateropulsion (p=0.014), head thrust test (p=0.039) and inability to stand (p=0.005) were significantly related with differentiation between central and peripheral vertigo.

Conclusions

Although lateropulsion, inability to stand and head thrust test is important differential points between central and peripheral vertigo, differential diagnosis of isolated vertigo at emergency room is not always easy.