Diploma thesis "Effect of cognitive task in postural sway of patiens with phobic postural vertigo" in its theoretical part discusses physiology of balance system, its disorders and summarizes knowledge of phobic postural vertigo. In experimental section we analyzed postural stability of 5 patients with phobic postural vertigo, 5 patients with structural lesion of vestibular system and 5 healthy subjects with posturography during normal stence and while performing cognitive tasks – "Contact test", Verbal Fluency task and modified Stroop test. The goal of this study was to find out whether postural stability of subjects differs while performing cognitive tasks in comparison with normal stance.