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Paper Title:	Influence of body Tilting induced by Galvanic Vestibular Stimulation on Postural Sway
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Abstract

One of the sequelae of stroke patients is a vertical cognitive impairment called Pusher's syndrome. In rehabilitating this symptom, a vertical state is presented to the patient by visual feedback using mirrors, etc., and the patient re-learns the vertical state. However, this is often combined with a visual attention disorder called unilateral spatial neglect, and there is a need to present vertical states without using vision. In this study, we investigated the use of galvanic vestibular stimulation (GVS), which can intentionally generate an anteroposterior postural tilt, to present vertical postures. In this study, subjects with somatosensory differences were presented with postures using GVS in the direction in which the posture returned to the vertical state. We investigated the effect of the presentation of the vertical posture by GVS on the stabilization of the posture based on the center-of-gravity sway before, during, and after the stimulation. The results showed that the magnitude and range of the center of gravity sway decreased with the change of the center of gravity position in the anodal direction. These results suggest that the GVS-based vertical posture presentation method is useful for people with postural tilt.