

USING VIBROTACTILE BIOFEEDBACK SYSTEM FOR BILATERAL VESTIBULAR LOSS

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Bilateral vestibular loss (BVL) main complaints are oscillopsys and imbalance. BVL has a strong negative impact on physical function and social interaction, decreasing quality of life. Vestibular rehabilitation therapy is currently the mainstay in the treatment for these patients. However, rehabilitation therapy has shown to be less effective with patients with bilateral vestibular loss. There is no evidence of an effective treatment for patients with bilateral vestibulopathy. Visual, auditory, vibrotactile, and electrotactile feedback have been used to provide real-time feedback of body or head movement during quiet and perturbed stance and some locomotor activities. There is a clear need for a therapeutic solution. In this pilot study, subjects with BVL used the vibrotactile biofeedback system (VBS). A significant improvement in quality of life of these subjects was observed. Efforts toward the development of VBS were justified. This method could be crucial for some patients' quality of life.

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