

ABSTRACT

Objectives: This study aims to confirm that the increase of range of motion, improvement of functional status and the happiness level in frozen shoulder patients is more effective with stretching use virtual reality game (VRG) compared with over head pulley (OHP).

Design: Randomized pre-post test control group design.

Setting: Physical Medicine and Rehabilitation Outpatient clinic Dr. Soetomo General Hospital.

Participants: A total of 16 patients with frozen shoulder were randomly assigned to VRG group (n=8) and OHP group (n=8).

Methods: Subjects in the VRG group received USD modality and stretching with VRG three times a week in a 6 weeks period. The OHP group received USD modality and stretching with OHP three times a week in a 6 weeks period.

Main Outcome Measures: The increasing of shoulder range of motion was evaluated with goniometer and the improvement of functional status with Disabilities of The Arm, Shoulder, and Hand (DASH) before and after intervention, and the happiness level with Linkert scale after intervention.

Results: No significant difference was observed in the increasing of range of motion, improvement of functional status, and the happiness level in the VRG and OHP group.

Conclusion: VRG is not better than OHP in increasing range of motion, improvement of functional status, and the happiness level in frozen shoulder patients.

Key words : frozen shoulder, rehabilitation, over head pulley, virtual reality game