
ORIGINAL RESEARCH

CORRECTED ERROR VIDEO VERSUS A PHYSICAL THERAPIST INSTRUCTED HOME EXERCISE PROGRAM: ACCURACY OF PERFORMING THERAPEUTIC SHOULDER EXERCISES

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ABSTRACT

Background and Purpose: The accurate performance of physical therapy exercises can be difficult. In this evolving healthcare climate it is important to continually look for better methods to educate patients. The use of handouts, in-person demonstration, and video instruction are all potential avenues used to teach proper exercise form. The purpose of this study was to examine if a corrected error video (CEV) would be as effective as a single visit with a physical therapist (PT) to teach healthy subjects how to properly perform four different shoulder rehabilitation exercises.

Study Design: This was a prospective, single-blinded interventional trial.

Methods: Fifty-eight subjects with no shoulder complaints were recruited from two institutions and randomized into one of two groups: the CEV group (30 subjects) was given a CEV comprised of four shoulder exercises, while the physical therapy group (28 subjects) had one session with a PT as well as a handout of how to complete the exercises. Each subject practiced the exercises for one week and was then videotaped performing them during a return visit. Videos were scored with the shoulder exam assessment tool (SEAT) created by the authors.

Results: There was no difference between the groups on total SEAT score (13.66 ± 0.29 vs 13.46 ± 0.30 for CEV vs PT, $p = 0.64$, 95% CI [-0.06, 0.037]). Average scores for individual exercises also showed no significant difference.

Conclusion/Clinical Relevance: These results demonstrate that the inexpensive and accessible CEV is as beneficial as direct instruction in teaching subjects to properly perform shoulder rehabilitation exercises.

Level of Evidence: 1b

Keywords: Exercises, shoulder, physical therapy, video

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