
The purpose of this study was to estimate the impact of adhesive capsulitis on costs and health and to compare the cost-utility of high-grade and low-grade mobilisation techniques. In a randomised controlled trial, 92 patients with adhesive capsulitis received either high-grade mobilisation techniques or low-grade mobilisation techniques and were followed for one year. Outcome measures were quality adjusted life years (QALYs) according to the Short Form 6D (SF-6D) and societal costs estimated from cost questionnaires. Estimated costs and QALYs in both randomisation groups were similar, except for the number of treatment sessions (18.6 for high-grade mobilisation techniques versus 21.5 for low-grade mobilisation techniques), with an estimated cost difference of €105 in favour of high-grade mobilisation techniques ($p = 0.001, 95\% \text{ CI} €43$ to €158). In the entire sample, the average valuation of health improved from 0.597 at baseline to 0.745 after a year. The burden due to adhesive capsulitis was estimated at 0.048 QALY and €4,521 per patient. About half these costs were due to absenteeism which, during the first quarter, amounted to 38\% of the total working hours. In conclusion, the cost-utility analysis does not allow for an evidence-based recommendation on the preferred treatment. Based on the clinical outcome measures, high-grade mobilisation techniques are still preferred to low-grade mobilisation techniques. The estimated substantial burden, both to the patient and to society, suggests that effective early treatment of adhesive capsulitis is warranted to attempt to accelerate recovery.

Key words: Adhesive Capsulitis; Physical Therapy Techniques; Costs and Cost Analysis; Cost of Illness


Postoperative physiotherapy has been shown to reduce the incidence of postoperative pulmonary complications after open abdominal surgery. This study aimed to determine if the addition of deep breathing exercises and secretion clearing techniques to a standardised physiotherapist-directed program of early mobilisation improved clinical outcomes in patients undergoing open abdominal surgery. Fifty-six patients undergoing open abdominal surgery, at high risk of developing postoperative pulmonary complications, were randomised before operation to an early mobilisation-only group or an early mobilisation-plus-deep breathing and coughing group. Mobility duration, frequency and intensity of breathing interventions were quantified for both groups. All outcomes were assessed by a blinded outcomes researcher using a standardised outcomes measurement tool developed specifically for this population. Outcomes included incidence of clinically significant postoperative pulmonary complications, fever, length of stay, and restoration of mobility. There were no significant differences between groups in mean age, anaesthetic time, perioperative morbidity, or postoperative mobility. Outcome data were available for 89\% of enrolled subjects. Overall incidence of postoperative pulmonary complications was 16\%. The incidence of postoperative pulmonary complications in the non-deep breathing and coughing group was 14\%, and the incidence of postoperative pulmonary complications in the deep breathing and
coughing group was 17%, (absolute risk reduction -3%, 95% CI -22 to 19%). There was no significant difference between groups in the incidence of fever, physiotherapist time, or the number of treatments. This study suggests that, in this clinical setting, the addition of deep breathing and coughing exercises to a physiotherapist-directed program of early mobilisation does not significantly reduce the incidence of clinically significant postoperative pulmonary complications in high risk open abdominal surgery subjects.

Key words: Respiratory Therapy, Postoperative Complications, Early Mobilization, Surgery


Communication is the greatest barrier in health care provision for people of non-English speaking backgrounds. The New South Wales Health Standard Procedures stipulate that the Health Care Interpreter Service must be used in consultations with clients who cannot fully comprehend English. This study explored the attitudes, thoughts, and feelings of physiotherapists toward health care interpreters and their service. Interviews and observations were conducted at three different hospitals. Six physiotherapists were interviewed in total. The results showed physiotherapists did not collaborate with health care interpreters for all consultations with clients of non-English speaking backgrounds. Physiotherapists were found to be largely negative in their attitude toward the health care interpreter service. Suspicion and distrust of interpreters, time constraints, and the perceived cost of the service were major themes identified in the interviews. Physiotherapists need to be aware that failure to collaborate with interpreters may result in litigation should there be reason to contest the validity of treatment consent or warnings given.

Key Words: Communication, Immigrants, English, Culture


Clinical measurement of pelvic floor muscle activity commonly involves techniques that are both physically and psychologically invasive. This study investigated transabdominal application of ultrasound to measure pelvic floor muscle action. The specific aims were to establish the face validity of ultrasound measures of displacement of the posterior bladder wall as a reflection of pelvic floor muscle contraction, and the reliability of measurement between raters and between testing occasions. Non-pregnant adult female subjects aged 24 to 57 years were tested in lying with a 3.5 MHz 35 mm curved array ultrasound transducer over the lower abdomen. Posterior bladder wall displacement was observed in both sagittal and transverse planes. Digital vaginal palpation and transabdominal ultrasound were undertaken simultaneously during pelvic floor muscle contractions to confirm that pelvic floor contractions were performed correctly and to grade pelvic floor muscle strength. Displacement (mm) was measured using electronic calipers on the ultrasound monitor screen. In all subjects, a correct pelvic floor muscle contraction was confirmed on digital palpation, and consistent anterior and cephalic movement was observed on screen. Digital strength grading did not correlate with ultrasound measures in either transverse or sagittal planes (r = 0.21 and -0.13). Average
intra-class correlation coefficients for within session inter-rater reliability ranged between 0.86 and 0.88 (95% CI 0.68 to 0.97), and for inter session intra-rater reliability between 0.81 and 0.89 (95% CI 0.51 to 0.96). Transabdominal application of diagnostic ultrasound is a personally non-invasive method for imaging and assessing pelvic floor muscle activity and is both valid and reliable.

Key words: Real-time ultrasound, Transabdominal ultrasound, Pelvic floor muscles, Reliability, Validity


Difficulty performing more than one task at a time is common in people with Parkinson’s disease, resulting in interference with one or both tasks. While studies have shown that greater interference in gait occurs with more complex concurrent tasks, the impact of the type of concurrent task is unclear in the Parkinson’s population. Thus the first purpose of this study was to investigate the effect of the concurrent task (calculation, language, or motor) on gait in people with Parkinson’s disease. As visual cues are commonly used to aid stride regulation in people with Parkinson’s disease, the second purpose of this study was to determine whether this method of increasing stride length was still effective if other tasks were performed simultaneously. Sixteen patients with Parkinson’s disease and 16 gender- and age-matched controls performed six cognitive and motor concurrent tasks when seated, walking 10 m, and walking over visual cues. Stride length decreased in people with Parkinson’s disease when performing the concurrent calculation and language tasks, but not with the motor task. The language task was more complex than the calculation task, thus the effect was not due to task complexity alone. Visual cues were effective in improving stride length whilst maintaining velocity in people with Parkinson’s disease, even when performed under dual task conditions. These findings highlight the importance of the task when assessing and retraining dual tasking during gait, and suggest that retraining dual tasking can occur whilst simultaneously using visual aids to regulate stride length.

Key words: Parkinson’s Disease, Gait, Attention, Cues