received 13 months of traditional outpatient physical therapy, then went on a scheduled one-month therapy hiatus before starting the intensive locomotor training program. The program consisted of ten 90-minute physical therapy sessions over two weeks. The program included the following: Body weight supported treadmill training (BWSTT) with manual assistance, overground training, and independent community integration activities.

Results: At the conclusion of the intensive locomotor program, the participant had a 33% improvement in the Berg Balance Scale and Timed Up-and-Go, a 24% improvement in the six meter walk test, and a 19% increase in the World Health Organization Quality of Life (WHOQOL-BREF) questionnaire.

Conclusion(s): A participant with chronic (>1 yr) SCI AIS D improved in balance, walking ability and self-reported quality of life after two weeks of intensive locomotor training. These findings follow a similar trend seen in long duration protocols.

Implications: This case report shows that positive functional gains in mobility, ambulation, balance and quality of life can be achieved following a short bout of intensive locomotor training. This approach may be more applicable in the current clinical environment, and could save in health care costs, thereby making the intervention more accessible for individuals with chronic motor-incomplete SCI.

Keywords: Intensive locomotor training; Spinal cord injury; Body weight supported treadmill training

Funding acknowledgements: None.

Ethics approval: Ethics approval not required for this case report. Informed consent obtained from the participant, and documentation is in place.

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Special Interest Report Poster Presentation
Number: SI-PO-19-04-Sun
Sunday 3 May 2015 13:00
Exhibit halls 401–403

CASE REPORT: EFFECTS OF STRUCTURED INTRADIALYTIC EXERCISE ON FATIGUE AND QUALITY OF LIFE FOR AN ACUTE CARE PATIENT ON HEMODIALYSIS

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Background: Research has confirmed the positive benefits of exercise in patients receiving hemodialysis (HD). The prevailing protocols include exercise after dialysis or during non-dialysis days. However, in the acute care setting current physical therapy (PT) regimen have been associated with lower patient adherence rate due to patients' decreased inclination to perform exercise due to increased complaints of pain and fatigue, as well as scheduling conflicts. Exercise during dialysis can increase their physical activity in an otherwise idle time and provide safe supervision while improving adherence to exercise, physical performance and promotion of healthier outcomes.

Purpose: The purpose of this case report is to determine the effect of a structured intradialytic exercise program called I-ACTED: Intradialytic Acute Care Therapeutic Exercise Design, on post-dialysis fatigue and quality of life of a patient with end-stage renal disease (ESRD) undergoing hemodialysis in an acute care setting.

Methods: The patient was a 43 year-old male with end stage renal disease who was admitted in an acute care hospital due to staph aureus septicemia. Prior to hospitalization the patient had been on hemodialysis for 3.0 years. Two weeks after admission, the patient was placed on the facility's I-ACTED program, a quality improvement initiative started by the investigators in their facility. I-ACTED is a structured exercise program that is implemented concurrent with the patient's dialysis session and succeeding his routine physical therapy intervention on the non-HD days. The program was intended to be executed within the first two hours of the patient's dialysis session, and consists of the following: aerobic training and lower extremity strengthening exercises using the following instruments; a cycle ergometer and leg press machine. Lower extremity cycling time was performed up to 30 minutes. Exercise dosage was based on rate of perceived exertion (RPE), target HR, BP and subjective symptoms. Intradialytic exercise was done three times during a seven-day period.

Results: The patient's fatigue perception using the Fatigue Severity Scale (FSS), improved by 45% from initial report. In the areas of general health and well-being, both the physical domain and the mental domain measures improved by 14% and 68% respectively, as shown by the Short Form 36 (SF-36). The patient demonstrated stable vital signs and no increased pain throughout the entire episode of care, with the performance of the exercises neither hindering nor affecting the process of hemodialysis.

Conclusion(s): The implementation of the I-ACTED program resulted in positive benefits on perception of fatigue and quality of life in a patient with chronic kidney disease undergoing hemodialysis in an acute care setting. The exercise regimen was implemented safely without any adverse reactions.

Implications: This case report shows the potential benefits of implementing an intradialytic exercise program in acute care. Though this practice is prevalent in other countries, it is not a common practice in the United States. These positive results showed that there is a need for us to develop evidence-based intradialytic exercise protocols that will improve mobility, function and quality of life in people with end-stage renal disease.

Keywords: Exercise; During; Dialysis

Funding acknowledgements: The authors have no outside funding sources to declare.

Ethics approval: As a case report, it did not need to meet the threshold for approval per our institutional review board (IRB).

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Research Report Platform Presentation
Number: RR-PL-1953
Monday 4 May 2015 11:29
Hall 406

IMMEDIATE SYMPTOM RESPONSE TO MANUAL THERAPY TREATMENT FOR NECK PAIN IS RELATED TO RATE AND EXTENT OF RECOVERY

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Background: Manual therapies are commonly used in the management of neck pain to relieve symptoms, restore mobility and hasten recovery. Common practice in manual therapy is using immediate treatment responses to inform both treatment progression and prognosis. Within-session changes in symptoms have been shown to correlate with self-reported recovery rate. This study sought a detailed profile of the trajectory of recovery of neck pain treated with manual therapy and further information about the predictive value of within-session improvements.

Purpose: The aim of this study was to describe the clinical course of a new episode of neck pain during a course of manual therapy treatment and to explore whether the early responses to treatment were related to longer term outcomes.

Methods: Analysis of treatment responses and recovery in participants from two arms of a manual therapy randomised controlled trial. Participants were 181 people with a new episode of neck pain, treated with a course of mobilisation or manipulation of the neck on four occasions over two weeks. The clinical course during the episode of care was described using average pre- and post-treatment pain scores (numerical rating scale 0–10) for each occasion of treatment. Repeated measures *t*-test was used to compare scores within and between sessions. The relationships between immediate treatment effects and time taken to recover and the Global Perceived Effect (GPE) of treatment at 3 months were explored using multivariate regression analyses.

Results: On each occasion of treatment, pain scores significantly decreased with the smallest average within-session change 1.4 (95%CI 1.2 to 1.5). There was also small but statistically significant increases in average pain scores of up to 0.7 (95%CI 0.4 to 1.0) between treatment sessions without regression to the preceding pre-treatment level. The change in pain scores after the first treatment session was independently associated with high GPE scores at three months ($B = 0.2$, 95%CI 0.01 to 0.4). There were also significant univariate associations between the within-session changes in pain and the time taken to recover from the episode of neck pain. However, these associations were not independent of duration of symptoms, self-rated general health, or the presence of headache.

Conclusion(s): These results indicate that people with neck pain who are treated with manual therapy experience a pattern of recovery of symptoms that coincides with the occasions of treatment and features improvement within sessions and slight relapse between sessions. These results also demonstrate that improvements in symptoms within a treatment session are associated with a faster rate of recovery from an episode of neck pain and with patient's overall perception of the benefits of treatment at 3-month follow up.

Implications: Manual therapists can use the information in this study to assist their patients' understanding of the trajectory of their recovery from a new episode of neck pain. In particular, it is helpful for patients to understand that slight relapses between treatment sessions are the norm and not necessarily an indicator of poor outcome. These results also assist clinical reasoning in manual therapy practice by demonstrating a predictive value of short term treatment responses.

Keywords: Manual therapy; Neck pain; Pain measurement

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Ethics approval: The study was approved by the University of Sydney Human Research Ethics Committee.

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