Translation of a Psychologically-Informed Physical Therapy Intervention to Enhance Return to Sport after Anterior Cruciate Ligament Reconstruction

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INTRODUCTION

- Despite successful anterior cruciate ligament reconstruction (ACLR), up to 55% of athletes do not return to their pre-injury level of sport.
- Psychological factors have been implicated in recovery after ACLR.
- There is a need to target modifiable risk factors to improve knee function and return to sport.

PURPOSE

- To describe feasibility, acceptability, and 6-month outcomes of a Cognitive-Behavioral based Physical Therapy (CBPT) program for improving ACLR recovery.

METHODS

- 8 patients (mean ± SD age = 20.1 years, 6 females) underwent unilateral ACLR for complete ACL tear.

CBPT Program

Session 1: What to Know Before Surgery
Knee anatomy, Surgery and recovery expectations, Pain management, Deep breathing exercises

Session 2: Grounding and Activity Plan
Grounding exercise, Graded activity plan, Weekly activity goals

Session 3: What is Next
Self-identity after injury, Staying connected to sport, Finding fulfilment in other activities

Session 4: Monitor your Self-Talk
Positive and negative thoughts

Session 5: Present-Mindedness
Present-mindedness, Setting daily intentions

Session 6: Managing Setbacks
Setback vs. relapse, Identifying and managing setbacks, Coping strategies

Session 7: Guided Imagery and Recovery Plan
Guided imagery exercise, Completion of a recovery plan

RESULTS

- Seven of the 8 patients completed all CBPT sessions.
- Six of the 8 participants reported that the benefits received from the CBPT intervention somewhat or far outweighed the effort put into it, and 1 patient felt the benefit equaled the effort.
- Five patients felt CBPT was as important as other postoperative services for recovery, while 1 patient felt CBPT was more important.
- Six patients reported they were satisfied with their outcome after surgery and 1 patient was very satisfied.

Figure 1. Preoperative and 6-month outcome scores

Figure 2. Return to sport outcome based on SPORTS score at 6 months.

CONCLUSION

- The CBPT program is a feasible and acceptable intervention to address psychological functioning and promote recovery after ACLR.
- Future efforts are ongoing to determine the efficacy of the program within a larger randomized trial.