

**Cognitive-Behavioral-Based Physical Therapy for Improving Recovery After Orthopaedic Traumatic Lower Extremity Injury (CBPT-Trauma)**

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**Purpose:** Extremity trauma has been shown to negatively affect long-term self-reported physical function, the ability to work, and participation in recreational activities and contributes to increased rates of anxiety and/or depression. Cognitive behavioral therapy (CBT) pain programs have been shown to mitigate these effects. However, patient access issues related to limited number of providers, financial and transportation constraints, and the competing demands of treatment focused on the physical sequelae of traumatic injury limits patient participation in this treatment modality. We studied a telephone-delivered Cognitive Behavioral-Based Physical Therapy (CBPT-Trauma) program to determine its effectiveness following lower-extremity trauma. The study goal was to determine the impact of the CBPT-Trauma program on improving physical function, pain, and physical and mental health in the orthopaedic trauma population.

**Methods:** This study was a phase III, prospective, double-blind randomized clinical trial. Patients were between the ages of 18 to 60 years with at least 1 acute orthopaedic injury to the lower extremity or pelvis/acetabulum requiring operative treatment. Individuals at risk based on 1 of 3 psychosocial risk assessments, were block-randomized in a 1:1 ratio to either education control group (n = 160) or CBPT-Trauma group (n = 165). In both groups, participants had 6 sessions of planned telephone interactions with a certified physical therapist to receive the assigned intervention (CBPT-Trauma or Education control). Follow-up was scheduled for 6 and 12 months following hospital discharge. The primary outcome was self-reported physical function (PF) assessed using the PROMIS (Patient-Reported Outcomes Measurement Information System PF item bank.

**Results:** The study randomized 325 patients at 6 Level I trauma centers and one military facility to CBPT-Trauma or an Education program after hospital discharge. The patient population was 60.6% male and non-Hispanic White (57.8%) with a mean age of 36.9 years. Most patients (88%) had multiple injuries. Follow-up for the primary outcome was available for 84% of participants at 6 months and 82% of participants at 12 months. The final analysis of our primary and secondary outcomes will be presented at the 2022 OTA Annual Meeting.

**Conclusion:** Overall, our interventional approach (CBPT-Trauma) is designed to empower patients to return to a productive life both inside and outside the home and ultimately improve their general physical and mental health. This is one of a very limited number of randomized controlled trials to have tested a CBT intervention for the orthopaedic trauma population.