Poster 46
Performance of Life Habits of Persons With Traumatic Brain Injury Living in Different Environments. Marie-Eve Lamontagne (Université de Montréal, Beaufort, QC, Canada), Bonnie R. Swaine.
Disclosure: None declared.

Objective: To describe the performance of life habits (eg, meal preparation, leisure, occupational activities) of people with traumatic brain injury (TBI) living in varied residential settings (alone, with close relative, foster family, alternative housing, private nursing home, long-term care). Design: Cross-sectional survey. Setting: Residential setting of participant. Participants: 131 adults (71% male; mean age, 39±12.2y) with moderate to severe TBI were interviewed using the Life-H questionnaire. Interventions: Not applicable. Main Outcome Measures: Level of performance of each life habit (Life-H) (no difficulty, with difficulties, by substitution, unable to perform) and type of assistance needed (no help, human/technical help, adaptations). Satisfaction with each life habit performance was also noted. Results: Mean percentage of life habits performed by the group was 72.5%±15.1%, with the greatest difficulties observed in the performance of social life habits (eg, interpersonal relationships, occupational activities). Persons living in foster families had the highest performance (76.8%), but performance and satisfaction levels did not differ among residential settings (P=.15). Conclusions: Human help is often required to perform life habits after TBI. Residential setting does not appear to be related to the performance of life habits for persons with TBI.
Key Words: Brain injuries; Housing; Rehabilitation.

Poster 47
Therapeutic Alliance in Postacute Rehabilitation After Traumatic Brain Injury. Mark Sherer (Methodist Rehabilitation Center, Jackson, MS), Clea Evans, Jae Lee, Jim Irby, Risa Nakase-Richardson, Stuart Yablon.
Disclosure: None declared.

Objectives: To determine which factors determine the degree of therapeutic alliance of persons with traumatic brain injury (TBI) and their family members, with the treatment team in postacute brain injury rehabilitation (PABIR); and to determine the influence of degree of therapeutic alliance on client outcome after PABIR. Design: Inception cohort, observational study. Setting: Outpatient multidisciplinary community integration program for persons with TBI. Participants: 69 persons (43 men) with TBI with mean age ± SD of 29.3±16.2 years and mean education of 12.6±2.5 years. Injury severity was moderate and severe, with mean emergency department admission Glasgow Coma Scale score of 8.0±3.7. Interventions: Not applicable. Main Outcome Measures: Modified California Psychotherapy Alliance Scale (client, family, and clinician forms), productivity status at discharge from PABIR. Results: Client ratings of therapeutic alliance were predicted by client years of education. Clinician ratings of therapeutic alliance were predicted by family dysfunction and the discrepancy between clinician and family views of the client’s functioning. Productivity (work) status at program discharge was predicted by client ratings of therapeutic alliance with a trend for clinician ratings. Conclusions: Family functioning and family perceptions of client functioning influence therapeutic alliance in PABIR programs. Key Words: Brain injuries; Rehabilitation; Therapeutics; Treatment outcome.

Poster 48
Experience-Based Nutrition Support for Patients With Spinal Cord Injury and Pressure Ulcers: Protocol Targets Long-Term Savings. E. Phillips (Magee Rehabilitation Hospital, Philadelphia, PA), N. Short.
Disclosure: None declared.

Objective: To develop a nutrition support protocol to prevent and treat pressure ulcers in spinal cord injury (SCI). Design: Experiential-based findings. Setting: Acute rehabilitation hospital. Participants: Inpatients with SCI and pressure ulcers admitted for physical rehabilitation. Intervention: Implement a nutrition support protocol for the management of pressure ulcers in SCI, based on current literature and clinical experience. Main Outcome Measures: Malnutrition, decreased muscle mass, and obesity are key nutritional risk factors for pressure ulcer development in SCI. Results: This protocol identifies and links pressure ulcer risks with specific guidelines for early intervention. Traditional protocols require justification that a standard enteral formula is unsuccessful before a specialized formula is utilized. However, for these high-risk patients with compromised nutritional status, use of standard formulas may prolong healing time and further impair nutritional status. Once specific nutritional goals are achieved, patients can then be transitioned to the less costly standard nutritional formula. Conclusions: Institutions that provide health care to persons who are at high risk for pressure ulcers need to be willing to adjust their protocols to invest upfront in a more appropriate nutrition support regimen in order to improve long-term clinical and financial outcomes.
Key Words: Nutrition; Pressure ulcers; Rehabilitation.

Poster 49
Relationship Between Volume of Cortical Structures and Scores on Memory Testing in People With Traumatic Brain Injury. M. Glenn (Spaulding Rehabilitation Hospital, Boston, MA); G. Strauman, R. Goldstein, K. Kelkar, T. O’Neill-Pirozzi, S. Rauch, C. Savage.
Disclosure: None declared.

Objective: To determine if there is an association, in people with traumatic brain injury (TBI) more than 1 year postinjury, between scores on memory testing and volume of cortical structures known to be involved in strategic memory. Design: Cross-sectional and survey. Setting: Academic medical center. Participants: 28 subjects with TBI. Interventions: Not applicable. Main Outcome Measures: Correlation coefficient between Hopkins Verbal Learning Test (HVLT) delayed recall score and volume of 3 cortical structures determined by magnetic resonance imaging. Results: There was a near-significant (P=.06), modest correlation (r=.36) between hippocampal volume and delayed recall score on the HVLT. There was a significant (P=.03), modest correlation (r=.40) between the volume of ventrolateral prefrontal cortex and free recall score. There was not a significant (P=.21) correlation between middle frontal gyrus volume and delayed recall score. Conclusions: There is an association in people with TBI between scores on memory testing and the volume of 2 cortical structures thought to be involved in encoding and storage and the use of semantic strategies in verbal memory. This association helps to confirm the relationship between these structures and the above functions and their importance in the pathophysiology and rehabilitation of TBI. Key Words: Brain injuries; Rehabilitation.

Poster 50
Increased Ankle Moments and Forces During Walking as a Result of Lower-Extremity Virtual Reality Training of Persons Post-stroke. J. Deutsch (UMDNJ, Newark, NJ), A. Mirelman, B. Partritti, P. Bonato.
Disclosure: None declared.

Objective: To confirm the relationship between these structures and the above functions and their importance in the pathophysiology and rehabilitation of TBI.