Objective

- To report recovery from mild traumatic brain injury (MTBI) across multiple domains in a 12-month follow-up.

Methods

- A consecutive sample of 74 previously healthy adults with MTBI between the ages of 18 and 60 years and 40 orthopedic controls (i.e., ankle injuries) completed assessments at 1, 6, and 12 months after injury.

- Outcome measures included:
  - Post-concussion symptoms [Rivermead Post Concussion Symptoms Questionnaire]
  - Fatigue [Barrow Neurological Institute Fatigue Scale]
  - Insomnia [Insomnia Severity Index]
  - Pain [Pain Scale of the Ruff Neurobehavioral Inventory]
  - Depression [Beck Depression Inventory]
  - Traumatic stress [PTSD-Checklist-Civilian Version]
  - Quality of life [Quality of Life after Brain Injury]
  - Satisfaction with life [Satisfaction with Life Scale]
  - Resilience [Resilience Scale]
  - Return to work [in days]
  - Cognition [Rey Auditory Verbal Learning Test, Stroop, Trail Making, verbal fluency, Finger Tapping, and the following subtests from WAIS-III: Information, Digit Span, Digit-Symbol Coding, and Symbol Search]

Results

- Patients with MTBI reported more post-concussion symptoms and fatigue than the controls at the beginning of recovery.

- By six months following injury, patients with MTBI did not differ as a group from controls on cognition, fatigue, or mental health, and by 12 months their level of post-concussion symptoms and quality of life was similar to that of controls.

- Almost all (96%) patients with MTBI returned to work/normal activities (RTW) within one year.

- A subgroup of those with MTBIs (26.7%) and controls (17.2%) reported mild post-concussion-like symptoms at one year.

- A large percentage (62.5%) of the subgroup who had persistent symptoms had a modifiable psychological risk factor at one month (i.e., depression, traumatic stress, and/or low resilience), and at six months they had greater post-concussion symptoms, fatigue, insomnia, traumatic stress, and depression, and worse quality of life.

- All of the control subjects who had mild post-concussion-like symptoms at 12 months also had a mental health problem (i.e., depression, traumatic stress, or both).

Conclusion

- The prognosis of MTBI in previously healthy adults was favorable.

- Modifiable psychological factors (e.g., traumatic stress, depression, and low resilience) were common in those with persistent long-term symptoms.