

## **RESEARCH SUMMARY:**

### **Patterns of fatigue and its correlates over the first 2 years after traumatic brain injury**

**The Questions:** How does fatigue develop in the first two years after traumatic brain injury (TBI)? What other things (such as sleep problems, depression, problems with thinking, problems with completing activities) may be related to or contribute to fatigue?

**Past Studies** show that between 50-80% of individuals with TBI have problems with fatigue. Fatigue has been found to be related to depression and sleep disorders. Different types of fatigue may require different types of treatment. There have not been studies to see if different things such as problems with thinking and depression are more or less important at different time periods after TBI.

**This study** focused on 51 individuals with TBI who volunteered for a fatigue study. These individuals had all been admitted to Santa Clara Valley Medical Center for rehabilitation because of a TBI. These individuals were assessed at up to 6 different time periods after their injury (3, 6, 12, 18, and 24 months after injury). They completed questionnaires and were interviewed using common tests that are used for fatigue. Participants were also asked questions about pain, sleep problems, depression, issues with thinking and completing activities, and issues related to doing things in their community.

The researchers found that there was some decrease in fatigue by the first year after TBI. There were also improvements in pain, sleep quality, thinking issues, and problems with completing daily activities in the first year after injury. There were no large changes between one and two years after injury. People who reported that they had increased fatigue had more problems with thinking, motor activity (like stumbling, losing balance), and being able to do things (general functioning) than those with stable fatigue or decreasing fatigue.

**Who May Be Affected By These Findings:** Individuals with traumatic brain injury, caregivers and family members, rehabilitation personnel, researchers

**Caveats:** These were early findings for a study that has not been completed yet. The tests used to measure fatigue were not specifically designed for individuals with TBI. There was some concern that tests for things like depression have questions in them related to fatigue problems (so people might appear depressed when they are actually fatigued or fatigued when they are actually depressed).

**Bottom Line:** Fatigue appears to decrease in the first year after brain injury and then does not change much by the second year. Individuals who do report increased fatigue are more likely to report issues with thinking, motor tasks, and general functioning.

#### **Find This Study:**

Bushnik, T., Englander, J., & Wright J. Patterns of fatigue and its correlates over the first two years after traumatic brain injury/ Journal of Head Trauma Rehabilitation, 23(1), 25-32.