

Brain Injury Recovery – Sleep

When the brain is injured, the person's sleep/wake cycle often becomes disrupted. So, many people who have sustained a brain injury experience difficulty getting to sleep, maintaining uninterrupted sleep, and often remain quite tired during the day.

The severity of the injury does not appear to matter, people with mild, moderate and severe brain injury report sleeping difficulties. It has been found that when these individuals do sleep, their sleep is lighter, and less restful, where they often awake during the night. When a person is not getting enough sleep at night, they often become excessively tired during the day, and frequently experience feelings of depression.

Lack of sleep causes lost cognitive sharpness with distinct decreases in attention, reaction time, capacity for new learning, and working memory. Some studies have revealed that brain trauma disturbs the normal cascade of neurotransmitter release, which causes frequent night-time awakenings known as "sleep fragmentation." Damage to the hypothalamus or the circuits linking it to the brain stem, also appear to play a role in at least some sleep disturbances.



Studies of patients with brain injury in sleep labs shows them waking up for brief moments as many as 40-50 times a night, interrupting and shortening the periods of SWS (slow wave sleep) and REM (dream) sleep. This robs sleep of its restful, restorative character, leaving people feeling tired, de-energized and out of sync with the rest of the world.

What Can You Do?

Talk to your doctor
Follow the tips on the next page...

Top 10 Tips for Improving Sleep!

1. Do not go to bed until you are drowsy:

Delaying going to bed until drowsy increases the chances of falling asleep. If you are not sure, go to bed at the same time every night.

2. Get up at the same time each morning, including weekends:

Maintaining a reasonably early awakening time is one of the important time cues for the 24-hour circadian sleep-wake rhythm. Breaking this rule causes sleep disruption in both good and poor sleepers.

3. Do not take naps:

Napping during the day disrupts the sleep-wake cycle, particularly if the nap occurs more than 10 hours after the major sleep period.

4. Reduce or eliminate the use of alcohol:

Do not drink alcohol later than 2 hours before bedtime.

5. Reduce or eliminate the use of caffeine:

Do not consume caffeine after 6:00 pm.

6. Reduce or eliminate the use of nicotine:

Do not smoke within 4 hours of your bedtime.

7. Exercise regularly:

Try to avoid strenuous physical exertion after 6:00 pm.

8. Eat a snack and take a bath before bed:

A light carbohydrate snack such as crackers and milk may help promote sleep in those who tend to eat most in the second half of the day.

A hot bath taken 90 minutes before bedtime will raise your body temperature initially...then the inevitable drop in body temperature will leave you feeling sleepy right when it is time to go to bed.

9. Prepare the sleep environment:

Your environment should be comfortable, with minimal levels of light and noise. Usually, a cooler room with lots of blankets works better for most people. Some people have found a "white noise" machine effective for falling asleep.

10. Only use your bed for sleeping:

Avoid using your bed to watch TV, work, read, etc. When you go to bed, your body will know it is time to sleep.