



The Role of Vestibular Rehabilitation in Concussion Treatment

by e3 Diagnostics

After a concussion, many health professionals prescribe only one remedy for treating symptoms: rest. For decades, the prevailing thought within the medical industry was that rest alone is the best method for reducing and eventually eliminating the effects of a concussion.

Sometimes, this treatment actually is enough. In fact, more than 80 percent of concussion patients experience a full recovery within just a few weeks (usually 1 to 3 weeks total). However, the other 20 percent of patients typically take much longer to experience the same levels of recovery. For these patients, research indicates that vestibular therapy can significantly reduce overall recovery time.

Vestibular Impairments After a Concussion

The signs of vestibular impairment are generally apparent immediately following a concussion.

Oftentimes, the symptoms are simply considered side effects of the concussion. (Some of the signs of vestibular impairment may include headache, dizziness, blurred vision, and balance problems.) In standard concussion treatment, with proper rest, the patient seems to improve after just a week or two, and the physician does not perform a follow-up assessment on vestibular function. The patient may appear to experience a full recovery from the concussion and be cleared to return to normal activities. However, many of these patients still have vestibular impairments that are simply overlooked. Without proper assessment and therapy, it may take many more months or even years for the vestibular dysfunction to improve.

When to Check for Vestibular Impairment

Some experts may argue that a vestibular assessment should always be performed as part

of the recovery process for concussed patients. Others believe that an assessment is only necessary when patients continue to experience symptoms of vestibular dysfunction. However, these symptoms are often so mild or imperceptible that they're never mentioned to the physician. Other times, the patient has simply acclimated and no longer considers the side effects "symptoms" at all.

Some of the most common signs reported by patients or medical professionals include "brain fog" or "fuzzy" thinking, headache, dizziness or balance issues, double vision, or sensitivity to light. Most experts would agree that any of these symptoms warrant a vestibular function assessment if they continue to occur weeks after the initial concussion.

New Methods and Technologies for Vestibular Rehabilitation and Diagnoses

Researchers have been working on new methods and technologies to assist with vestibular rehabilitation for years. Some methods are quite simple, yet yield amazingly accurate results. For example, there is a method for diagnosing vestibular ocular function that has a 90 percent accuracy rate for diagnosing patients with a concussion. The only tools required for this test are a metronome and a tape measure.

Other methods require more innovative technologies such as Videonystagmography goggles (VNG goggles) or Electronystagmography (ENG) electrodes. VNG goggles monitor the eyes using

video, while ENG electrodes are placed around the eyes to monitor movement. These tests may be performed with the inclusion of a rotary chair, which moves the patient into various positions to monitor vestibular function during movement.

Final Thoughts

While it's true that 80 percent of concussion patients experience a complete or near-complete recovery in just a few weeks, the ongoing effects of a concussion can be debilitating for the remaining 20 percent. It's also possible that some patients who are released from their doctor's care are actually still experiencing vestibular dysfunction. For these reasons, it's clear that proper vestibular assessments are crucial during concussion recovery treatment.

When dysfunction is noted, vestibular rehabilitation may be the key for reducing recovery time for many concussion victims. Thanks to the new methods and technologies available to the medical community, it's become easier to identify vestibular dysfunction so these patients can gain access to therapies they need for a full recovery.

About the Author

e3 Diagnostics is a nationwide team of local experts that have worked in the field of instrumentation for years. Our experience, both local and nationwide, allows us to set the standard for the highest level of expertise in our field. We are a committed team, driven by our desire to apply our many years of experience and knowledge to assist you.