

# Recognizing and Treating Concussions in the Elderly

Falls are the leading cause of fatal and non-fatal injuries in older adults, and according to the Centers for Disease Control (CDC), one in four Americans over 65 years old fall each year.

For many older adults, falling is associated with hip, wrist, or ankle fractures. This focus on broken bones often leads to the under recognition of less visible trauma, like concussions.

But sometimes doctors miss concussion symptoms such as mobility and memory problems, and attribute them to other common concerns such as:

- Dementia
- Depression
- "Normal aging"

Older adults often under-report symptoms they are experiencing, which makes assessment and diagnosis more difficult.

They may have:

- A tendency to downplay their symptoms, fearful it may lead to less independence.
- Poor insight into their cognitive limitations, making it hard to determine what's pre-existing versus what's due to the concussion or traumatic brain injury (TBI).
- More chronic health conditions and functional limitations that may include vision, hearing, mobility, communication or cognitive issues.
- Vague or non-specific symptoms, such as changes in appetite or mood, and incontinence in some cases.
- Mental health concerns, such as depression, anxiety, or substance abuse.

**There is also a greater rate of divorce in this age group, which can contribute to isolation.**

## Steps you can take

### 1. Schedule a full medical examination

Getting the proper treatment right away is key to healing and preventing further injury and decline in function. If you or your love one are having concussion symptoms, it is important to seek help from a professional who has experience working with brain injury.

The symptoms of a concussion might not become apparent for days, and failing to treat the injury during this critical period could be lead to serious complications down the line.

### 2. Rest the body and mind

For many years, it was believed a person had to stay awake for at least 24 hours after a concussion, but this recommendation has changed in recent times. If the concussion is severe, the doctor will likely suggest emergency care. Mild concussions typically require only 2 or 3 days of rest, which includes plenty of sleep and as little stimulation as possible.

### **3. Avoid certain substances**

Unless the doctor has given you or your loved one a list of safe medications to take, most over-the-counter painkillers and anti-inflammatory medications should be avoided. Medications such as these can dilate blood vessels and increase the risk of brain hemorrhages. Avoid alcohol, tobacco products, stimulants like caffeine, and any other products that can affect the cardiovascular system.

### **4. Take care of lingering discomfort**

Discomfort is a completely natural symptom of a concussion, but it should never be debilitating. You or your loved one should be able to sleep somewhat comfortably and resume all of his or her regular daily activities within a few days. For minor headaches, the doctor may recommend acetaminophen and an ice pack to keep the discomfort at bay. If secondary problems such as vomiting or a fever occur, go to the emergency room as soon as possible.

### **5. Post-concussion care**

Most people recover from a concussion in a few weeks, but sometimes recovery can take much longer. This longer recovery time may be an indicator of post-concussive syndrome. This is when symptoms like headaches, dizziness, and problems with concentration and memory linger longer than expected. A physical examination can help determine the source of post-concussion headaches and recommend tools like manual therapy or medication to treat them.

A Physical Therapist can work with you to increase your strength and endurance without increasing concussion symptoms to allow you to return to all your normal activities. An Occupational Therapist can address balance issues while incorporating mental challenges at the same time to improve unsteadiness and concentration problems.

### **6. Dizziness**

Dizziness is one of the most common complaints in older adults, with at least 25% reporting they feel unsteady or off balance. A physical therapist can determine what is causing the symptoms by performing a thorough history and examination.

Some treatments addresses vision and the connections between the brain and eyes. Our brain processes the information we gather through the eyes, and the two exchange that information seamlessly to meet visual demands like reading and writing. Concussions can create an imbalance in this network, which is what this treatment seeks to improve.

### **7. Emphasize the importance of a routine schedule with regard to sleep, nutrition, hydration, stress management, and physical activity**

Healing requires a lot of calories, so nutritional intake may need to be increased while your loved one is recovering from the injury. The level of physical activity will need to be adjusted based on their pre-injury activity levels, so it may be a good idea to recommend they take short walks accompanied by someone else; a physical therapist can help you plan to increase activity levels safely.

## 8. Address sleep issues

Poor sleep can contribute to and exacerbate concussion symptoms. Sleep changes in this population are widespread and can be significant. Older adults enjoy less deep sleep and have more difficulty maintaining sleep. Their internal biological clock shifts to earlier bed and wake times. They may also be taking medications that tend to disrupt sleep. Other serious consequences to poor sleep including:

- Difficulty sustaining attention / slower reaction time
- Decreased ability to complete daily tasks
- Increased impairments in concentration and memory
- Higher occurrence of mood and anxiety related symptoms
- Increased pain
- Adverse effect on relationships

### **There are a number of barriers or other post-injury factors that need to be considered.**

1. **Insurance:** Medical insurance may limit providers and the number of visits, which may require out of pocket costs.
2. **Transportation:** Transportation will be needed to follow up appointments and therapy sessions.
3. **Tendency not to self-advocate:** You may need to take a more active role in this area and facilitate communication with other treatment providers. Get releases to speak with them to ensure everybody's on the same page.
4. **Other medical conditions that impede the recovery model:** Take into account if you or your love one has orthopedic conditions that may limit their ability to get physically active or if they are undergoing treatment for other conditions that are stressful or time-consuming, which may limit their ability to participate in treatments.
5. **Role of mood and anxiety:** Many older adults may have concerns about normal age-related cognitive decline and may be anxious about developing dementia. Will there is some evidence of a link between concussion and Alzheimer's, concentration and memory problems are common with concussion but not necessarily indicative of dementia.

Despite older age being an independent predictor of worse outcome from a concussion or TBI, there are no evidence-based guidelines for the clinical management of older adults following a TBI. This is due in part to limited research focus on older adults with TBI in general, since most research is conducted on younger populations, specifically athletes. Older adults, particularly those with pre-existing functional impairment or multiple comorbidities, are often excluded from TBI research altogether. The lack of research is concerning because older adults are at a greater risk of poor outcomes following concussion compared to younger adults, especially those who are hospitalized after their head injury.