Falls are the leading cause of head injuries among the elderly. One of the most serious types of head injuries is a subdural hematoma, which consists of a collection of blood on the surface of the brain. The terms acute, subacute, and chronic reflect how long it takes blood to collect. Acute subdural hematomas usually result from a serious head injury, whereas chronic subdural hematomas can occur spontaneously or after a very minor head injury, especially in the elderly. These tend to go unnoticed for many days to many weeks.

A subdural hematoma is an emergency condition. According to the Washington Hospital Center in Washington, D.C., acute subdural hematomas are among the most lethal of all head injuries. They expand very rapidly, leaving little room for the brain, and are associated with brain injury. Treatment includes performing lifesaving measures, controlling symptoms, and minimizing permanent brain damage.

Healthcare providers should be prepared to seek medical attention following a significant head trauma or mental deterioration in the elderly. Please take the time to review the circumstances surrounding the following situation and make changes as necessary at your facility.

The Situation
A man was admitted to a nursing home following hospitalization for treatment of meningitis and hydrocephalus. His family chose the nursing home because he had briefly stayed there four years earlier while recovering from a right parietal craniotomy for tumor removal. At that time, he received physical therapy and was eventually discharged back to his home upon regaining some functional abilities. His family was pleased with the care and services that he received and wanted the same for him again.

Unfortunately, the man’s brain tumor had reoccurred, leaving him with dizziness, loss of balance, and weakness on his left side. He had difficulty recalling things immediately, but seemed otherwise alert and oriented. A recent surgery had caused complications, so the family opted not to proceed with anymore aggressive measures because of his weakened state.

During his first week at the facility, the man rapidly developed more complications, including seizures and a blood clot in his left leg, so he was taken back to the hospital. He was treated at the hospital for four days and returned to the facility with orders for padded ¾-length siderails to provide a physical barrier during seizures and when independently moving in bed, since his hemiparesis made his movements jerky and erratic. He also was to be given an anticoagulant as a preventive measure for thromboembolic disease.

Over the next few days, the man’s condition worsened. He reported experiencing double vision and became more and more restless while in bed. One morning, a phlebotomist (from a consultant lab company) walked into the man’s room and found him struggling to sit on the edge of his bed.

The phlebotomist assisted him in sitting upright and proceeded to draw his blood. When she was finished, she helped the man lie back down and left his room without raising the bed’s siderails. Shortly thereafter, the man’s bed alarm sounded and the staff found him lying on the floor after falling from his bed.

The staff arriving at the scene asked the man if he had struck his head, and he replied that he had. His head had no visible injury, but there were red marks on his back and shoulder, to which they applied ice packs. A staff nurse performed a head-to-toe assessment and found no other injuries, so they used a lift to put the man back in bed.

About this time, the nurse supervisor arrived and was informed of the incident. The supervisor performed a neurological check of the resident and found no change in his condition since his last admission assessment. She notified the man’s spouse and physician about the incident and explained that there were no significant injuries. The physician ordered neurological checks to be done every 15 minutes for the first hour and hourly checks for the next four hours. The nurses were to immediately notify the physician if any changes occurred.

Within the next five hours, the therapists noticed the man was less focused during treatments and complained of nausea and a severe headache. One therapist notified the staff nurse, who stated that the man was not due for another pain reliever, so she encouraged him to lie down and rest until
lunch. When lunchtime came, the man attempted to eat but became nauseated and vomited. He went back to sleep after telling the nurse, “The food must have disagreed with me.”

Three hours later, the oncoming nurse arrived and was informed of the fall. The staff nurse told the oncoming nurse that the man’s neurological checks were fine. Afterward, the oncoming nurse went to the man’s room to assess him and found him unresponsive. About that time, the man’s family entered his room for a visit. The man was immediately sent to the hospital, where he died later that day from a subdural hematoma.

The following day, the administrator and director of nursing conducted an investigation of the fall and determined that the phlebotomist had left the man’s siderail down, which enabled him to fall out of bed when he became restless. They implemented a new policy that informed all independent contractors (on their requisition forms) when a particular resident had a siderail order.

Months after the man’s death, his spouse filed a wrongful death lawsuit against both the facility and consultant laboratory that employed the phlebotomist. The alleged negligence focused on the siderail issue and the staff nurse’s negligence in missing the signs of an intracranial bleed, which resulted in a delay in getting proper medical attention for the man.

The staff nurse defended her actions, stating the symptoms caused by the man’s brain tumor were similar to those associated with intracranial bleeding, such as left-sided weakness, tiredness, headaches, etc. However, she had no explanation for not taking action when the man became nauseated and vomited.

The man’s neurosurgeon testified that, whether the man was sent to the hospital right after the fall or later on, the only treatment option was surgery. And the family had previously made it clear that they did not want any aggressive measures taken because of the man’s weakened state. The surgeon further stated that no one could be sure when the intracranial bleed started, as an unwitnessed seizure also might have caused it. The case was mediated and all parties agreed to a settlement.

**Protecting Your Residents and Facility**

A crisis of the neurological system can be the most challenging to monitor and evaluate for any healthcare professional. Whether it’s a brief check of neurological status or a comprehensive neuro exam, a nurse’s assessment may uncover nervous system dysfunction before it is too late. Therefore, it is essential that every nursing facility has policies and procedures, coordinated by the medical director, to guide and address when and how these exams should be done. Consider the following when developing your plans:

1. Have a licensed nurse perform neurological checks after all unwitnessed falls involving residents with a history of confusion or residents with a suspected head injury.
2. Check for signs and symptoms of head injury, which include one or more of the following:
   - unusual drowsiness or can’t be awakened (easily or at all), mental confusion, slurred speech
   - nausea and forceful or repeated vomiting, stiff neck and fever
   - seizure activity
   - unequal pupils, papillary response, or accommodation
   - clumsy walking, stumbling, or other problems with use of extremities, areas of numbness, parasthesias
   - headache (mild or severe), dizziness, double vision, or blind spots
   - increased blood pressure or a marked drop in blood pressure
   - decrease in pulse and/or increased and shallow respirations (these are associated with intracranial pressure)
   - unequal grasp and/or nonexistent extremity movement (these are associated with cerebral damage)
3. Conduct an initial thorough exam at the location where the resident was found, without moving him or her. Wear gloves when necessary and provide as much privacy as possible.
4. Evaluate the level of consciousness and mentation of the resident. A change is usually the first clue to a deteriorating condition. Since terms, such as lethargy, are frequently used imprecisely, it is wise to descriptively document how the resident responds.
5. Check pupil reaction, blood pressure, temperature, pulse, respirations, grasp, and active range of motion of all extremities. If neck or spinal injury is suspected, keep the resident still and call for emergency help.
6. Obtain orthostatic blood pressures per facility protocol. Move the resident to his or her bed only after a full assessment of injuries or potential injuries is complete, and use a method that will protect the resident from any further injury.
7. Perform neurological checks according to the frequency indicated on the medical director’s or attending physician’s orders. In addition, subsequent assessments should be problem-focused, zeroing in on the parts of the nervous system affected by the resident’s condition. The resident’s diagnosis and the acuity of his or her condition will determine how extensive your problem-focused assessments will be and if you should conduct them more frequently.
8. Be sure to compare your findings with those of previous exams. Through comparison, you’ll be able to spot changes and trends and, when necessary, intervene quickly and appropriately.
9. Immediately notify the resident’s physician of any sign of deterioration in the resident’s status.

The neurological assessment is a key component in the care of residents with known or suspected head trauma. It can help you detect the presence of injury and determine the type of care that you need to provide. By taking these precautionary measures, you can protect your residents and facility.

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The GuideOne Center for Risk Management is dedicated to helping churches, senior living communities, and schools/colleges safeguard their communities by providing practical and timely training, and resources on safety, security, and risk-management issues. For more information, phone (877) 448-4331, ext. 5175; or e-mail slc@guideone.com, or visit www.guideone.com. To send your comments to the author and editors, e-mail williams1006@nursinghomesmagazine.com.