

Medicare Risk Adjustment Coding Focus

Cerebral Hemorrhage

Cerebral or brain hemorrhage is a type of stroke which occurs when there is bleeding around or within the brain. These strokes are caused by a ruptured or torn artery in the brain, which leads to localized bleeding. Strokes are the fourth leading cause of death in the United States, with hemorrhagic strokes accounting for roughly 13% of all strokes.¹ There are two types of hemorrhagic stroke, intracerebral and subarachnoid.²

Cerebral hemorrhages occur rapidly and are life-threatening as the excess blood causes increased pressure within the brain and deprives the brain of oxygen, which causes the brain cells to die.

Causes of cerebral hemorrhage

There are several causes of brain hemorrhage, some of which include:

- Aneurysm (a weakened blood vessel that swells and bursts)
- High blood pressure, which can damage blood vessel walls
- Blood or bleeding disorders
- Head trauma, from an accident or injury
- Brain tumors
- Excessive alcohol use, smoking or use of illegal drugs

While cerebral hemorrhage is more common among adults, it can also occur in children in the form of pediatric stroke.³

Symptoms and treatment

There are multiple symptoms of cerebral hemorrhage, including a sudden and severe headache, numbness or tingling, loss of motor skills, weakness in one arm or leg, changes in vision, seizure or loss of consciousness.

As a cerebral hemorrhage is life-threatening, emergency medical intervention is required. Tests such as a CT scan or MRI are used to determine if there is bleeding and to locate the cause of the bleed. Prompt medical treatment is vital to help minimize any damage caused by the hemorrhage and will depend upon the type and

location of the bleeding. Surgery may be needed to repair ruptured vessels, and medication may be administered to control blood pressure or to prevent seizures.

Coding guidance

Correct coding for cerebral hemorrhage will depend on the location of the bleeding as well as any affected areas or arteries, as documented in the medical record.

In ICD-9-CM, codes for nontraumatic cerebral hemorrhage (HCC 99) include subarachnoid hemorrhage, code 430, intracerebral hemorrhage, code 431, and other and unspecified intracranial hemorrhage, code category 432.⁴ The code sets for nontraumatic cerebral hemorrhage (HCC 99) in ICD-10-CM contain much greater detail and the medical record will need to be reviewed thoroughly in order to accurately code to the highest level of specificity, based on the information provided.

Nontraumatic subarachnoid hemorrhage, code category I60, provides additional information such as the specific artery and affected side. Nontraumatic intracerebral hemorrhage, code category I61, contains codes that identify the specific part of the brain affected. Other and unspecified nontraumatic intracranial hemorrhage, code category I62, includes details regarding the acuity and location of the hemorrhage.⁵

Resources

- ¹ WebMD website. "Brain Hemorrhage (Bleeding): Causes, Symptoms, Treatments" (accessed September 20, 2016): <https://www.webmd.com/>
- ² Hemorrhagic stroke. (accessed September 20, 2016) from <https://www.stroke.org/>
- ³ Cleveland Clinic. (2013, July 3). *Cerebral & Intracerebral Hemorrhage* | Cleveland Clinic. (accessed September 20, 2016): <https://my.clevelandclinic.org/>
- ⁴ Hart, A. C., Stegman, M. S., & Ford, B. (2011). *ICD-9-CM for physicians, volumes 1 & 2: 2012 professional: International Classification of Diseases, 9th revision, Clinical Modification*. Eden Prairie, MN: OptumInsight.
- ⁵ Anita Schmidt, K.K., & P.W. (2016). *ICD-10- CM Expert for Physicians*. Optum360

Reference the ICD-10-CM Codebook, CMS-HCC Risk Adjustment Model(s) and AHA Coding Clinic for complete code sets and official coding guidance.