STROKE AWARENESS

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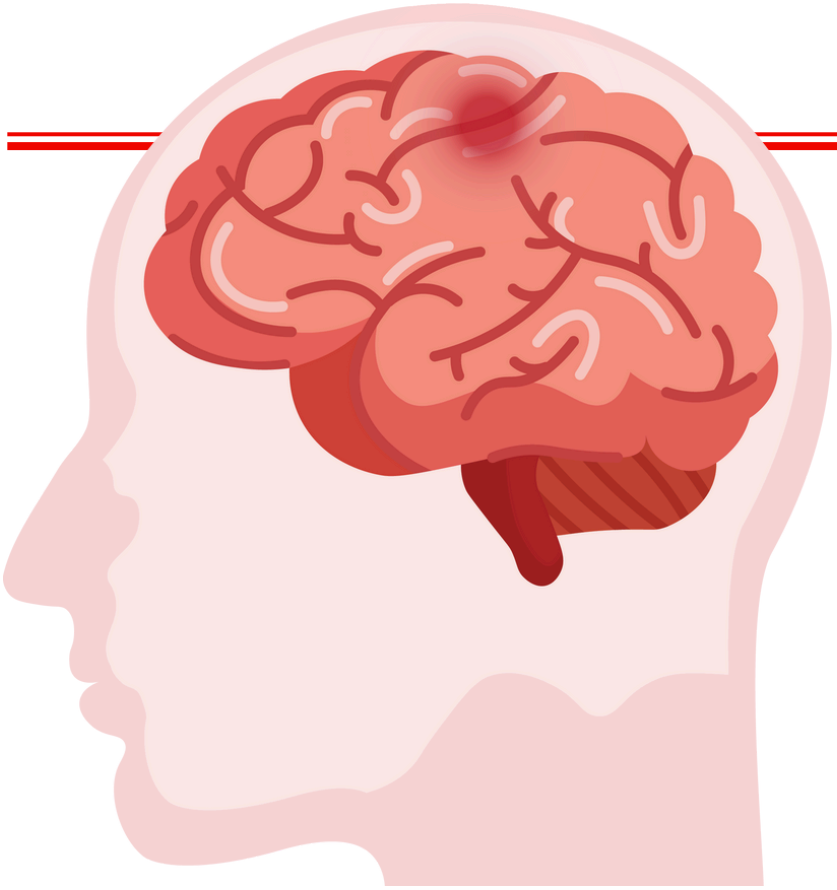
It is a sobering statistic to see that stroke is the 2nd leading cause of death worldwide. In the United States alone, data from the Centers for Disease Control and Prevention shows that an estimated 795,000 people will experience a stroke every year. Unfortunately, the impacts of stroke are widespread. Depending on the severity of the residual deficit, strokes result in significant changes to family care plans, workforce productivity, and often initiate a spiral of declining health problems.

However, we are fortunate that we live in a modern era of stroke awareness, prevention, and treatment. Prior to 1810, strokes were largely categorized in the medical writings of the times as "apoplexy" or "theoplexy" without any sense of a clear understanding of the underlying disease process. Without this understanding, there was much room for hypothetical cures, diagnoses and management techniques that rarely impacted the natural history of the disease in a positive manner. In ~1810, however, physicians were able to show that the disease was a direct result of a lesion in the brain. This fundamental understanding of the pathology ushered in the modern era of stroke care.

Strokes can be generally classified into one of two major categories: hemorrhagic or ischemic. Ischemic strokes account for roughly 85% of the stroke cases in the US, with the remaining 15% being attributable to hemorrhagic causes. The primary difference between these two categories relates to the cause of the lesion in the brain. In ischemic strokes, the injury to the brain occurs as the result of insufficient blood reaching an area of the brain. This lack of oxygen renders the tissue unable to survive and rapidly leads to cell death. With hemorrhagic strokes on the other hand, the tissue is injured through the infiltration of blood into the cellular network of the brain resulting in cell swelling, injury and cell death.

The most common cause of ischemic strokes is a blockage in an artery leading to a portion of the brain. This blockage can occur as the result of progressive narrowing in a blood vessel leading to the brain (eg. atherosclerosis), or through a sudden blockage from a small blood clot (eg. embolus) originating from a different place in the body. Although frightening and potentially devastating, ischemic strokes offer many opportunities to positively impact the natural history of the disease.



From an early focus on exercise, smoking cessation and appropriately managing cholesterol levels, we can minimize the extent of atherosclerosis that occurs in our blood vessels. Chronically irregular heartbeats can also lead to periods of clot formation during the irregular rhythm period. Through early recognition and management, appropriate medications can be used to avoid the irregular rhythms or thin the blood to avoid clots from forming. Additionally, the carotid arteries are frequently a source of small clots. Through physical exams and appropriate ultrasound studies for people at risk, we can often identify potential problems long before a stroke will happen.

Finally, since ischemic strokes are the result of a lack of blood flow to an area of the brain, prompt recognition and early treatment can drastically impact the outcomes. Clot breaking medications and catheterizations to remove clots are most effective when they are administered within 90 minutes of the start of symptoms. Important symptoms to look for include changes in speech, weakness in an arm or leg and sudden vision changes. Remember "FASTER". Sudden changes in the Face, Arms, Stability, Talking or Eyes need immediate Reaction.

Hemorrhagic strokes are typically caused by poorly controlled blood pressure, trauma to the head or congenital problems within the skull such as aneurysms or arterial malformations. Unfortunately, these causes are more difficult to prevent or predict, but the same attention to symptoms and expediency of treatment can help improve the outcomes.

Our team here at the Greenbrier Clinic is committed to partnering with you and ensuring that you are being evaluated in the modern era! From blood pressure control and cholesterol management to diagnostic tests to look at heart rhythms and carotid arteries, we focus on early diagnosis and aggressive preventative treatment. Our goal is to ensure that you will never need to make a 911 call. However, if there is ever a question of a possible stroke, think "FASTER" and err on the side of immediately seeking care. Time is critical.