

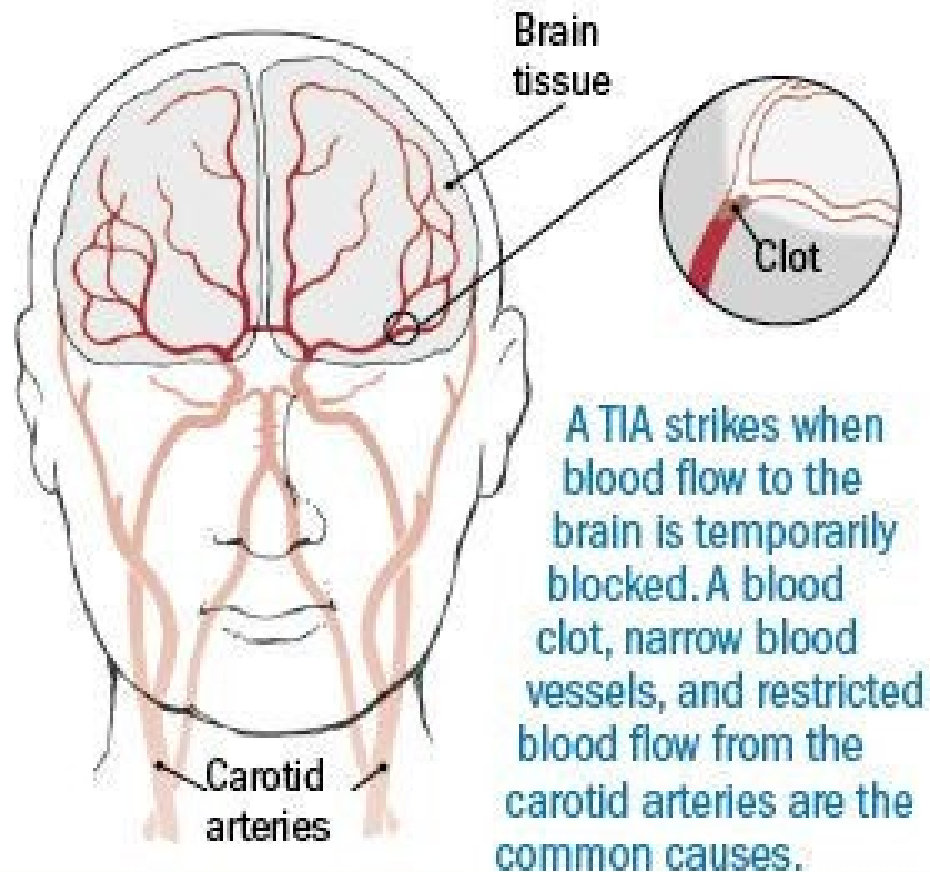


TRANSIENT ISCHEMIC ATTACKS AND STROKES



TRANSIENT ISCHEMIC ATTACK (TIA)

Transient ischemic attack (TIA)



TIA's

Temporary (transient) periods when the brain doesn't work correctly.

Begin suddenly, then resolve rapidly and completely within 24 hours.

Caused by temporary lack of blood supply to brain.

Referred to as “warning signs” for having a stroke.

SYMPTOMS OF A TIA



Same symptoms as for a stroke:

- Hand, face, arm, or leg weakness or numbness.
 - Face weakness is seen as drooping of one side of the face.
- ➤ Difficulty speaking, slurred speech, or inability to speak.
- ➤ Blurred, double, or decreased vision in one or both eyes.
- ➤ Loss of balance, dizziness.



STROKES

A stroke (also known as a cerebrovascular accident or CVA) is an injury to the brain from loss of blood supply and thus loss of oxygen (ischemia). This causes brain tissue to become damaged or die.

A stroke can cause lasting brain damage, long-term disability, and even death.

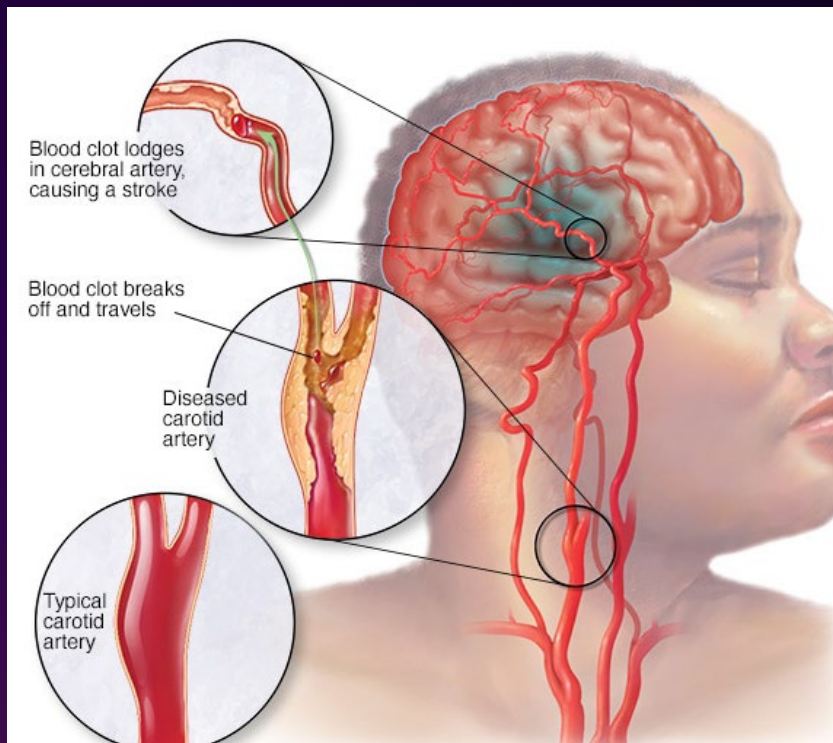
There are two main types:

- Ischemic: from blockage of blood vessels.
- Hemorrhagic: from bleeding in the brain.

STROKES



ISCHEMIC STROKE



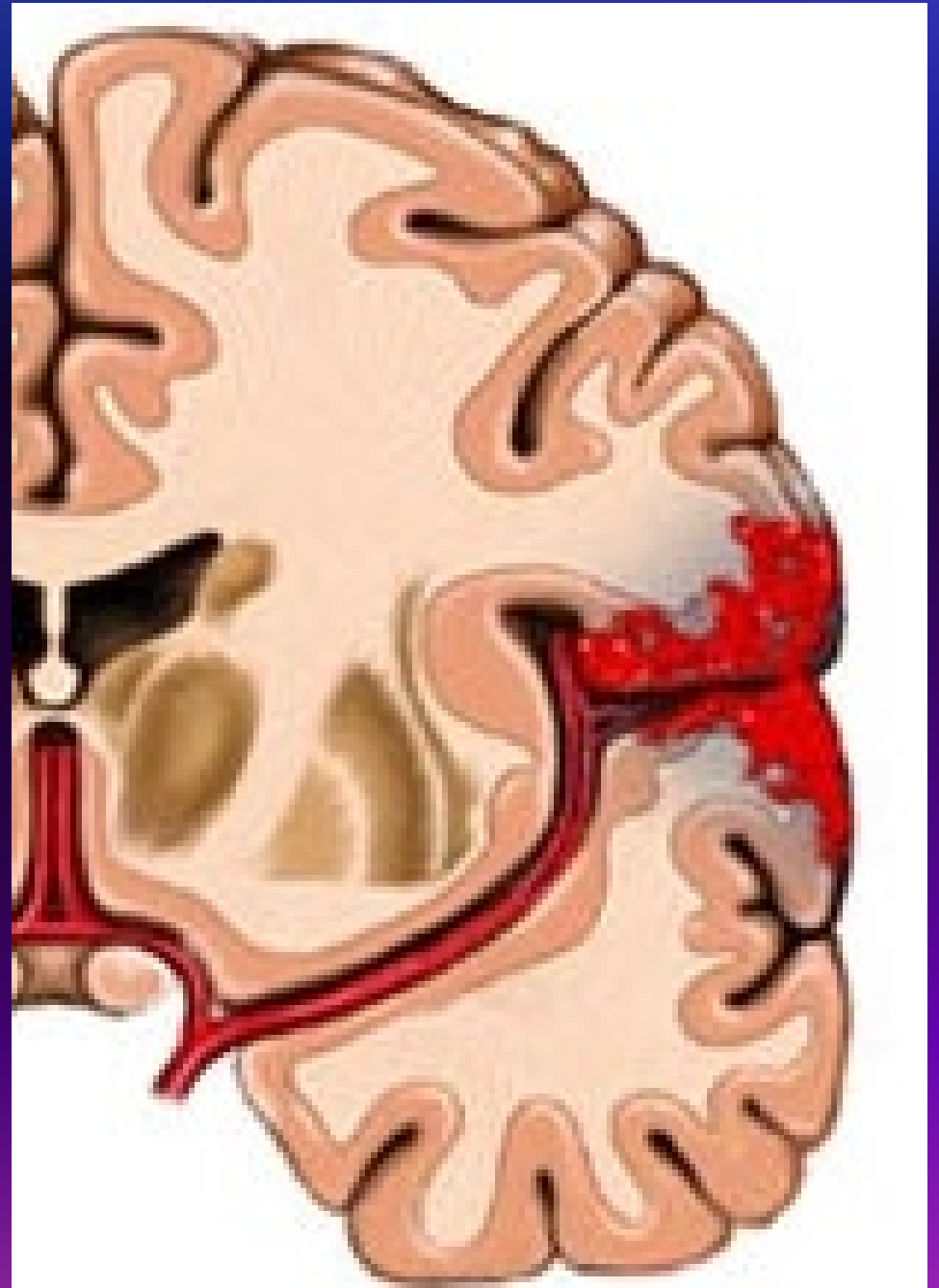
- The most common type of stroke.
- Occurs when the brain's blood vessels become narrowed or blocked due to atherosclerosis (build up of plaque).
- They can also be blocked if blood clots, or other debris travel through the blood stream and become lodged.

HEMORRHAGIC STROKE

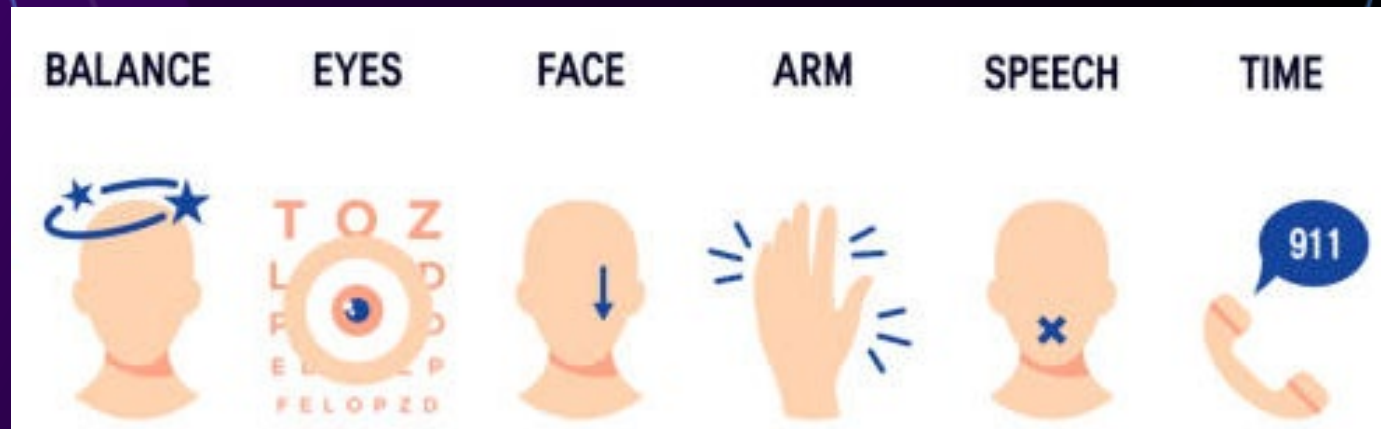
Occurs when a blood vessel in the brain leaks or ruptures.

Factors related to hemorrhagic strokes include:

- High blood pressure that is not under control.
- Overtreatment with anticoagulants.
- Bulges at weak spots in the blood vessel wall (aneurysm).
- Head trauma
- Brain tumors



STROKE SYMPTOMS: B E F A S T

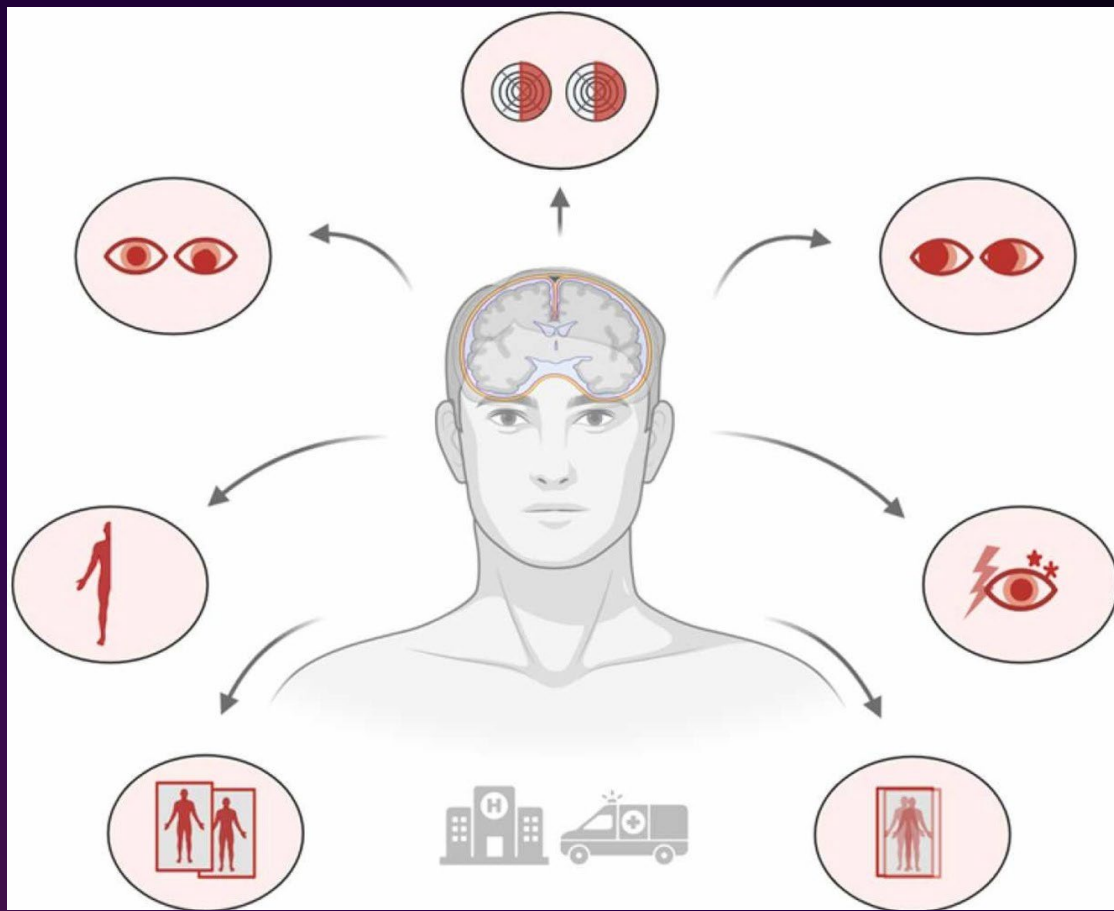


SYMPTOMS - BALANCE

Someone having a stroke may have trouble walking, dizziness, loss of balance, or lack of coordination. They may stumble when trying to walk.



SYMPTOMS - EYES



Someone having a stroke may have problems seeing in one or both eyes.

They may have double vision or blurred vision.

They may only see half of the visual field or have a blind spot in one or both eyes.

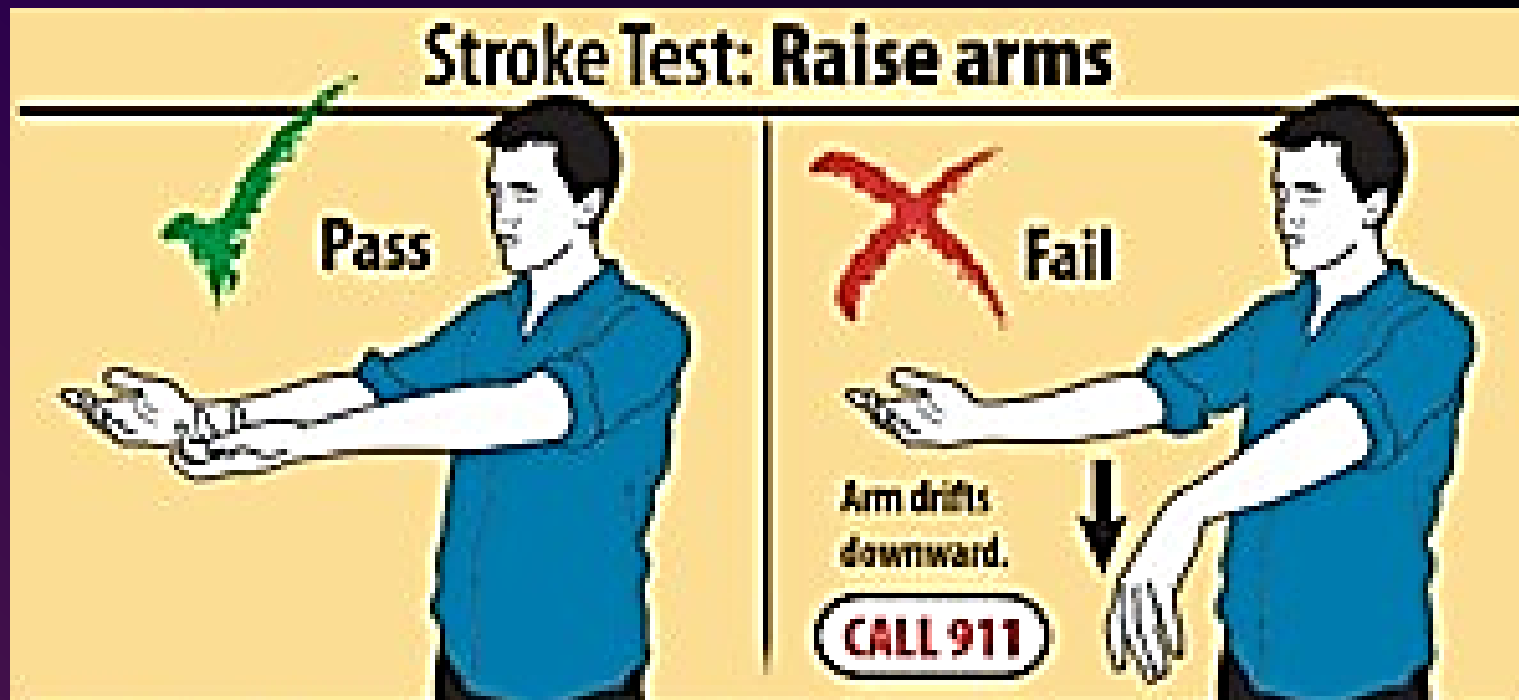
The ability to move both eyes together may also be affected.

SYMPTOMS - FACE

During a stroke, the face can droop on one or both sides. The eyelids and corners of the mouth may appear pulled down, and a person may be unable to smile or speak clearly.



SYMPTOMS - ARMS



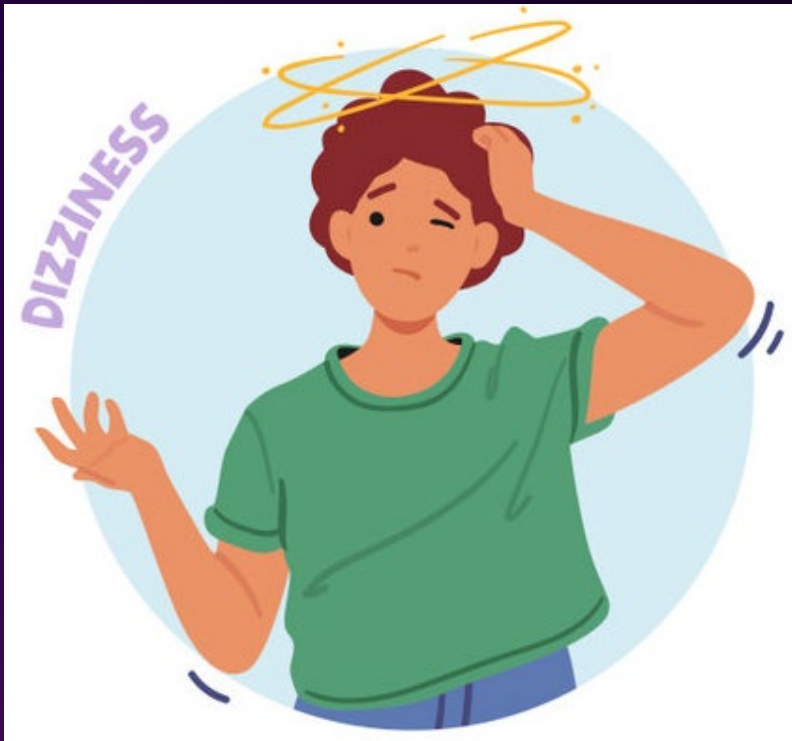
Someone having a stroke may have weakness of the arms or legs. Does one arm feel weak or numb? Instruct the person to raise both arms. Does one arm slowly drift down?

SYMPTOMS - SPEECH

Someone having a stroke may have trouble speaking or understanding words. The person may appear confused or slur words.



OTHER SYMPTOMS



Different parts of the brain control different capabilities, so the signs and symptoms of a stroke depend on the affected part(s). Stroke symptoms can include:

- One sided paralysis or weakness of the body (hemiparesis)
- A sudden total or partial loss of one or more senses
- Lack of coordination or clumsiness
- Dizziness, headaches, fainting
- Neck stiffness
- Personality changes
- Memory loss

TIME

Time is of essence – act fast.

If you see that someone may be having a stroke:

- ❑ Call 911 immediately.
- ❑ Note the time that symptoms first appeared as treatment is extremely time sensitive.
- ❑ Perform CPR if necessary.



- Being overweight
- Physical inactivity
- Heavy or binge drinking
- Smoking, vaping, and/or use of illegal drugs such as cocaine

LIFESTYLE RISK FACTORS FOR A STROKE OR TIA



MEDICAL RISK FACTORS

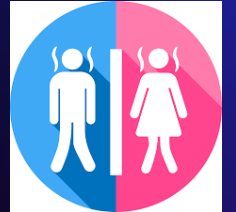
- Hypertension
- High cholesterol
- Diabetes
- Obstructive sleep apnea
- Migraines
- Cardiovascular disease, especially atrial fibrillation
- Family history



OTHER RISK FACTORS

Other factors associated with a higher risk include:

- Age – people over age 55 have a higher risk
- Race or ethnicity – African Americans and Hispanics have a higher risk
- Gender – men have a higher risk than women. Women are usually older when they have strokes, and they are more likely to die of strokes than are men.
- Hormones – taking birth control or hormone therapies that include estrogen can increase risk.



COMPLICATIONS OF A STROKE

A stroke can sometimes cause temporary or permanent disabilities. Complications depend on how long the brain lacks blood flow and which part is affected. They may include:



- **Loss of muscle movement, known as paralysis.**
 - A stroke may affect muscles needed for balance and ambulation.
- **Trouble talking or swallowing.**
 - A stroke might affect the muscles in the mouth/throat making it hard to talk clearly, swallow or eat. There may be problems with speaking or understanding speech, reading or writing.
- **Pain.**
 - Pain, numbness or other feelings may occur in the parts of the body affected by stroke.

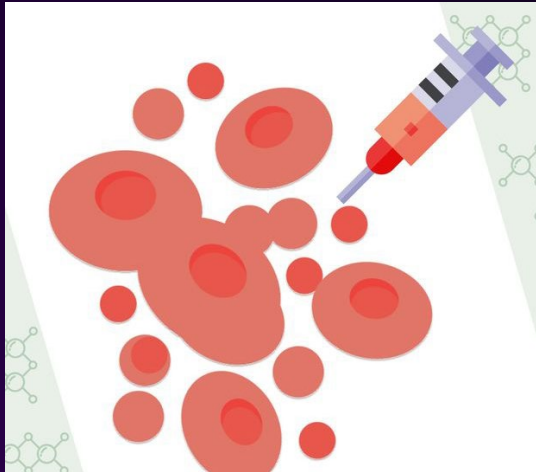


STROKE COMPLICATIONS

- **Memory loss or trouble thinking.**
 - Many people who have had strokes experience some memory loss. Others may have trouble thinking, reasoning, making judgments and understanding concepts.
- **Emotional symptoms.**
 - People who have had strokes may have more trouble controlling their emotions; some may develop depression.
- **Changes in behavior and self-care.**
 - People who have had strokes may become more withdrawn. They also may need help with grooming and daily chores.



ISCHEMIC STROKE TREATMENT



If a person gets to the hospital within 3 hours of the first symptoms of an ischemic stroke, a thrombolytic medication may be given to break up blood clots.

This medication, called tPA, improves the chances of recovering from a stroke.

Those treated with tPA are less likely to need long-term care in a nursing home.

Recognizing the signs and symptoms and seeking immediate medical attention by calling 911 is essential to prevent stroke related disability and death.

HEMORRHAGIC STROKE TREATMENT

- Controlling the bleeding is the first step in treatment. This may mean surgery to repair blood vessel damage.
- Medications to lower blood pressure and pressure on the brain may be used.
- Endovascular embolization fills or closes blood vessels to prevent bleeding and rupturing and is done via a catheter that is threaded up to the area that requires treatment.



Medication



Surgery



Aneurysm Clipping



Endovascular Embolization

STROKE RECOVERY AND REHABILITATION

Most people who have had a stroke go through a rehabilitation program. The program is recommended based on the person's age, overall health and degree of disability from the stroke.

The treatment team members may consist of a dietitian, physical therapist, occupational therapist, speech pathologist, social worker, and specialists such as a neurologist and/or physiatrist.



PREVENTION: LOWERING RISK FACTORS

Controlling high blood pressure is one of the most important things to do to lower the risk of having a stroke. In addition:

- Lower cholesterol by diet or medications.
- Quit tobacco use.
- Manage diabetes.
- Maintain a healthy weight.
- Eat a diet rich in fruits and vegetables
- Reduce or eliminate alcohol intake.
- Exercise regularly.
- Treat sleep apnea.
- Do not use illicit drugs.



STROKE AND TIA



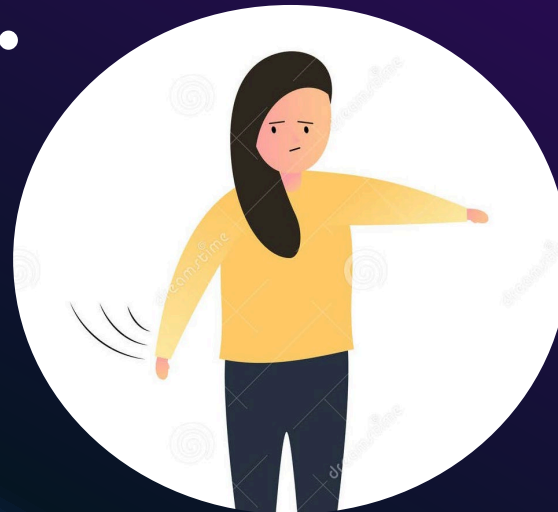
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Thank you
Jean Justad, MD
Medical Director DDP
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