

# Treatments and Procedures Immediately After a Stroke



Treatment for a stroke depends on whether it is an ischemic stroke or a hemorrhagic stroke, how long it has been since the stroke symptoms started, and many other factors specific to you. Your doctors will select the best treatment for you depending on these factors.

The time immediately after the start of your stroke symptoms is known as the **acute period**. Your healthcare team will be working quickly to figure out what treatment is best for you during this period. This can be a scary and fast-paced time.

After you have received acute treatment for your stroke, you should expect to be monitored closely by your healthcare team. You will likely be admitted to either the Stroke Unit or the Neurological Intensive Care Unit.

## What are the treatments for Ischemic Stroke during the acute period?

An **ischemic stroke** occurs when there is a blockage or reduction in the flow of blood to the brain. If the body cannot clear this blockage, then permanent brain

damage (infarction) will result within minutes to hours. Therefore, the goal of acute stroke treatment is resolving this blockage **as soon as possible**.

There are treatments available in the immediate (acute) period of stroke symptom onset. Since they are only available within a certain timeframe, it is important **to call 911 and go to the hospital as soon as you notice symptoms**. **These treatments can save lives and reduce long-term effects of stroke.**

## TNK

Tenecteplase or TNK, is a clot-busting medication that can be administered through an intravenous (IV) catheter. IV TNK can help dissolve blood clots and improve blood flow to the part of the brain that is being deprived of blood flow. This medication is delivered as a 5-10 second push through an IV.

If eligible, you can receive IV TNK within 3 hours of the **last known normal**. Some people can receive it within 4.5 hours of last known normal. Unfortunately, many people do not arrive at the hospital in time to receive this medication, so it is important to seek treatment immediately if you think you are having a stroke.

**Last known normal** is the date and time at which you were last known to be without the signs and symptoms of current stroke or at your previous neurological baseline.

### What can I expect during and after receiving IV TNK?

Once you receive TNK, your healthcare team will pay close attention to your neurological (brain) functioning. They will complete a neurological assessment every 15 minutes during the hour-long infusion. They will also regularly monitor your **vital signs** (blood pressure, heart rate, and breathing rate).

After TNK is given, your team will continue to monitor your neurological functioning and vital signs frequently over the next 24 hours.

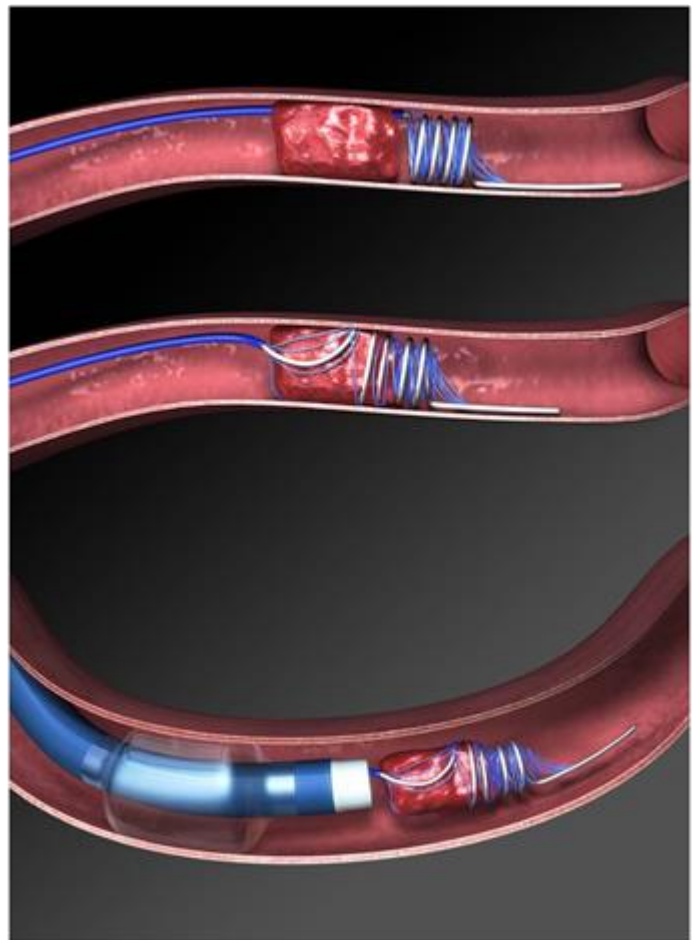
## Mechanical Thrombectomy

A mechanical thrombectomy uses a catheter (tube) to mechanically remove a clot from a vessel in your brain.

For this procedure, you may receive a medicine to help you feel drowsy and relaxed. Depending on the situation, some people may require heavier sedation which may mean a temporary breathing tube is placed (intubation) for the procedure.

During the procedure, a catheter is threaded through an artery in the groin up to the blocked artery in the brain. A wire-cage device, called a **stent retriever**, is then put through the catheter up to the blocked artery. The stent will open and grab the clot to remove it. Occasionally, a special suction tube is also used to help with removal. After clot removal, the entire device is removed from the artery.

## Mechanical Thrombectomy



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This procedure can take place up to 24 hours after last known normal. You will also likely be treated with IV TNK if you are eligible.

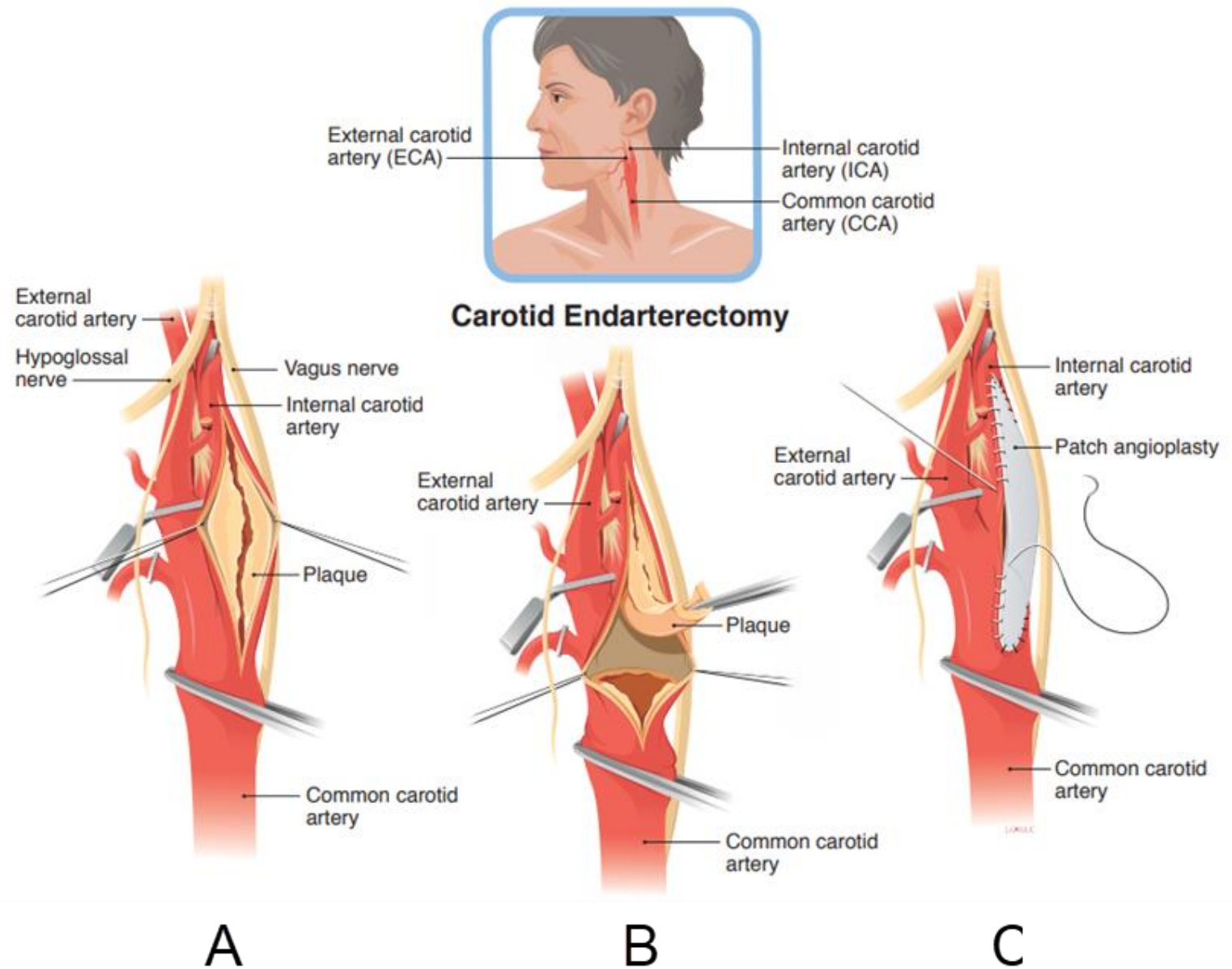
### What can I expect after mechanical thrombectomy?

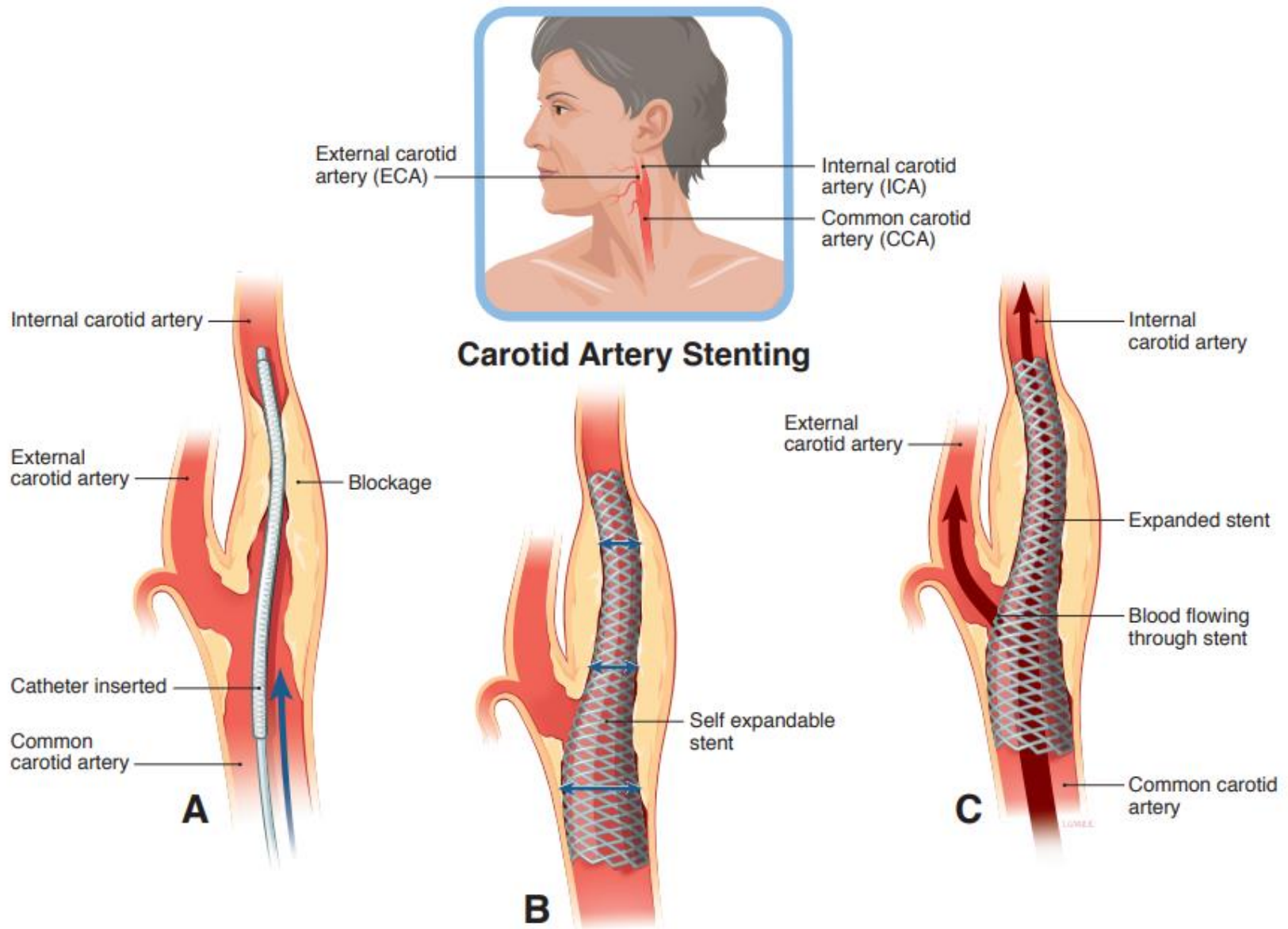
After the procedure, you will spend some time in a recovery room and then be transferred to a stroke unit or intensive care unit for further monitoring. Your healthcare team will pay close attention to your neurological functioning and monitor your vital signs (blood pressure, heart rate, and breathing rate) frequently. You will need to stay in the hospital for a day or more, depending on your condition.

### What procedures are performed in the hospital to prevent me from having ischemic stroke?

For those with **carotid artery stenosis** (narrowing), there are surgical procedures that aim to help prevent a first ischemic stroke or a repeated ischemic stroke. Your doctors will take careful consideration to determine your eligibility for these procedures:

- **Carotid endarterectomy (CEA):** Your surgeon makes a cut in your neck to reach the narrowed or blocked artery. They will open the blocked part of the artery and remove the plaque that is blocking blood flow. (see page 5)
- **Carotid artery angioplasty and stenting (CAS):** is used to widen the carotid artery and restore normal blood flow. A thin tube with a deflated balloon on the end is threaded through a blood vessel in your neck to the blocked artery. Once in place, the balloon is inflated to push the plaque against the artery wall and small wire mesh coil (stent) is then put into the artery to keep the artery open. (see page 6)







## What procedures are performed in the hospital to prevent me from having hemorrhagic stroke?

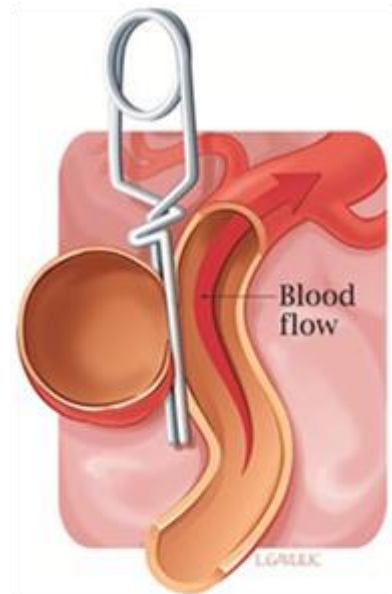
**Clipping:** A surgery for treatment of a brain aneurysm. A surgical clip is placed at the bottom of the aneurysm to stop blood flow into the aneurysm and reduce the risk of rupture (burst).

**Coiling:** A catheter fills the aneurysm with detachable coils to reduce the risk of rupture.

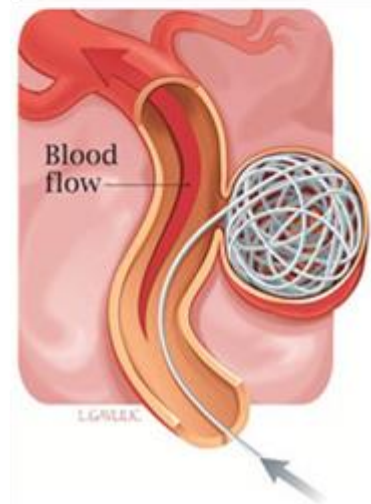
**Craniotomy:** A surgical opening in the skull to access the brain for surgery, such as clipping of an aneurysm. This piece of skull is returned to its original position at the end of surgery.

**Craniectomy:** A procedure that removes a larger section of the skull to reduce pressure in the head. With this method, the bone plate is left off for an extended period to allow for reduced swelling.

Clipping:



Coiling:



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