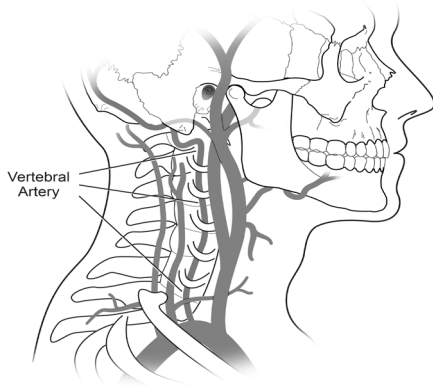


## Vertebral Artery Injuries in Trauma

There are two vertebral arteries on each side of your neck. They provide blood supply to the tissues there. They also provide some blood to the brain. Injuries in your neck near your spinal column can injure these arteries. This can cause swelling and bleeding which may compress the many nerves that make up your spinal cord. This can also prevent blood flow to the spinal cord or brain.



### Causes

- A blunt, powerful blow to the neck
- Hyperextension, such as whiplash
- Piercing neck injuries (gun shot or stabbing)

### Symptoms

Many times, there are no symptoms of this type of injury. This makes it hard to diagnose. If the injury is severe, you may have:

- Drowsiness
- A hard time swallowing
- A headache, neck pain, dizziness, ringing in the ears
- Problems with vision
- Swelling or bruising in the area you were injured

### Tests

You may have an x-ray or scan of your arteries called an **angiogram** or **arteriogram**. You will need contrast dye to make the arteries easier to see. You will have blood tests or other scans such as a CT scan, MRI or an ultrasound.

### Treatment

The health care team watches for any effects on the nerves such as loss of movement or feeling.

**We often need to prevent blood clots with this type of injury.** Aspirin, heparin and warfarin (Coumadin®) are common medicines used. These medicines prevent your blood from clotting and blocking off a blood vessel. Heparin can be given as a shot, or through the IV. Aspirin and warfarin are taken as a pill. You may need frequent blood tests when using these medicines, to ensure that your blood stays in a safe range.

You may have **surgery** to repair your injured blood vessels if needed.

If the vessel is fully blocked, surgery is not an option. Your health care team will manage your symptoms.

After you leave the hospital, you will follow-up with your doctor for further testing to decide if you need more treatment. You will likely keep taking blood thinners. You may still need frequent blood tests to be sure you are getting the proper amount. You may have another scan in a few months to look at your arteries again.

## Complications

Blood thinners may increase bleeding. Minor symptoms of this are: bruises, bloody nose, and blood in your spit. Dangerous type of bleeding can occur around your brain, or in your gut, or kidneys. You may have tests to see if you have bleeding inside your body that cannot be seen.

If the injured artery is stopping blood flow to the brain, you may have symptoms of a stroke. **Call 911** if you have any of these symptoms:

- Sudden onset facial numbness
- Drooping
- Weakness
- Loss of feeling to one side of the body
- Trouble swallowing
- Vision changes

Your doctor will balance the risk of bleeding with the risk of stroke in order to plan the best treatment.

At home, avoid bleeding. Use an electric razor, soft toothbrush, avoid high-contact sports, and take all medicines as directed.

## When to Call

- Blood in urine or stool
- Severe or sudden headaches
- Changes in your vision
- Continued nausea or vomiting
- Increased sleepiness
- Change in behavior
- Problems with walking or balance
- Any drainage from your incision or any signs of infection (increased redness, swelling, drainage, increase in pain, fever greater than 100 F)
- Dizziness
- Changes in speech

## Who to Call

Neurosurgery clinic  
**(608) 263-7502**

After hours, nights, weekends and holidays, call the paging operator at **608-262-0486**. Ask for the resident on call for your clinic. Leave your name and phone number with the area code. The doctor will call you back.

The toll-free number is **1-800-323-8942**.

If you are a patient receiving care at UnityPoint – Meriter, Swedish American or a health system outside of UW Health, please use the phone numbers provided in your discharge instructions for any questions or concerns.