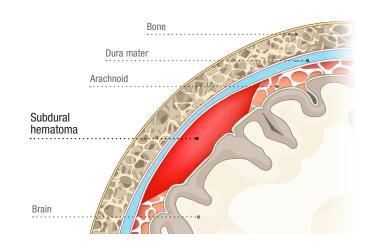
Subdural Hematoma (SDH)

What Is a Subdural Hematoma?

A subdural hematoma (SDH) forms because of an abnormal collection of blood that builds up between the protective layers that surround your brain (dura mater). This collection of blood damages cells in the brain lining, causing an inflammation and excessive cell growth.1

The most common cause for a SDH is a head injury such as a car accident, fall, or trauma.1 However, chronic subdural hematomas (cSDH) are common in older adults. This is due to stretched veins caused by brain shrinkage, making them easily injured and prone to break.2



What Are the Symptoms of a Subdural Hematoma?

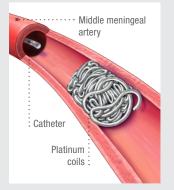
An SDH may cause symptoms right away, or it may grow over time and cause symptoms later (chronic subdural hematoma—cSDH). Depending on the size of the hematoma and where it presses on the brain, any of the following may occur:3

- Confusion or coma
- Decreased memory
- Problem speaking or swallowing
- Balance or walking problems
- Drowsiness
- Headache
- Seizures
- · Weakness or numbness of arms, legs or face
- Nausea/Vomiting
- Aphasia
- Visual difficulties
- Pupil size
- Ringing sound in the ears

Subdural Hematoma Treatment

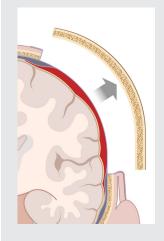
Embolization One treatment option for SDH involves embolization of the middle meningeal artery (MMA). The MMA provides blood supply to the dura mater and feeds the membrane capillaries covering the SDH. This

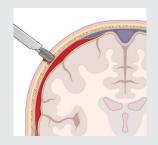
procedure blocks blood flow to this region, ultimately decreasing the size of the hematoma. To reach the MMA, a catheter (tube) is inserted through an incision in the femoral artery at the groin or radial artery at the wrist and guided toward the brain. Fluoroscopy (a type of x-ray) is used to track the catheter through the arteries. Once in position, soft platinum coils, particles or liquid



embolics are pushed through the tube and released to close off the artery, causing the hematoma to shrink.2

Craniotomy The removal of a section of the skull to access and extract the hematoma.2





Burr Hole Craniostomy During this surgical procedure, one or more small holes are drilled into the skull. A tube is then inserted through the hole to help remove the blood. A shunt may be used to continue draining blood from the affected area for several days.2

Source: National Institutes of Health

- 1. Pierre L, Kondamudi NP. Subdural Hematoma. In: StatPearls. Treasure Island (FL): StatPearls Publishing; August 12, 2023

 2. Désir LL, D'Amico R, Link T, et al. Middle Meningeal Artery Embolization and the Treatment of a Chronic Subdural Hematoma. Cureus. 2021; 13(10):e18868. Published 2021 Oct 18. doi:10.7759/cureus.18868
- 3. Nourí Á, Gondar R, Schaller K, Meling T. Chronic Subdural Hematoma (cSDH): A review of the current state of the art. Brain Spine. 2021; 1:100300. Published 2021 Nov 2. doi:10.1016/j.bas.2021.100300

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