



[Home](#) → [Medical Encyclopedia](#) → Cavernous sinus thrombosis

URL of this page: //medlineplus.gov/ency/article/001628.htm

Cavernous sinus thrombosis

Cavernous sinus thrombosis is a blood clot in an area at the base of the brain.

Causes

The cavernous sinus is a structure inside the head that receives blood from veins of the face and brain. The blood drains it into other blood vessels that carry it back to the heart. This area also contains nerves that control vision and eye movements.

Cavernous sinus thrombosis is most often caused by a bacterial infection that has spread from the sinuses, teeth, ears, eyes, nose, or skin of the face.

You are more likely to develop this condition if you have an increased risk of blood clots.

Symptoms

Symptoms include:

- Bulging eyeball, usually on one side of face
- Cannot move the eye in a particular direction
- Drooping eyelids
- Headaches
- Vision loss

Exams and Tests

Tests that may be ordered include:

- CT scan of the head
- MRI of the brain
- Magnetic resonance venogram
- Sinus x-ray

Treatment

Cavernous sinus thrombosis is treated with high-dose antibiotics given through a vein (IV) if an infection is the cause.

Blood thinners help dissolve the blood clot and prevent it from getting worse or recurring.

Surgery is sometimes needed to drain the infection.

Outlook (Prognosis)

Cavernous sinus thrombosis can lead to death if left untreated.

When to Contact a Medical Professional

Contact your health care provider right away if you have:

- Bulging eyes
- Drooping eyelids
- Eye pain
- Inability to move your eye in any particular direction
- Vision loss

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Review Date 3/31/2024

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