

## Anterior Cerebral Artery

The anterior cerebral artery is one of a pair of arteries on the brain that supplies blood to the most medial portions of the frontal lobes and superior medial parietal lobes. The two anterior cerebral arteries arise from the internal carotid artery and are a part of the Circle of Willis in the brain. The left and right anterior cerebral arteries are connected by the anterior communicating artery. If occlusion occurs prior to the anterior communicating artery, they are usually well tolerated due to collateral circulation. However, if occlusion occurs after the communicating artery, common signs and symptoms include paralysis or weakness of the contralateral lower limb due to involvement of the motor leg area as well as cortical sensory loss in the contralateral foot and leg.



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### Contralateral paralysis of lower limb

[Paralyzed-leg with crutches on opposite side of brain damage](#)

Occlusion of the anterior cerebral artery can lead to paralysis or weakness of the contralateral leg and foot due to involvement of the leg area in the primary motor cortex.

### Contralateral loss of sensation in lower limb

[Leg on Opposite-side of brain damage with No Sensation from fire below](#)

Occlusion of the anterior cerebral artery can lead to cortical sensory loss of the contralateral leg and foot due to involvement of the leg region in the primary sensory cortex of the brain.