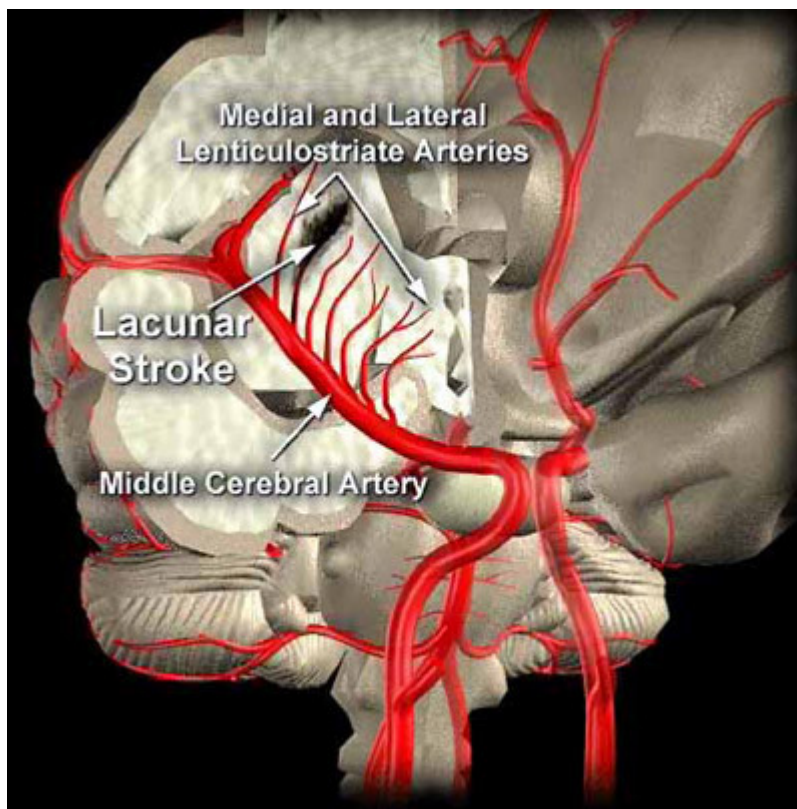


Lenticulostriate Artery

Small, deep penetrating [arteries](#) known as the lenticulostriate arteries branch from the [middle cerebral artery](#).



The name of these arteries is derived from some of the structures it supplies: the [lenticular nucleus](#) and the [striatum](#).

Classification

one, the internal striate, passes upward through the inner segments of the lentiform nucleus, and supplies it, the caudate nucleus, and the internal capsule;

the other, the external striate, ascends through the outer segment of the lentiform nucleus, and supplies the caudate nucleus.

More modern texts divide the anterolateral central arteries into “lateral striate arteries” and “medial striate arteries”.

see [lateral lenticulostriate artery](#)

Pathology

These small arteries are particularly susceptible to damage from [hypertension](#). They may either rupture, producing an [intracerebral hemorrhage](#) that is initially centered in the region they supply, or become occluded producing a [lacunar infarct](#) in the tissue they supply.

They are 'end arteries' meaning that the regions they supply do not have significant collateral blood supply. Occlusion of these vessels therefore leads to stereotyped [stroke](#) syndromes. In the case of the

lenticulostriate vessels, hemorrhage may remain localized to the [putamen](#) and [caudate nucleus](#), may involve neighboring structures like the [internal capsule](#) and other more distant white matter of the hemisphere, or may even rupture into the [ventricular system](#).

Occlusions of these vessels or penetrating branches of the Circle of Willis or vertebral or basilar arteries are referred to as [lacunar strokes](#).

In the elderly, CT scanning shows signs of infarction in only approximately half of the most of the common form of lacunar stroke (pure motor stroke), but MRI has increased the yield: the probability that CT or MRI will be positive is generally a function of the severity of the deficit [Mohr JP and Sacco RL, 1992]. The cells distal to the occlusion die, but since these areas are very small often only minor deficits are seen. When the infarction is critically located, however, more severe manifestations may develop, including paralysis and sensory loss.

Within a few months of the infarction, the necrotic brains cells are reabsorbed by macrophage activity, leaving a very small cavity referred to as a lake (or lacune in French).

Is one of a pair of blood vessels that supply oxygenated blood to the posterior aspect of the brain (occipital lobe) in human anatomy. It arises near the intersection of the posterior communicating artery and the basilar artery and connects with the ipsilateral middle cerebral artery (MCA) and internal carotid artery via the posterior communicating artery (PCommA).

Ischemic injury as a result of damage to the [lenticulostriate artery](#) or MCA branches is one of the main causes of surgical morbidity associated with [insular tumor surgery](#). To avoid these complications, a thorough knowledge of the regional anatomy, meticulous microsurgical technique, hemostasis, and gentle handling of the vasculature are crucial.

Lenticulostriate artery aneurysm

see [Lenticulostriate artery aneurysm](#).

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