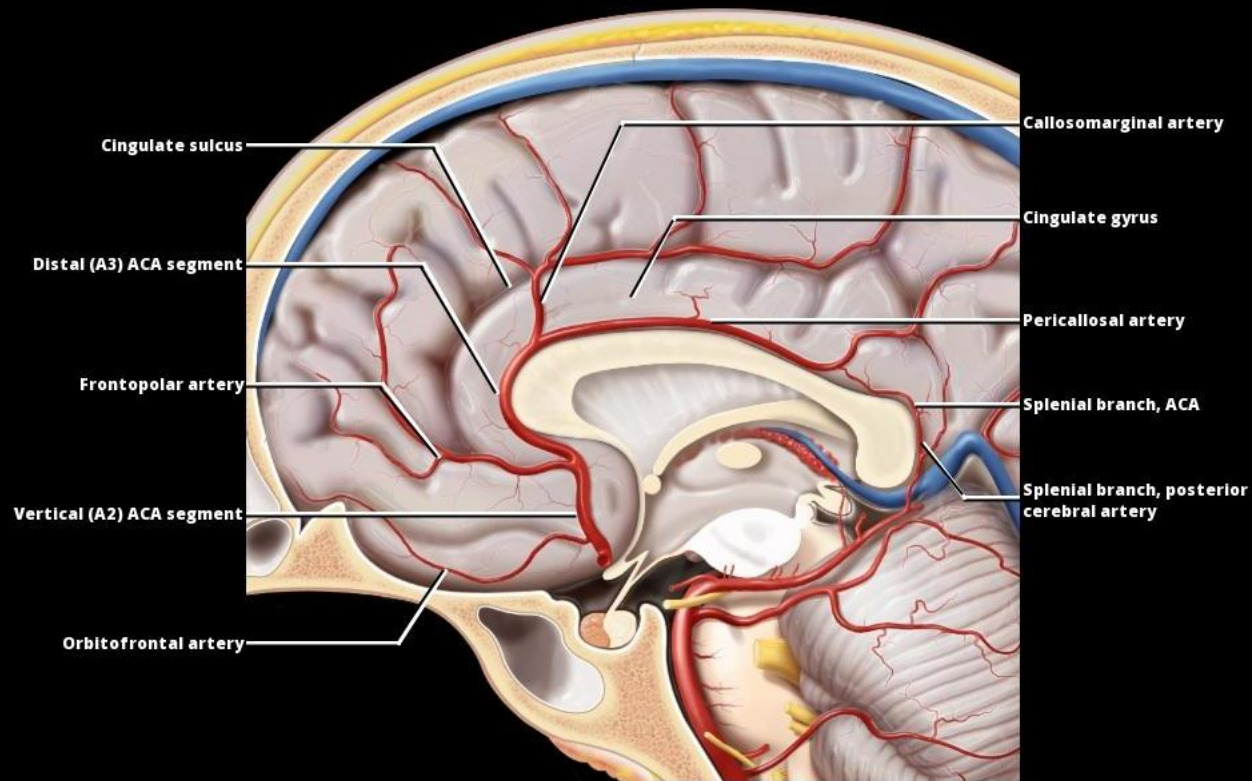


ACA - Three segments

- **A1** - Horizontal or pre-communicating segment
- **A2** - Vertical or post-communicating segment
- **A3** - Distal segment and cortical branches
- Anatomy Relationships
 - **A1**: Extends medially over optic chiasm/nerves
 - **A2**: Runs superiorly in interhemispheric fissure, anterior to corpus callosum rostrum
 - **A3**: Curves around corpus callosum genu, divides into pericallosal, callosomarginal arteries
 - Pericallosal, callosomarginal arteries course within interhemispheric fissure, under falx cerebri



- A2 - ascends in front of the third ventricle within the cistern of the lamina terminalis.
- A3- curves around the corpus callosum genu. The branch point of the distal ACA into the pericallosal and callosomarginal arteries varies.
- Almost the entire anterior 2/3 of the medial hemisphere surface is supplied by the ACA and its branches.
- Branches of the posterior and anterior cerebral arteries anastomose around the corpus callosum genu.

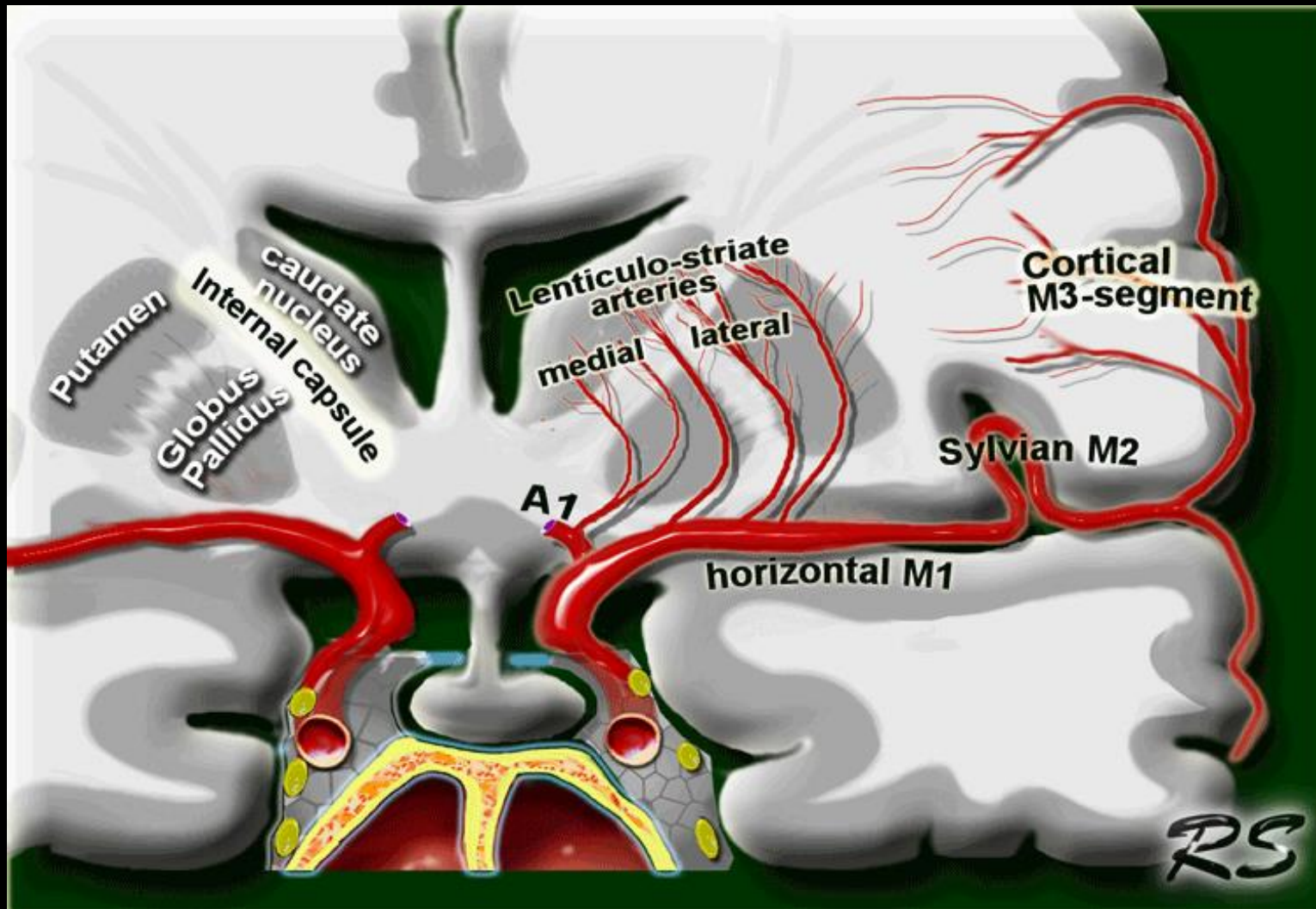
Anterior cerebral artery - Lateral view



Legend

1. Anterior Cerebral Artery territory
2. Pericallosal artery
3. Terminal (cortical branches)

Lenticulo Striate



Recurrent artery of Heubner

- Largest perforating branch from the proximal anterior cerebral artery (ACA),
- Only one routinely seen on angiography.
- Origin and course
 - Its origin is near the A1-ACOM-A2 junction of the ACA, arising from the proximal A2 in 90% of cases, and from the distal A1 in 10% of cases.
 - It then curves back sharply on itself, paralleling the A1 and is at risk from ACOM aneurysm clipping
- Supplies the head of caudate

