

Stroke syndromes refer to symptom patterns of patients who appear clinically to have suffered a stroke in a particular cerebral region, but who have not had diagnostic imaging to confirm the diagnosis.

### Total Anterior Circulation Syndrome (TACS)

Usually Middle Cerebral Artery (90%)

Causes all three of:

- Higher dysfunction
  - Dysphasia
  - Visuospatial disturbance
  - Decreased consciousness
- Homonymous hemianopia
- Motor & Sensory Deficit (2/3 of face, arm and leg)

### Partial Anterior Circulation Syndrome (PACS)

Patient will have either 2 out of 3:

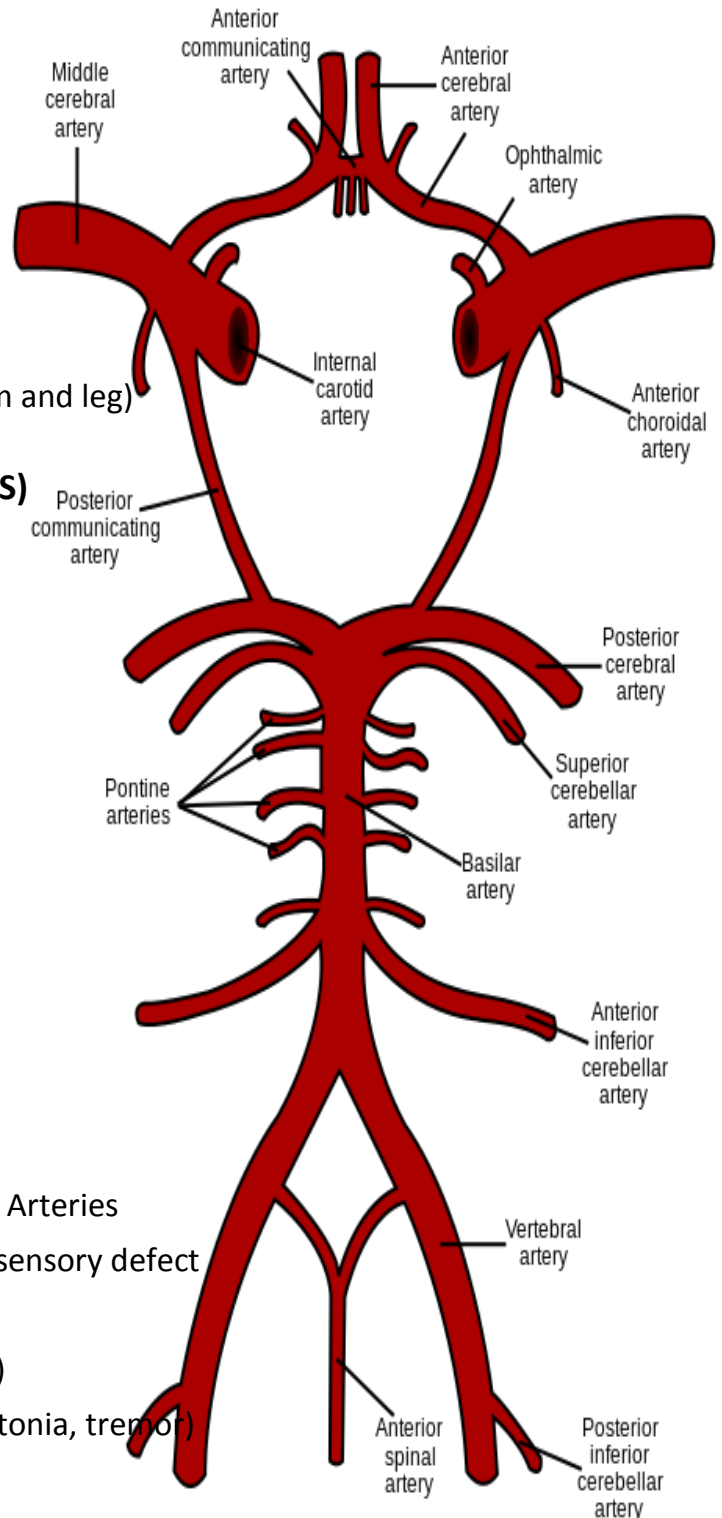
- Higher dysfunction (as above)
- Homonymous hemianopia
- Motor & Sensory defects

Or

- Higher dysfunction alone
- Partial Motor or Sensory defect

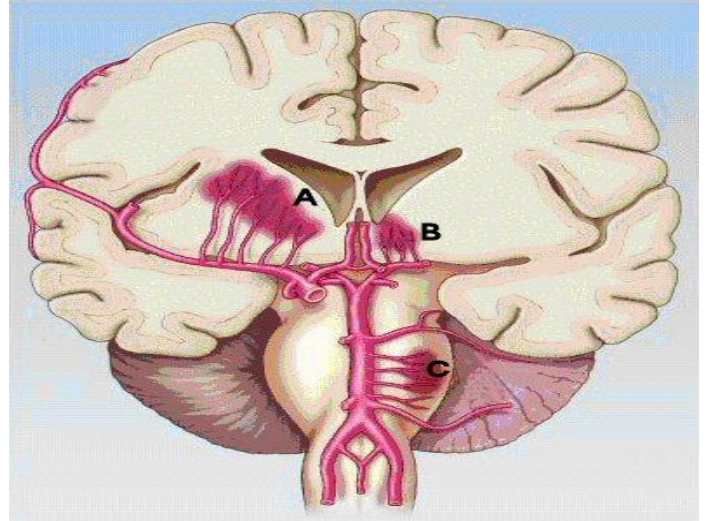
### Posterior Circulation Syndrome (POCS)

- Vertebral, Basilar and Posterior Cerebral Arteries
- Cranial nerve AND contralateral motor/ sensory defect
- Bilateral motor or sensory defect
- Eye movement disorder (e.g. nystagmus)
- Cerebellar dysfunction (e.g. ataxia, hypotonia, tremor)
- Isolated homonymous hemianopia



## Lacunar Stroke Syndrome (LACS)

- Lacunes are small subcortical infarcts (<15mm in diameter)
- Results from occlusion of a single penetrating arteries to deep brain structures
- Most frequently affect basal ganglia, internal capsule, thalamus, corona radiata and pons
- 5 classical syndromes:



Name	Location of Infarct	Presentation
<b>Pure Motor Hemiparesis</b>	<ul style="list-style-type: none"> <li>• Internal capsule (posterior limb)</li> <li>• Basis pontis</li> <li>• Corona radiata</li> </ul>	<p>Hemiparesis/ Hemiplegia on contralateral side</p> <p>Dysarthria/ dysphagia and transient sensory symptoms may also be present</p>
<b>Ataxic Hemiparesis</b>	<ul style="list-style-type: none"> <li>• Internal Capsule (posterior limb)</li> <li>• Basis Pontis</li> <li>• Corona Radiata</li> <li>• Red Nucleus</li> <li>• Lentiform Nucleus</li> <li>• Superior Cerebellar Artery</li> <li>• Anterior Inferior Cerebellar Artery</li> </ul>	<p>Combination of cerebellar and motor symptoms</p> <p>Weakness/ clumsiness on the ipsilateral side</p> <p>Affects leg &gt; arm</p> <p>Onset over hours/ days</p>
<b>Dysarthria/ clumsy hand</b>	<ul style="list-style-type: none"> <li>• Basis Pontis</li> <li>• Internal Capsule (anterior limb or genu)</li> <li>• Corona Radiata</li> <li>• Basil Ganglia</li> <li>• Thalamus</li> <li>• Cerebral peduncle</li> </ul>	<p>Variant of Ataxic Hemiparesis</p> <p>Dysarthria</p> <p>Clumsiness of the hand (best seen when writing)</p>
<b>Pure Sensory Stroke</b>	<ul style="list-style-type: none"> <li>• Thalamus</li> <li>• Internal Capsule</li> <li>• Corona Radiata</li> <li>• Midbrain</li> </ul>	<p>Paraesthesia- often unpleasant on contralateral side</p>
<b>Mixed Sensorimotor Stroke</b>	<ul style="list-style-type: none"> <li>• Thalamus</li> <li>• Posterior Internal Capsule</li> <li>• Lateral Pons</li> </ul>	<p>Hemiparesis/ Hemiplegia and</p> <p>Sensory impairment on contralateral side</p>