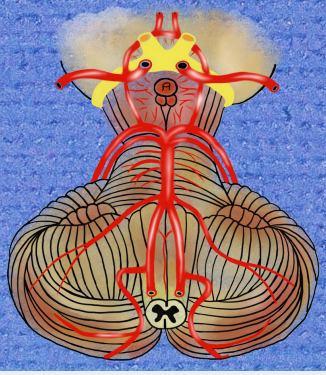
STROKE AND TIA

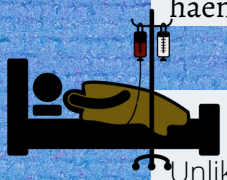


Definitions

Stroke= **sudden onset** loss of CNS function lasting **>24 hrs** and due to a **vascular cause**

TIA= **transient** episode of neurological dysfunction as a result of **focal** brain, spinal cord or retinal ischaemia, with **no evidence of acute infarction on imaging**

Stroke can be ischaemic (85%) or haemorrhagic (15%)



Presentation

Unlikely a loss of consciousness or confusion ALONE

General Features= motor weakness, dysphagia, sensory loss, visual field defects, swallowing defects, balance problems

Sx more common in haemorrhagic= decreased consciousness, headache, N&V, seizures

Brainstem stroke- quadriplegia, locked-in syndrome

Risk Factors and Causes

Ischaemic RF- **age, HTN**, **smoking**, **DM**, **hyperlipidaemia**, PMH of CVA/MI/PVD etc, **AF**, valvular heart disease

Haemorrhagic RF- age, HTN, **arteriovenous malformation**, anticoagulation drugs.

Atherothrombotic- cause thromboembolism. Commonly start from artery branch points (aortic arch etc)

Small Vessel Disease- degeneration of intracranial vessels

Cardioembolic- from heart>> intracranial

Dissection- usually carotid/vertebral>> neck pain

Stroke Syndromes

TACS- Total Anterior Circulation stroke- middle and anterior cerebral arteries. All 3 of: contralateral hemiparesis and/or hemisensory loss, homonymous hemianopia, higher cognitive dysfunction e.g. dysphasia

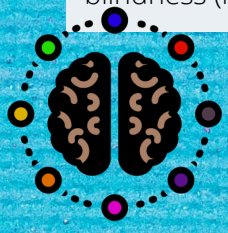
PACS- Partial Anterior Circulation stroke. Smaller arteries of anterior circulation e.g. divisions of MCA. 2 out of 3 of above criteria met

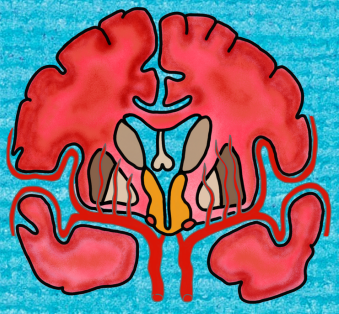
Stroke Syndromes

LACS- Lacunar Stroke- usually affects internal capsule. Either: unilateral weakness and/or sensory deficit of face and arm, arm and leg or all 3, pure sensory stroke, or ataxic hemiparesis.

POCS- vertebrobasilar territory. Cerebellar stroke (ipsilateral sx), contralateral homonymous hemianopia , loss of consciousness, brainstem stroke.

Amaurosis Fugax- transient monocular blindness (ipsilateral)- retinal artery occlusion





Management

- CT head
- IV r-TPA if sx onset within 4.5 hrs and haemorrhage excluded
- Baseline bloods, BM, ECG. CXR
- Admit to acute stroke unit
- BP lowering may be used in haemorrhagic
- Aspirin 300mg if haemorrhagic excluded
- Statins if cholesterol >3.5mmol/l
- Thrombectomy in suitable pts
- Carotid endarterectomy in sig. senosis
- Clopidogrel as secondary prevention plus investigation of underlying cause and lifestyle advice

Soton Brain Hub