

HISTORY FINDINGS

- History of sudden onset neurological symptoms
- Usually maximal at onset
- PMHx: AF / Vascular risk factors / Previous stroke or TIA

EXAMINATION FINDINGS

- Physical observations: Often stable, may be hypertensive
- Airway: Airway may be at risk if depressed GCS
- Neuro examination:
 - Sensory +/- motor disturbance
 - Visual or speech disturbance
 - Cerebellar symptoms (ataxia, nystagmus, dysdiadochokinesia, tremor, hypertonia)
- Complete appropriate scoring system:
 - ABCD2 - symptoms resolved < 24hrs (TIA)
 - NIHSS - symptoms > 24hrs (stroke)

Bamford classification of Ischaemic Stroke

| TOTAL ANTERIOR CIRCULATION STROKE (TACS) | PARTIAL ANTERIOR CIRCULATION STROKE (PACS) | LACUNAR SYNDROME (LACS) | POSTERIOR CIRCULATION SYNDROME (POCS) |
|--|--|--|---|
| Large stroke affecting areas supplied by both Middle and Anterior cerebral arteries | Less severe form of TACS, in which only part of the anterior circulation has been compromised | Subcortical stroke secondary to small vessel disease | Stroke affecting the area of the brain supplied by the Posterior circulation -Cerebellum- -Brainstem- |
| All 3 need to be present for a diagnosis of TACS: <ul style="list-style-type: none">• Unilateral weakness +/- sensory deficit of the face, arm and leg• Homonymous hemianopia• Higher cerebral dysfunction (dysphasia / visuospatial disorder) | 2 need to be present for a diagnosis of PACS: <ul style="list-style-type: none">• Unilateral weakness +/- sensory deficit of the face, arm and leg• Homonymous hemianopia• Higher cerebral dysfunction (dysphasia / visuospatial disorder) | 1 needs to be present for a diagnosis of LACS: <ul style="list-style-type: none">• Pure sensory stroke• Pure motor stroke• Seno-motor stroke• Ataxic hemiparesis <p>There is no loss of higher cerebral functions</p> | 1 need to be present for a diagnosis of POCS: <ul style="list-style-type: none">• Cranial nerve palsy and a contralateral motor/sensory deficit• Bilateral motor/sensory deficit• Conjugate eye movement disorder (horizontal gaze palsy)• Cerebellar dysfunction (vertigo / nystagmus, ataxia)• Isolated homonymous hemianopia |

INVESTIGATION FINDINGS

- CT head:
 - Haemorrhagic stroke should be evident
 - Imaging may be normal in ischaemic stroke
- ECG: Atrial fibrillation often found in ischaemic stroke
- CXR: possible aspiration

MANAGEMENT

THROMBOLYSIS CALL IF SUSPECTING ACUTE STROKE

Call Senior for any patient with confirmed or suspected Stroke

Stroke patients should be managed on specialist Stroke unit by Stroke team

General management advice:

- NBM until swallow assessed as safe - otherwise NG
- Ensure all appropriate bloods are taken:
 - FBC / U&E / CRP / LFT / HbA1C / Lipids / Coagulation / TFTs / Bone profile / Group & Save

- Closely monitor blood sugars - avoid hypoglycaemic episodes

- Hourly neuro observations

- Move patient to stroke unit as soon as possible

Haemorrhage or space occupying lesion:

- Contact neurosurgeons for further advice

- General management advice - Always follow local guidelines / Neurosurgeons
 - Target BP < 140 systolic
 - Stop statin, antiplatelets, anticoagulation
 - Reverse anticoagulation if necessary
 - Consider anti-convulsants / steroids

Ischaemic stroke:

- Antiplatelet therapy - Always follow local guidelines

- Aspirin 300mg PO/NG/PR until day 14 or discharge (whichever is earliest)
 - The ongoing antiplatelet medication (i.e. Aspirin 75mg OD)

- If sensitive to Aspirin
 - Clopidogrel 300mg Day 1
 - Then Clopidogrel 75mg OD

- Thrombolysis / Thrombectomy criteria - See local guidelines
 - Thrombolysis: < 4.5 hours onset
 - Thrombectomy: Large area of infarction with salvageable penumbra and good collateral blood supply.
 - Often limited by baseline functional status and age.

- General management advice - Always follow local guidelines
 - Anticoagulation for AF but avoid anticoagulating for first two weeks as may cause haemorrhagic transformation
 - Ensure BP < 185/110
 - Intermittent pneumatic compression stockings
 - Statin therapy +/- PPI

Always consult BNF for dose / administration and contraindications for all above medications