



He was last seen well 8 hours previously.

**Q3. List 2 (two) treatment options and give rationale for each. (4 marks)**

	<b>Treatment Modality (2 marks)</b>	<b>Rationale (2 marks)</b>
1.	Thrombolysis with Alteplase @ 0.9mg/kg	Symptoms of anterior circulation stroke, within the time limit of 9 hours with a CT perfusion mismatch
2.	Transfer to stroke centre for mechanical thrombectomy	Definitive management of the thrombus, at a stroke centre will improve prognosis

Pt is at 8hrs post onset of symptoms.

**Q4. State the CT findings that would prompt you to consider endovascular thrombectomy? (2 marks)**

- Basilar artery clot on CT angiogram
- Large ischaemic penumbra and large vessel occlusion in the internal carotid artery, proximal middle cerebral artery (M1 or M2 segment), or with tandem occlusion of both the cervical carotid and intracranial large arteries.

Thrombolysis has been commenced while waiting transfer to tertiary centre for thrombectomy. Suddenly it has been noted that, his GCS has dropped to 8. A repeat CT Brain shows the patient has suffered from an intracranial haemorrhage with signs of early hydrocephalus.

**Q5. Outline your key management steps in this situation (7 marks)**

- Immediately stop ongoing infusion of thrombolytic drug, and stop all antiplatelet and anticoagulant therapies.
- Decision regarding palliation if poor pre-morbid status Vs Intubation for airway protection and hyperventilation to target PaCO<sub>2</sub> 35-40 mmHg
- Consider surgical intervention for:
  - cerebellar ICH
  - lobar ICH with mass effect
  - ventricular drainage may be an option for intraventricular haemorrhage as blood is less likely to clot
- Reverse fibrinolysis:
  - FFP 2 units q6h for 24h
  - cryoprecipitate 10 units
  - tranexamic acid 1g IV
  - prothrombinex and Factor 7
- BP control e.g. SBP <160 mmHg and MAP <110 mmHg
- Control ICP:
  - elevate head to 30 degrees— target PaCO<sub>2</sub> 35-40 mmHg

- mannitol or hypertonic saline
- sedation +/- neuromuscular blockade
- treat seizures (e.g. phenytoin loading 18 mg/kg IV), but do not give prophylaxis



Alternative question if patient aged < 60

Post Imaging – the Stroke team are concerned regarding ‘Malignant MCA Stroke’ and whether patient could benefit from a Decompressive Craniectomy.

**Q. List the CT imaging criteria for Malignant MCA Stroke (2 marks)**

- MCA territory stroke of >50% on CT
- Perfusion deficit of >66% on CT

Alternative question

**Q. List the components of the NIH Stroke Scale (11 marks)**

- Level of Consciousness
- Best Gaze
- Visual Fields
- Facial Palsy
- Motor drift Arms
- Motor drift Legs
- Limb Ataxia
- Sensation
- Language/Aphasia
- Dysarthria
- Inattention

**Q. Outline the main treatment priorities for a stroke patient who does not qualify for Thrombolysis (8 marks)**

- Paracetamol for fever > 37.5
- Antiplatelet therapy with Aspirin 300mg followed by 100mg daily (other routes if patient NBM)
- Thromboprophylaxis (compression stockings or LMWH)
- Swallow screen and early Speech Pathology review
- Anti-hypertensives if BP > 220/120
- Hydration with Normal Saline or Hartmans (avoid dextrose solutions as they can cause cerebral oedema)
- Glycaemic control esp if patient is a diabetic.
- Pressure care and Falls prevention