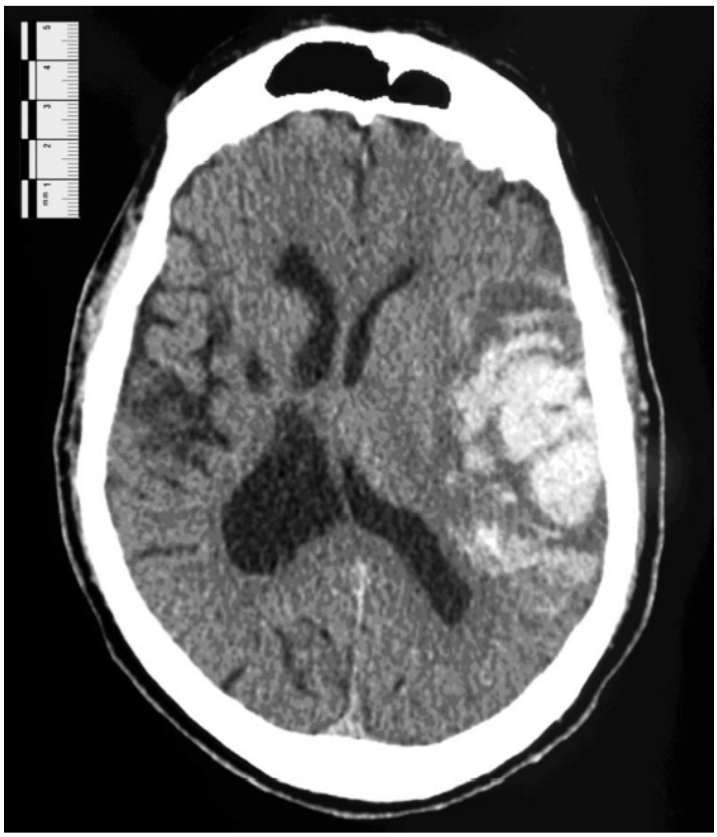
**VAQ 2011.1.6 (CT)**

A 64 year old man has a seizure two hours after receiving thrombolytic therapy for a stroke.
He has become more drowsy with increased right sided weakness and is intubated prior to repeat CT.
A non contrast CT head is performed
Observations:

| | | | |
|---|---|---|---|
| HR | 75 | /min | |
| BP | 180/100 | mmHg | |
| Temperature | 36.6 | $^0$C | |
| $O_2$ Saturation | 100 | % | on 50% $FiO_2$ |



a. Describe and interpret the CT image provided (50%)
b. Outline your treatment (50%)

He has had a large post thrombolysis bleed with severe neurological impairment. This is an immediately life threatening condition requiring reversal of thrombolysis, secondary neuroprotection, and consideration of decompression. He will require ICU admission and family discussion.

**CT head**

axial image at level of lateral ventricles
approx 5x8cm total area of heterogenous radiodensity in left parietal region
multiple areas of increased opacity centrally **suggestive of acute intracranial haemorrhage**
surrounding hypodense area suggests surrounding cerebral oedema
approx 1.5 cm **midline shift away from lesion (or raised ICP below)**
effacement of sulci on left and compression of left lateral ventricle
prominent right lateral ventricle could represent developing hydrocephalus
findings suggest **raised ICP (or midline shift above)**

**Treatment**

specific

**reversal of anticoagulation** (as per UpToDate, I can't find a protocol; college answer – consider will do rather than just do)
1mg protamine per 1000u active heparin if any given
2u FFP, 10u cryoprecipitate, blood pressure, reduce by maximum 25% with titrated IV GTN (50mg in 50ml, start 2ml/hr, adjust as necessary)

**Secondary neuroprotection**

Ensure **normal**:

**oxygenation** (prevent superoxygenation)

serum sodium,serum **glucose**, **30 degrees head up**

**Aim for low-normal pCO2 (30-35)**

**Consider mannitol 1mg/kg or hypertonic (3%) saline infusion**

**head up 30 deg**

Neurosurgical consultation for consideration of craniectomy / decompression

Supportive

ICU consultation for admission, Sedation and paralysis

Adequate IV access and spare

Optimise ventilation

IDC, NGT, IAL for invasive BP monitoring

Family discussion