22.1_Acute Stroke & TIA

Case

Elliot Mable, aged 70 years, presents complaining of right sided weakness and loss of vision. Elliot has an episode of acute ischaemic attack 6 months previously that resolved spontaneously and he has been taking aspirin since this time. His symptoms began two hours ago.

What further history and examination would you undertake?	Hx 1. Are symptoms progressing or resolving? (if resolving can't call it a TIA until 24hrs as passed with all symptoms resolved) 2. Trauma, Falls, Seizures 3. Headache, visual changes, speech, other neuro disturbances 4. Consider all Meds Cerebral Lesion if = Issues w/ Motor, Visual, higher functions (speech etc) Brainstem/Cerebellar Lesion if = Issues w/ Ataxia, diplopia, vertigo or bilateral weakness
What investigations and further management would you order for suspected TIA or Stroke?	B I – MRI or CT Brain, CXR M B – FBC, EUC, LFT, Coags, Lipids, BGL O – ECG (maybe A-fib causing clots?)
What is the difference between a stroke and a transient ischaemic attack?	TIA = a stroke where symptoms resolve within 24hrs STROKE = the focal neurological deficit worsens after patient first presents.
List FIVE common differential diagnoses of a stroke and TIA	Cerebral tumours Subdural haematoma Demyelination (e.g. GBS) Hypoglycaemia Migrainous aura (with or without headache)
List the 4 modifiable and 4 non-modifiable risk factors for stroke.	Non-Modifiable: - Age - Gender - PHx TIA/Stroke - FHx Modifiable: - HTN - Smoking - Alcohol - Oral Contraceptives
List the four main indications for immediate CT/MRI in acute stroke.	? Patient on anticoagulants or with abnormal coagulation ? Plan to give thrombolysis or immediate anticoagulants ? Deteriorating conscious level or rapidly progressing deficits ? Suspected cerebellar haematoma, to exclude hydrocephalus
Briefly describe the evidence in favour of a) acute stroke units B) Aspirin c) rTPA (Alteplase) d) statins	**a) Acute Stroke Units** – early admission better outcomes **B) Aspirin** – 300mg daily after sroke reduces risk of early recurrence and long sterm has a small effect on reducing risk stroke/TIA

e) anticoagulants f) blood pressure lowering	**c) rTPA** (Alteplase) – There is a risk of rTPA causing a fatal intracranial haemorrhage. But overall there is a net benefit. (Treating 1000 patients within 3 hours prevents about 60 patients from being dead or dependent at 3 months). **d) Statins** – Treating 1000 pts over a year will prevent 17 strokes **e) Anticoagulants *(e.g., Heparin)*** – Reduction in early ischemic recurrence benefits are offset by a definite increase in the risk of both intracranial and extracranial haemorrhage. Furthermore, routine use of heparin does not result in better long-term outcomes. Heparin should not be used in the routine management of acute stroke. **f) Lowering BP** – v/effective: Lowering blood pressure even in the 'normal range' reduces the risk of recurrent stroke, myocardial infarction and vascular deaths. Treating 1000 patients for a year prevents about 22 strokes.