



## ONSET, ONSET, ONSET!

- INSTANTANEOUS
  - vascular processes (dissections can ‘stutter’)
  - seizures
- MINUTES-HOURS
  - could it be migrainous (ask about ‘teens & FHx)?
  - remember rapid infections
- HOURS-DAYS
  - para-infectious/immune/inflammatory
- DAYS-WEEKS AND PROGRESSIVE
  - neoplastic
  - post-infectious/immune/inflammatory

## Urgent referrals: usual features

- INSTANTANEOUS OR RAPID ONSET
  - OR
- RELENTLESS PROGRESSION
  - AND
- SIGNIFICANT DISABILITY

## Some typical ‘accepted-as-urgent’

- ?SAH
- ?Guillain-Barré
- ?transverse myelitis
- cranial neuropathy ‘plus’ syndromes
- known myasthenia gravis or similar
- often filtered via other specialities:
  - ?stroke – medics
  - ?meningitis/encephalitis - medics
  - ?cord or cauda compression - orthopedic/neurosurgery

## Headache red flags

- SAH
  - must be "worst ever"
  - near immediately at its worst (<5 mins.)
  - much higher index of suspicion >50 yrs.
  - coital cephalgia if >=3
- Raised pressure symptoms:
  - worse lying, coughing, straining
  - wakes early from sleep (not waking up in morning with it)
  - persistent nausea or vomiting
  - relentless progression
  - increased daytime somnolence/ataxia (SDH)
- Infectious symptoms:
  - confusion or bizarre behaviour remember encephalitis
  - preceding history of infection or dental treatment
- Temporal arteritis:
  - do not consider in patient <50
  - remember to ask about jaw claudication and scalp tenderness
  - if confident start steroids and call ophthalmology for biopsy
- Any associated "hard signs"
  - fundi, fundi, fundi... (we don't dilate!)
  - neck stiffness, meningism
  - heel-toe walking good for ataxia

## Weakness

- Onset, progression, disability
- Distribution:
  - symmetrical?
  - proximal, distal, global?
- Diurnal variation?
  - myasthenia gravis ('indifferent' patient THINK facial weakness?)
  - oculo-bulbar in elderly
- Motor only
  - think about motor neuron disease
- Reflexes
  - absent = peripheral (or root) e.g. GBS
  - brisk = central (check plantars too)

## Stroke

- Time is brain
- BP, BP, BP!
- For thrombolysis:
  - onset clear <4.5 hours
    - I.e. less than 3 hours from GP
  - no warfarin etc.
  - keen to thrombolysse those with a lot to lose:
    - 40s-50s
    - esp. brain stem 'locked in'
- Currently administered via medics

## Pins & needles/numbness

- Very common symptom
- Not urgent without motor involvement
- Distribution of sensory change:
  - glove/stocking (common)
    - not urgent unless progressive motor features (e.g. GBS)
    - send serum electrophoresis as well as usuals
  - dermatomal (rare)
    - pain in distribution of nerve (e.g. sciatic into foot)
    - associated weakness/appropriate hyporeflexia?
    - exclude sensory level (e.g. cord compression)
    - ask about sphincters and erectile function (e.g. cauda)
  - 'patchy' (common)
    - might be MS in right context but often idiopathic and self-limiting
    - if nil motor then consider 'watch and wait' versus OPA
    - acute compression neuropathies e.g. ulnar at elbow
      - not urgent without rapidly progressive motor features

## Steroids for MS relapses?

- In general NO:
  - little evidence for benefit
  - don't alter outcome
  - may speed recovery marginally
  - significant life-threatening AEs possible including psychosis, pancreatitis, perforation, avascular necrosis of hip
- 3 relapse scenarios to consider use when acute in onset:
  - can't walk
  - can't see
  - can't maintain continence
- Always check for UTI first and treat instead
- Consider MS nurse referral first
- Oral methylprednisolone 500mg for 5 days as "good" as IV
  - No more than 3 courses per year

## 'Dizziness'

- "Dizziness" is a PATIENT WORD
- Is it true rotational VERTIGO?
  - abnormal feeling of movement
  - like you're on a ship?
  - V-B event versus labyrinthitis:
    - dysarthria, dysphagia, dysphonia, diplopia NOT labyrinthitis
  - stereotypy:
    - BPPV, Meniere's
    - vertiginous (acephalgic) migraine
- Or is it LIGHT-HEADEDNESS?
  - do you think you might pass out?
  - cardiac symptoms?
  - ECG ?HB
  - postural BP? (NB Addison's)
- Or is it UNSTEADINESS?
  - Proprioception (worse in dark?), only then Romberg's test & B12
  - early PD (rigid, stiff, can't turn in bed, poor corrective reflexes)

## First fits

- History, history, history:
  - witness account vital: they must bring along
  - could it have been a faint with secondary hypoxia?
  - cardiac symptoms?
  - alcohol/drugs/insulin?
  - cerebrovascular disease very common cause
- Refer?
  - urgent if signs or significant headaches (>50 years)
  - otherwise OPA (expedited if ongoing seizures)
- DON'T start treatment unless recurrence clear
- DO tell them to talk to DVLA

## Bell's palsy

- LMN VII (i.e. including forehead) and no other signs
- Associated features:
  - pain behind ear prior
  - hyperacusis ipsilateral
  - subjective numbness on face common despite being trigeminal
- Not acceptable:
  - limb weakness
  - ataxia
  - other cranial nerves (bar V)
- Check no shingles rash in ear or mouth
  - give aciclovir if rash develops but not otherwise
- Steroids (~0.75mg/kg for 5 days) if within 3 days of onset
- Warn 10% incomplete recovery
- Patch the eye and give lubricant if cornea exposed

## Is it PD or essential tremor?

- Age >50, recent onset
- Progressive
- Asymmetrical
- Rest tremor (NOT head)
- Small handwriting
- Usually no family history
- "Slowing up"
- Rigidity (shoulder shake)
- Poor postural reflexes
- Think about BP and sphincters (MSA) and falls (PSP)
- TIME MAY TELL...
- Any age, "had it for ages"
- Non-progressive
- Often symmetrical
- Not at rest
- Head tremor sometimes
- "Shaky" handwriting
- Family history common
- Otherwise active
- No rigidity
- Adequate postural reflexes
- Ask about alcohol's effect
- Consider propranolol, primidone or topiramate

## Memory loss

- DIFFICULT!
  - tincture of time
  - easy for us all to get wrong too
- Biggest group in dementia clinics are depressed
- Always check TSH and B12
- Common 'normals':
  - I get upstairs and forget why
  - I forget people's names
- Try less confronting questions:
  - Can you bring a Sunday roast together warm?
- Red flags:
  - brought by someone else to see you
  - lost in familiar surroundings (AD)
  - marked personality change (FTD):
    - odd eating, disinhibition
  - fluctuations, hallucinations, Parkinsonism (LBD)

## The 1 minute screening exam

- Fundi
- Eye movements (including nystagmus)
- Screw your eyes tight, show teeth, stick out tongue
- Grip tight, get up from the chair with arms folded and stand on your toes and heels
- Reflexes and plantar responses
- Heel-toe walk

## Should I refer to Neurology?

- Multiple pathologies in elderly patient, esp. falls:
  - often best dealt on practical level by a good geriatrician (MDT support)
- 'Dizziness' may require ENT opinion too
- If in doubt call the on call Neurology StR to discuss
- Help us by reducing the 'brain scan will cure all' expectation