

# Common Cerebral Histories

Presenting complaint	Exploding symptom	Relevant system reviews	Differential diagnoses		Clues to differential
			Grouping	Differentials	
Headache	<p><b>Pain</b></p> <p><b>Site</b></p> <p><b>Onset</b></p> <p><b>Character</b></p> <p><b>Radiation</b></p> <p><b>Associated symptoms</b></p> <p><b>Timing</b></p> <p><b>Exacerbating/relieving factors</b></p> <p><b>Severity</b></p> <p><b>Red flags</b></p> <ul style="list-style-type: none"> <li>•Meningismus symptoms: rash, fever, neck stiffness</li> <li>•Temporal arteritis symptoms: visual problems, jaw claudication, scalp tenderness</li> <li>•Glaucoma symptoms: visual problems, red eyes, halos around lights</li> </ul>	<p><b>General</b></p> <p>Fever, skin rashes/bruising</p> <p><b>Neurological</b></p> <ul style="list-style-type: none"> <li>•General: fits/falls/LOC, dizziness, vision/hearing, memory loss, neck stiffness/photophobia</li> <li>•Motor: weakness/wasting, incontinence</li> <li>•Sensory: pain, numbness, tingling</li> </ul>	Primary	Tension headache	<ul style="list-style-type: none"> <li>•Bilateral tight band sensation</li> <li>•Recurrent</li> <li>•Occurs late in day</li> <li>•Association with stress</li> </ul>
				Cluster headache	<ul style="list-style-type: none"> <li>•Short painful attacks around one eye</li> <li>•Last between 30 mins – 3 hours</li> <li>•Occur once/twice a day for 1-3months</li> <li>•May be lacrimation and flushing</li> </ul>
				Migraine	<ul style="list-style-type: none"> <li>•Unilateral pulsating headache in trigeminal nerve distribution</li> <li>•Last between few hours – days</li> <li>•may be aura (usually visual)</li> <li>•Need to lie down in dark room (photophobia)</li> </ul>
				Trigeminal neuralgia	<ul style="list-style-type: none"> <li>•2 second paroxysms of stabbing pain in unilateral trigeminal nerve distribution</li> <li>•Face screws up with pain</li> </ul>
			Secondary - intracranial	Meningitis	<ul style="list-style-type: none"> <li>•Photophobia</li> <li>•Neck stiffness</li> <li>•Systemic symptoms e.g. fever, non-blanching rash</li> </ul>
				Temporal arteritis	<ul style="list-style-type: none"> <li>•Unilateral throbbing pain</li> <li>•Scalp tenderness and jaw claudication</li> <li>•&gt;55 years</li> <li>•May be visual problems</li> </ul>
				Subarachnoid haemorrhage	<ul style="list-style-type: none"> <li>•Very sudden onset severe headache</li> <li>•"like some on hit me with a brick over the head"</li> <li>•Meningismus</li> </ul>
				Raised intracranial pressure (e.g. tumour, benign intracranial hypertension)	<ul style="list-style-type: none"> <li>•Worse in morning and with coughing and bending</li> <li>•Vomiting &amp; reduced GCS</li> <li>•May be neurological symptoms &amp; seizures if tumour</li> </ul>
			Secondary - extracranial	Glaucoma	<ul style="list-style-type: none"> <li>•Pain around one eye</li> <li>•Swollen red eye</li> <li>•Visual blurring and halos</li> </ul>
				Sinusitis	<ul style="list-style-type: none"> <li>•Facial pain exacerbated by leaning head forward</li> <li>•Rhinorrhoea</li> </ul>
Vertigo	<p><b>Timing</b></p> <ul style="list-style-type: none"> <li>•When started</li> <li>•Acute/ gradual onset</li> <li>•Duration</li> <li>•Progression</li> <li>•Intermittent or continuous</li> </ul> <p><b>Background to attacks</b></p> <p>e.g. had before, frequency, impact on life</p>	<p><b>General</b></p> <p>Fever</p> <p><b>ENT</b></p> <ul style="list-style-type: none"> <li>•Ear: hearing loss, tinnitus, otalgia</li> <li>•Nose: rhinorrhoea, epistaxis</li> <li>•Throat: saw throat,odynophagia</li> </ul> <p><b>Cardiorespiratory</b></p> <p>Chest pain, palpitations, SOB/wheeze, cough, sputum, leg swelling</p> <p><b>Neurological</b></p> <ul style="list-style-type: none"> <li>•General: fits/falls/LOC, headache, dizziness, vision/hearing, memory loss, neck stiffness/photophobia</li> <li>•Motor: weakness/wasting, incontinence</li> <li>•Sensory: pain, numbness, tingling</li> </ul>	Peripheral (vestibular)	Benign positional vertigo	<ul style="list-style-type: none"> <li>•Attacks of sudden rotational vertigo</li> <li>•Evoked by head turning</li> <li>•Last ~ 30 seconds</li> </ul>
				Vestibular neuritis (e.g. herpes virus)	<ul style="list-style-type: none"> <li>•Often preceded by URTI</li> <li>•Sudden rotational vertigo and vomiting</li> <li>•Lasts several days but imbalance may persist</li> <li>•May re-occur several times per year</li> </ul>
				Viral labyrinthitis	<ul style="list-style-type: none"> <li>•Often preceded by URTI</li> <li>•Severe vertigo and hearing disturbance</li> <li>•May be tinnitus, otalgia, N&amp;V, fever</li> </ul>
				Meniere's disease	<ul style="list-style-type: none"> <li>•TRIAD: vertigo + tinnitus + hearing loss</li> <li>•Attacks last minutes-hours</li> </ul>
			Central	Vertebrobasilar insufficiency	<ul style="list-style-type: none"> <li>•Momentary vertigo attacks precipitated by neck extension</li> <li>•Elderly with cervical OA</li> </ul>
			Other differentials	<p><b>Peripheral</b></p> <p>Acoustic neuroma (vestibular schwannoma)</p> <p>Chronic otitis media</p> <p>Eustachian tube dysfunction</p> <p>Ramsay-Hunt syndrome (vertigo, facial palsy, otalgia, zoster rash)</p> <p>Cholesteatoma</p> <p><b>Central</b></p> <p>Vertebrobasilar stroke (e.g. PICA syndrome)</p> <p>Cerebellar stroke</p> <p>Neurological conditions (e.g. MS, epilepsy, brain tumour, migraine)</p> <p>Head injury</p> <p>Inner ear syphilis</p> <p><b>Drugs</b></p> <p>e.g. alcohol, salicylates, quinine, aminoglycosides, metronidazole, cotrimoxazole, diuretics</p>	

Fit/Fall/ Syncope	<p><b>Attack</b></p> <ul style="list-style-type: none"> <li>•Before: warning, circumstance</li> <li>•During: duration, LOC, movements (floppy/stiff/jerking), incontinence/bite tongue, complexion (GET CORROBORATION)</li> <li>•After: amnesia, muscle pain, confusion/sleepiness, injuries from fall</li> </ul> <p><b>Background to attacks</b> e.g. had before, frequency, impact on life</p>	<p><b>General</b> Fever</p> <p><b>Cardiorespiratory</b> Chest pain, palpitations, SOB/wheeze, cough, sputum, leg swelling</p> <p><b>Neurological</b></p> <ul style="list-style-type: none"> <li>•General: fits/falls/LOC, headache, dizziness, vision/hearing, memory loss, neck stiffness/photophobia</li> <li>•Motor: weakness/wasting, incontinence</li> <li>•Sensory: pain, numbness, tingling</li> </ul>	Cardiovascular	Postural hypotension	<ul style="list-style-type: none"> <li>•Dizziness ± LOC on standing from lying</li> <li>•Recently started/changed anti-hypertensive</li> </ul>	
			Arrhythmia	<ul style="list-style-type: none"> <li>•Fall after transient arrhythmia</li> <li>•May have palpitations or feel very strange before collapse</li> <li>•Cardiac history or family history of sudden death</li> <li>•May have occurred during exercise or when supine</li> </ul>		
			Aortic stenosis	<ul style="list-style-type: none"> <li>•Collapse on exertion</li> <li>•Breathlessness worse on exertion</li> </ul>		
			Neurological	Seizure	<p><b>Partial</b></p> <ul style="list-style-type: none"> <li>•Simple partial: focal motor seizure, no LOC</li> <li>•Complex partial (e.g. temporal lobe epilepsy): strange actions with impaired awareness</li> </ul> <p><b>Generalised</b></p> <ul style="list-style-type: none"> <li>•Tonic-clonic (grand mal): sudden LOC, limbs stiff then jerk, may become incontinent, bite tongue, feel awful with myalgia and confusion afterwards</li> <li>•Absence (petit mal): unresponsively stare into space for ~ 5 seconds (in childhood)</li> <li>•Atonic: all muscles relax and drop to floor</li> <li>•Tonic: all muscles become rigid</li> <li>•Myoclonic: involuntary flexion</li> </ul>	
			Parkinson's disease	<ul style="list-style-type: none"> <li>•QUADRAD = rigidity + tremor + bradykinesia + postural instability</li> </ul>		
			TIA/stroke	<ul style="list-style-type: none"> <li>•Neurological symptoms e.g. limb/face weakness, slurred speech, hemianopia</li> </ul>		
			Vasovagal	<ul style="list-style-type: none"> <li>•Occurs in response to stimuli e.g. emotion/pain/fear/prolonged standing</li> <li>•Preceding nausea, pallor, sweat, closing visual fields</li> <li>•Then LOC for ~ 2 mins</li> </ul>		
			<b>Other differentials</b>	<p><b>Mechanical</b> Mechanical fall/postural instability</p> <p><b>Cardiovascular</b> Structural e.g. HOCUM, ARVD Situation syncopies (e.g. cough syncope, effort syncope, micturition syncope) Carotid sinus hypersensitivity (precipitated by head turning/ shaving) Vertebrobasilar insufficiency (elderly with cervical OA)</p> <p><b>Neurological</b> Neuropathy e.g. MS Intracranial haemorrhages (extradural, subarachnoid, subdural) Drop attack (sudden leg weakness without warning/LOC/confusion)</p> <p><b>Drugs</b> e.g. alcohol, polypharmacy</p> <p><b>Abdominal</b> Ectopic pregnancy Ruptured AAA</p> <p><b>Misc</b> Delirium (secondary to infection) Any cause of vertigo above Anaemia Hypoglycaemia Eyesight problems Arthritis</p>		