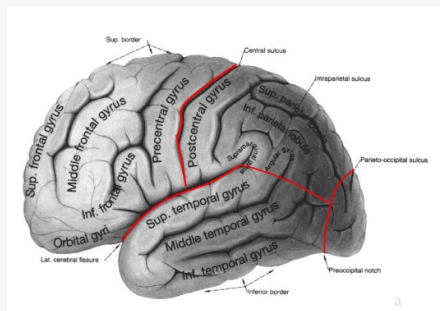


Lobes of the brain



Types of Intracranial disorders

Cerebrovascular damage Haemorrhage

Infarction

Aneurysms

Blood disorders

Arteriovenous Malformations

Haematomas Intradural
Extradural

Intracranial Tumours Benign
Malignant

Intracranial infection Abscess

Post trauma Concussion

Tumours

Supratentorial Tumours **Infratentorial Tumours**

Raised ICP + brain shift S&S

Raised ICP + brain shift S&S

Tentorial herniation then tonsillar herniation

S&S of CSF outflow blockage

Causes tonsillar herniation

Tumours (cont)

VI Nerve Palsy - BS pushed downwards, stretches VI nerve over petrous tip **Unreliable sign**

Extradural haematoma:

Pushes on hemisphere sideways under Falx, downwards through tentorium
Stretches CN III over edge of the tentorium - unilateral III nerve palsy **reliable sign**

Frontal Lobe

Functional areas:

Olfactory Bulb, tract + optic nerve Frontal Poles

Cingulate Gyrus Frontal eye fields

Cortical control of micturition (urination) Corpus Callosum

Motor cortexes Rolandic fissure (fissure between occipital + frontal lobe)

Sylvian Fissure Broca's area (fissure between temporal + frontal lobe)

Frontal lobe Lesions:

Loss of drive

Apathy

Decreasing concern about personal appearance, hygiene, family affairs, business

Memory problems

Diminished intellect

Epilepsy Focal, motor
Adversive (includes eyes)

Frontal lobe Lesions: (cont)

Status Epilepticus (seizure lasting 10 minutes or more)

Possible Temporal lobe attacks due to its close proximity

Frontal lobe - personality, acquired social behaviour

More Symptoms

Weakness on opposite side of face and/body

If parasagittal, legs are affected bilaterally

Loss of micturition (urge incontinence)

Speech Disturbance - Dysphagia (Broca's)

Visual Disturbance - in visual and or acuity
Alteration in smell

Signs

Intellectual impairment

Memory Defect

+ve Grasp Reflex

Contralateral UMNL signs

Unilateral anosmia

Visual pathway deficits

Dysphasic signs

Occipital Lobe Functional areas

Visual Association areas Main Visual cortex

Calcarine fissure (medially in right hemisphere)

Occipital Lobe Lesions

Seizures with flashing light
Aura

Visual Field Defects

Dyslexia Visual Agnosia (cannot recognise visual information)

Parietal lobe Lesions (EITHER)

Sensory Seizures	Soft Motor signs
Visual pathway Disturbance	Postural Sensation disturbed
Decreased Passive Joint Movement Sense	Touch Localisation Disturbed
2 pt Discrimination disturbed	Appreciation of size + texture Disturbed
Perceptual Rivalry	Altered Optokinetic nystagmus

Perceptual Rivalry: When presented with two images, instead of them being superimposed, the images appear separately

Optokinetic nystagmus: Following an object when stationary (larger visual field, oculomotor response and directs image onto the retina, compared to small moving visual objects, directs image onto fovea in smooth pursuit)

Parietal Lobe Lesions (RIGHT & LEFT)

RIGHT	LEFT
Anosognosia - no longer aware of opposite side	Confusion of right and left limb
Dyspraxia - loss of acquired skills	Finger agnosia
Disturbance of Geographic Memory	Acalculia
	Agraphia
	Wernicke's dysphagia

Wernicke's dysphagia- loss of production/comprehension of spoken &/or written language (acquired)

Temporal Lobe functional areas:

Uncinate fasciculus (connects uncus to orbital frontal cortex)	Hippocampus
Uncus	Inferior longitudinal fasciculus (to visual association areas)
Motor fibres entering cerebral peduncles	

Temporal Lobe Lesions

Epileptic - complex partial seizures "on/off"

Complex Automisms :

Lipping	Sucking
Kissing	Repeated fiddling with clothing

Walking/driving then "waking up"

Prodromes: Visual/auditory/smell-s/taste hallucinations

Unpleasant visceral sensations "Something awful is about to happen"

Deja vu Jamais vu

Deja vu:- described as a strong sensation that a current event has happened/occurred before

Jamais vu: - opposite to deja vu. Something that has happened in a person's life but they have the feeling it happened for the first time.

