TBI

Acquired Brain Injury (ABI)	Any type of brain damage that occurs after birth → infection, disease, lack of oxygen
Traumatic Brain Injury (TBI)	Subset of ABI Brain injury caused by trauma to the head.

Types of TBI	• Close Head Injury: Brain is injured as a result of a blow to the head, or a sudden violent motion that causes the brain to knock against the skull → DIFFUSE Damage
	  ○ Coup and Contrecoup
	  ○ Deep axonal injury
	  ○ Soft tissues of brain hit skull
	• Penetrating Head Injury: Object penetrates the skull → affecting specific or FOCAL areas of brain tissue
	• Crush Injury: Least common. Often damages base of skull and brain stem nerves rather than brain itself.

TBI Chain of events	1. Seconds after the accident 2. Minutes/Hours after: results from loss of oxygen to the brain due to other injuries or post damage circumstances 3. Any time after 1 and 2 and results from bleeding or swelling in the brain

TBI Coma	TBI often results in coma → " A state of profound unconsciousness, characterised by absence of spontaneous eye opening, response to painful stimuli, and vocalisation"
	
	Coma may not clear and they may remain in a persistent vegetative state (after 4 weeks is not good).
	
	Coma – Glasgow Coma Scale (GCS): Scores levels of consciousness (important to monitor as it is a prognostic indicator → longer time it is low; worse outcomes).
	• E (eye opening /4)
	• M (motor response /6)
	• V (verbal response /5)
	  ○ Severe < (less or equal to) 8
	  ○ Moderate 9 -12
	  ○ Mild > (more or equal to) 13

Post Traumatic Amnesia (PTA)	"Transient stage of memory disruption and confusion in the early stages of recovery"
	• State of confusion that can follow TBI → Last from months to Hours (length is a prognostic indicator)
	• Galveston Orientation and Amnesia Test (GOAT; Levin et al., 1979); taken every day to monitor improvement (repeated over and over)
	• Possible patient behaviours:
	  ○ Disoriented
	  ○ Slow processing
	  ○ Anterograde (new memories) and Retrograde (old)
	  ○ Distractibility/poor concentration
	  ○ Lack of insight
	  ○ Aggression
	
	PTA Communication may be:
	  ○ Confused, confabulatory, repetitive and preservative
	SP role in PTA:
	  ○ Dysphagia, dysarthria, monitoring cognitive impairment, provision of simple AAC, advising family RE communication, ensuring environment is conductive to communication. → Don't start ax and tx until PTA over.