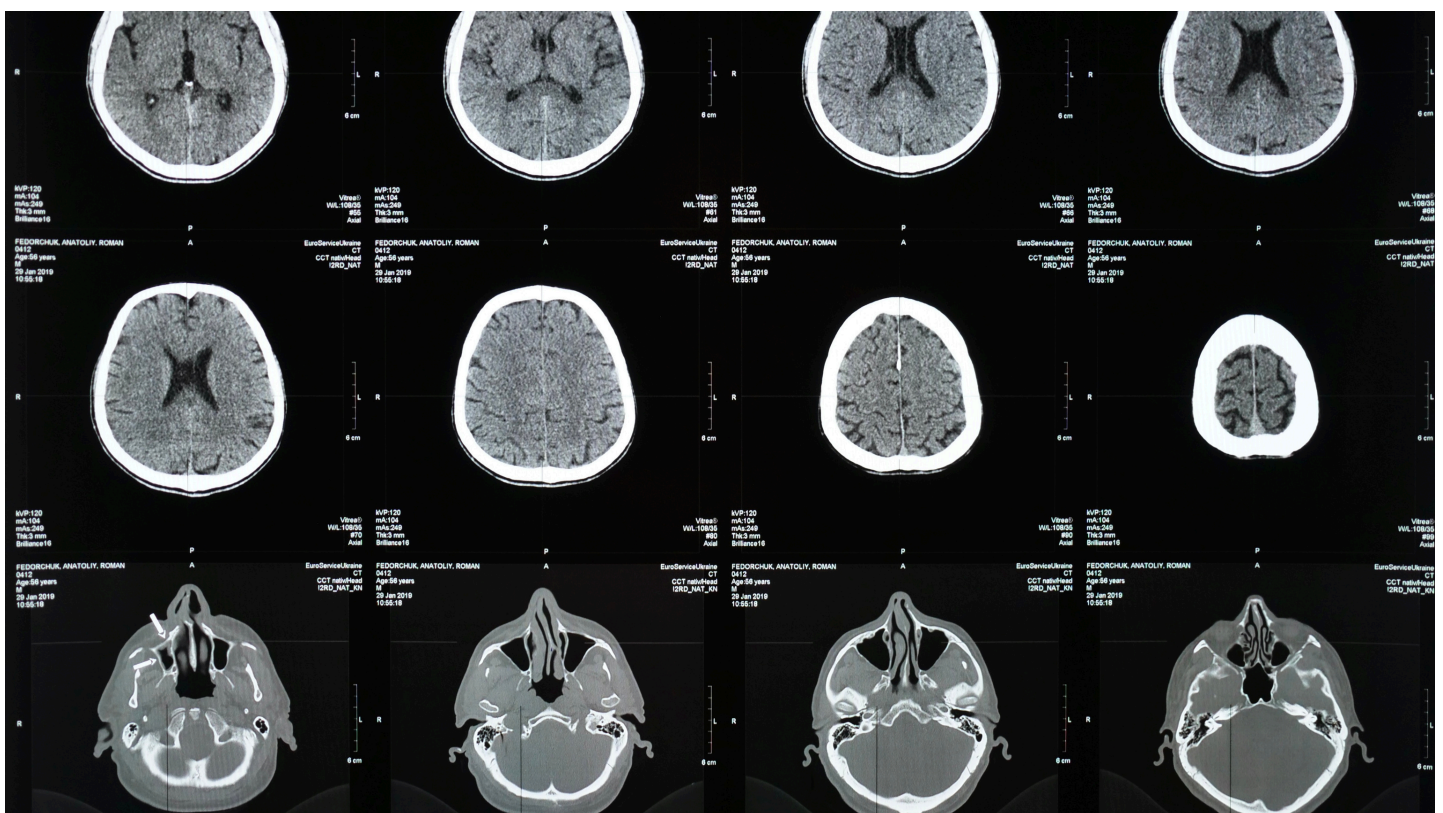


The Trauma Bulletin



Use Your Head

Management of the bleeding brain in geriatric patients

Issue twenty



Case summary

You have all heard the nursery rhyme:



It's raining, its pouring, the old man is snoring. He went to bed and bumped his head and couldn't get up in the morning.

Spoiler! This actually happens a lot.

An elderly man presents to RPH after a fall from standing height, banging his head and landing across a table on the left side of his torso.

He had a brief, witness loss of consciousness and presents with a GCS of 13-14 (confused) and some vomiting. He is not on any anticoagulants, or antiplatelets, and his vital signs are all within normal range.

The CT scan

He clearly has both a head injury and a left upper quadrant injury to his abdomen and imaging reveals a small left subdural and grade 2 splenic laceration injury.



Disposition

He looks to be well enough to go to the SMTU, with a plan to perform regular neurological observations and re-CT scan in 24 hours.

Just prior to transfer (and after four hours in ED) nursing staff note that his GCS had fallen two points to 11, still well above the magic level of 8 (a level we all recognise as needing the airway secured). It was decided to let him continue on his journey to the trauma unit.

ROYAL PERTH BENTLEY GROUP				SURNAME	URN	
CHART FOR PATIENTS WITH IMPAIRED CONSCIOUSNESS WARD: _____ DOCTOR: _____				GIVEN NAMES		
				D.O.B.	SEX	
DATE						
TIME	0-24 hours					
CONSCIOUSNESS	Eyes open	Spontaneously	4	Eyes closed by swelling = C		
		To speech	3			
		To pain	2			
		None	1			
	Best verbal response	Oriented	5	Endotracheal tube or tracheostomy = T Aphasic = A		
		Confused	4			
		Inappropriate words	3			
		Incomprehensible Sounds	2			
	Best motor response	Obey commands	6	Usually record the best arm response Muscle relaxant = M sedation = S		
		Localise	5			
		Withdraw	4			
		Abnormal flexion	3			
			Extension	2		
			None	1		
	G.C.S. TOTAL			15		
• 1 • 2 • 3 • 4 • 5 • 6 • 7 • 8 Pupil scale (mm) Respiration	Blood pressure and Pulse rate	230	40	Temperature °C		
		220	39			
		210	38			
		200	37			
		190	36			
		180	35			
		170	34			
		160	33			
		150	32			
		140	31			
		130	30			
		120				
		110				
		100				
		90				
		80				
70						
60						
50						
40						
30						
PUPILS	right	Size	Reaction	+ reacts - no reaction C. eye closed		
	left	Size	Reaction			
LIMB MOVEMENT	ARMS	Normal power		Record right (R) and left (L) separately if there is a difference between the two sides.		
		Mild weakness				
		Severe weakness				
		Spastic flexion				
		Extension				
	LEGS	No response				
		Normal power				
		Mild weakness				
		Severe weakness				
		Extension				
No response						



SMTU

Very shortly after his arrival, he was found to have declined again with a GCS of 9.

His repeat CT scan was confronting, showing a much larger subdural, with a heterogenous texture indicating acute bleeding, and also significant midline shift with effacement of the ipsilateral ventricle, and a very tight brain.



The message

The imaginary case reflects a reality that we see sometimes. Deciding how bad a head injury is before it is too bad to come to the SMTU isn't always easy. Clearly there are some patients who need an ICU referral (GCS less than 9), and also a decline in GCS of two or more points, but how often do these situations follow the textbook? We rely on common sense and encourage consultation/referral with ICU/Neurosurgery if there is any doubt.

Our threshold for referral falls even lower if there is a history of anticoagulants, seizure activity, focal neuro signs or **ANY** decline in GCS after arrival to hospital.

Always remember

Don't be afraid to consult if there is any doubt about the suitability of a patient with a head injury destined for the STU

