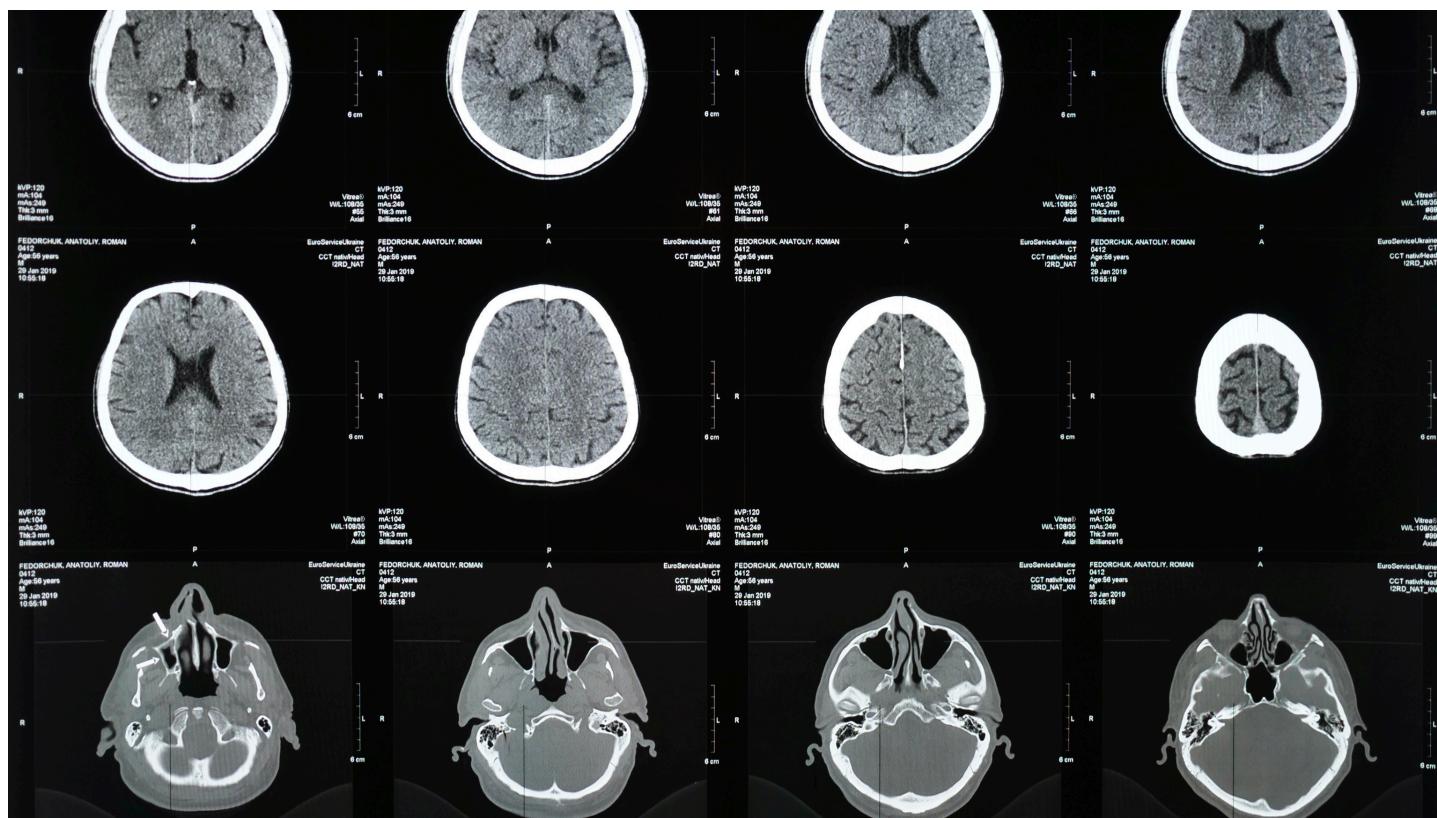


# The Trauma Bulletin



## Use Your Head

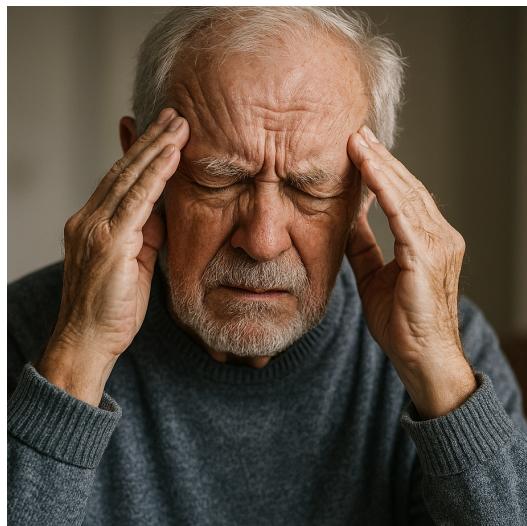
Management of the bleeding brain in geriatric patients

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.*

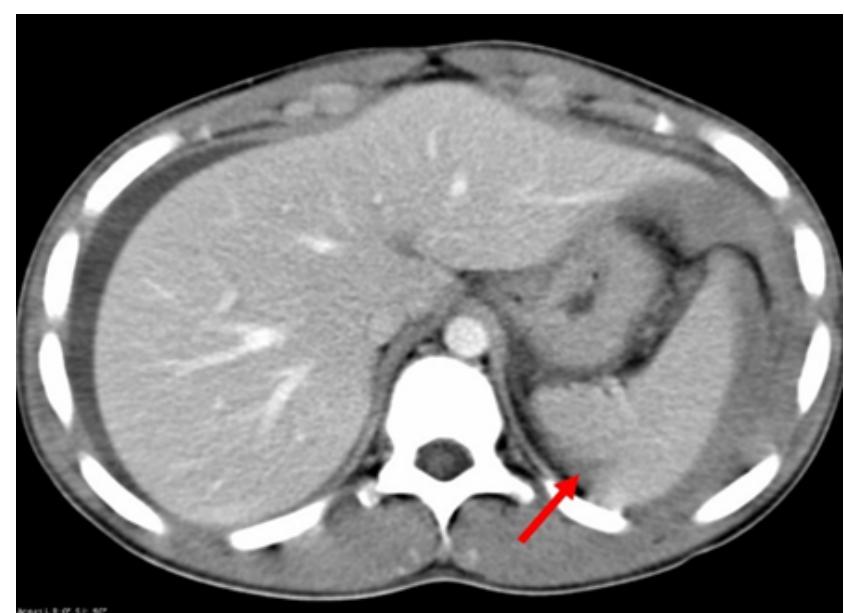
**Spoiler!** This actually happens a lot.

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 a 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		GIVEN NAMES		
WARD:		D.O.B.		SEX
DOCTOR:				
DATE				
TIME		0-24 hours		
C O N S C I O U S N E S S	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		
		None 1		
Best motor response	Obey commands 6		Usually record the best arm response Muscle relevant = M sedation = S	
	Localise 5			
	Withdraw 4			
	Abnormal flexion 3			
	Extension 2			
	None 1			
		G.C.S. TOTAL 15		
Pupil scale (mm)	• 1	230	Temperature °C 40 39 38 37 36 35 34 33 32 31 30	
	• 2	220		
	• 3	210		
	• 4	200		
	• 5	190		
	• 6	180		
	• 7	170		
	• 8	160		
		150		
Respiration	140			
	130			
	120			
	110			
PUPILS	100			
	90			
	80			
	70			
MOVEMENT	60			
	50			
	40			
	30			
L I M B M O V E M E N T	right	Size Reaction	+ reacts - no reaction C. eye closed	
	left	Size Reaction		
	A	Normal power		
		Mild weakness		
	R	Severe weakness		
	M	Spastic flexion		
	S	Extension		
		No response		
	L	Normal power		
E	Mild weakness			
E	Severe weakness			
G	Extension			
S	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



\* No clinical photos are used in Trauma Bulletins \*