The acute management of head Injury

Head Injury makes one of the most common trauma presentations seen in the Emergency Department. Many patients get admitted to the wards who have suffered a head injury as part of the medical event that led to that admission. We all need to be aware of the potential problems that may develop.

In the older patient there are two main risks in the apparently “minor” head injury:

1) There is the risk of intracranial bleeding that was known to be increased by a factor of 8 to 10 times in the presence of warfarin and consequently most of those patients had CT scans. We now have no idea what the actual risk increase is for NOAC’s and await data. By default, we are now treating most NOAC patients as if they were on warfarin, which may lead us to a false sense of security, because the bleeding may not actually happen until days or weeks later. The effect of NOAC’s in head injury is still unknown as is the timing of those effects. To counter this we have to maintain a clinical suspicion and be willing to reassess the elderly “minor head injury”, even if they have had a clear scan, should they become symptomatic. From a practical point of view, persistent headache is probably an important symptom since the problem is as likely to be an intra-cerebral haemorrhage, as much as a surgical subdural or extradural.

2) Also the elderly patients often have arthritic necks which are far less flexible. Consequently they are more likely to suffer from neck and cord injuries after falls, particularly forward falls that cause hyperextension of the neck.

As a rule;

a. Any elderly patient with a forehead bruise after falling against a piece of furniture must be assessed for signs of spinal cord injury. In particular the central cord injury where the hands are CLUMSY rather than completely PARALYSED and the legs are more or less normal. (The classical description is the man who can walk to the pub but not pick his pint up!) This injury does NOT need a fracture to be present!

b. Any elderly patient who has a need for a Head CT scan should have the neck included in that scan. This will NOT pick up every cord injury and the fracture may well be very subtle. Get a radiological review of the case.

c. If there are signs of new limb neurology then the need for an MRI should be discussed with the radiologists and the results recorded.

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