

1. Canadian CT head rule

# **Canadian CT Head Rule**

**CT head is only required for minor head injury patients with any one of these findings:**

## **High Risk (for Neurological Intervention)**

- 1. GCS score < 15 at 2 hrs after injury**
- 2. Suspected open or depressed skull fracture**
- 3. Any sign of basal skull fracture\***
- 4. Vomiting  $\geq$  2 episodes**
- 5. Age  $\geq$  65 years**

## **Medium Risk (for Brain Injury on CT)**

- 6. Amnesia before impact  $\geq$  30 min**
- 7. Dangerous mechanism \*\* (pedestrian, occupant ejected, fall from elevation)**

### **\*Signs of Basal Skull Fracture**

- hemotympanum, 'raccoon' eyes, CSF otorrhea/rhinorrhea, Battle's sign

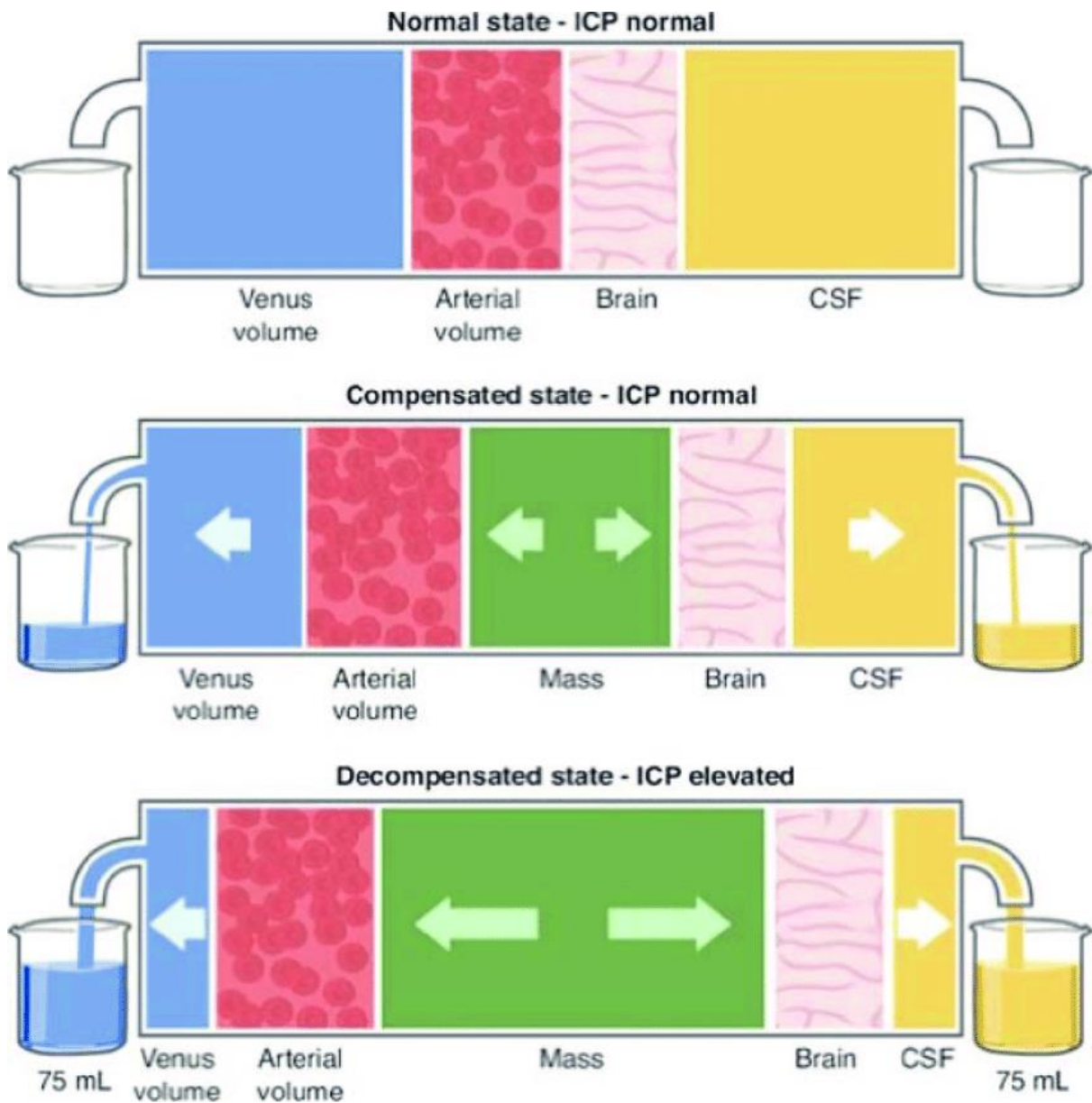
### **\*\* Dangerous Mechanism**

- pedestrian struck by vehicle
- occupant ejected from motor vehicle
- fall from elevation  $\geq$  3 feet or 5 stairs

### **Rule Not Applicable if:**

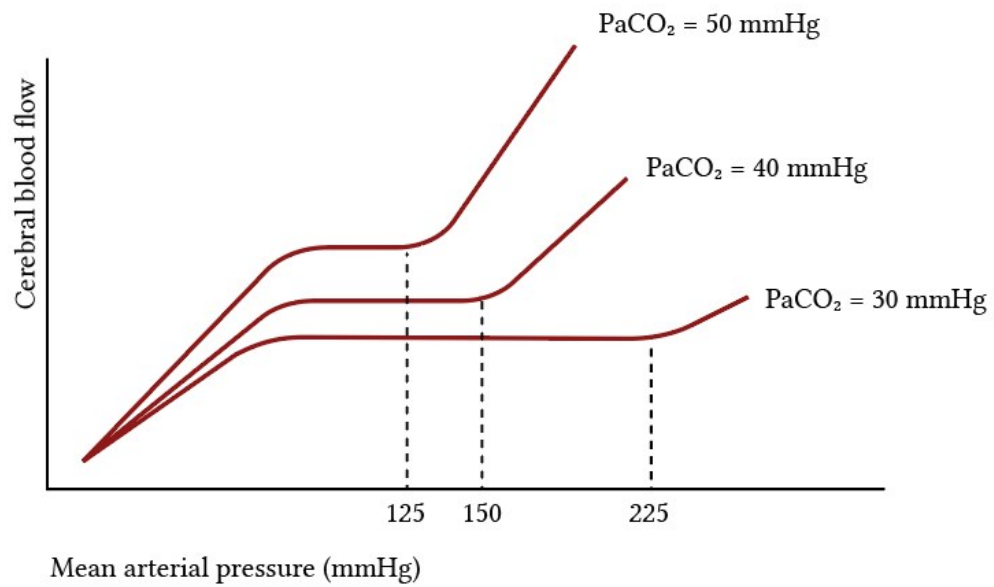
- Non-trauma cases
- GCS < 13
- Age < 16 years
- Coumadin or bleeding disorder
- Obvious open skull fracture

2. Monroe-Kellie Doctrine – principle of ICP management



Available from: [https://www.researchgate.net/figure/The-Monro-Kellie-doctrine\\_fig2\\_344409628](https://www.researchgate.net/figure/The-Monro-Kellie-doctrine_fig2_344409628)  
[accessed 14 May, 2024]

3. Cerebral Blood flow (impact of CO<sub>2</sub> and BP)



<https://derangedphysiology.com/main/cicm-primary-exam/required-reading/cardiovascular-system/Chapter%20474/cerebral-blood-flow-autoregulation>