Pediatric TBI

1. Please list in sequential order the therapeutic interventions for the control of increased ICP according to the critical pathways for the treatment of pediatric TBI
   - 3% hyperosmolar therapy
   - mild hyperventilation
   - CSF drainage
   - sedation and analgesia
   - decompressive craniectomy

2. What is the PaCO₂ range consistent with “mild hyperventilation”?

3. Select the drugs or combination of drugs that would provide patients with the benefits of BOTH sedation and analgesia?
   - midazolam
   - propofol
   - fentanyl
   - morphine and lorazepam
   - midazolam and propofol

5. 6 yo male s/p closed head injury following an MVA presents to the ED with a GCS of 8 and is taken to the OR for placement of an ICP monitor without ventricular drain. In the PICU he has an ICP of 30 despite adequate sedation and analgesia. You raise the head of the bed to 30° and position the head midline to avoid jugular venous outflow obstruction and decide to give a dose of vecuronium. His ICP remains elevated despite these interventions. His VS are BP 110/60, HR 110, sats 100% of 40% FIO₂. Physical exam reveals sluggishly reactive pupils, clear breath sounds, soft abdomen, and cold extremities with diminished pulses on his lower extremities. Which drug would be most beneficial to control his ICP- mannitol or 3% saline? Why?