Normal Values

Hb (g/L)	Normal: 70-100 Males: 135-180 Females: 115-160
Platelets (x10^9/L)	Normal: 140-400 Avoid P+V: <30 ?NP suction: <50-60 Weight lifting: >100
INR	Normal: 1 Heart Valves: 2.5-3.5 DVT/PE/AF: 2-3
INR	Normal: 1 Heart Valves: 2.5-3.5 DVT/PE/AF: 2-3
BP MABP CVP	90/60 - 140/90 70-105 5-15
SIRS Criteria	WCC: <4 or >12 Temp: <36 or >38 HR: >90 RR: >20 or PaCO2 <32 SIRS: 2+/4 above Sepsis: SIRS+source infection Sepsis+: Sepsis+Org. Fail

Neurological Values

ICP (mmHg)	0-15 TBI target <22
CPP	>60 CPP = MABP - ICP
Upper Motor Neuron Lesions	Weakness/Spasticity/Hypereflexia/Primitive Reflexes Babinski sign
Lower Motor Neuron Lesions	Weakness/Hypotonia/Hyporeflexia/Atrophy Fasiculations

Sedatives

Midazolam	Short acting, avoid due to delirium
Morphine / Fentanyl (Opiod)	Also analgesic
Propofol	Short acting, rapid onset of action, short term sedation
Dexmedetomidine	Used for pt who are difficult to wake due to agitation

Inotropes/Vasopressor

Noradrenaline (mcg/kg/min)	Vasopressor (>0.1)
Adrenaline (mcg/kg/min)	Vasopressor + Isotrope (>0.1)
Dobutamine (mcg/kg/min)	Inotrope (5-10, >10 risk of arrhythmias)
Vasopressin (units)	Increases BP by increasing renal fluid resorption + peripheral vasoconstriction (0.01-0.04)

MHI precautions

- PEEP >10 +/- (FiO2>0.4)
- Airborne or contact precautions
- FiO2 >0.7
- Pulmonary compliance is low (compliance <40mL/cmH2O)
- Pulmonary bull or lung abscess -> CXR

MHI Contraindications

- Highly infectious respiratory conditions
- High frequency oscillating ventilation (HFOV)
- Severe bronchospasm or gas trapping
- Pneumothorax is present and is untreated (insertion of ICC)
- Frank hemoptysis is present

MHI - Resp Considerations

Patients WOB	Accessory muscle use Paradoxical breathing patterns
CVL insertion	Withhold MHI until CXR -> ptx
ICCs	Review swinging, bubbling and drainage prior/after rx
Broncho-pleural fistula	D/w ICU consultant

MHI - Haemodynamics Considerations

- Acute PE is present
- BP is low (MABP<60) especially 1) labile BP 2) High vasopressor/inotropic) 3) acute resuscitation phases of septic shock or hypovalemic states
- New arrhythmia (ok if present + controlled)

MHI - Neurological Considerations

ICP	Is it being monitored, caution when CPP/ICP is labile
Cerebral hemodynamics	Hypocapnia > vasoconstriction > dec. ICP Hypercapnia > vasodilation > inc. ICP
EVD	Should be clamped prior to MHI
Increase in ICP during MHI	Hyperventilate > hypocapnia > vasoconstriction > dec ICP

Subjective Ax

- Heart and lungs: PMHx
- Post Op: nausea, vomiting, light-headedness, pain
- Resp: cough, sputum, wheeze, SOB, smk hx
- PLOF: aids, ex-tolerance/limitation, indoor/outdoor, falls
- SHx: home setup, occupation, children, hobbies

Objective Ax	
Resp:	Cough, sputum, palpate, auscultation
Neuro:	Sensation (light touch, pain), power UMN: spasticity, babinski, clonus, hyperreflexia LMN: hypotonia, hyporeflexia, atrophy, fasciculations
MSK:	MMT, atrophy
Function:	Sitting balance, etc
Gait:	As appropriate
Circul-ation:	DVT, Cap refill

Room Prep	
Where are we going/what do we need	Chair, IV pole, sheet, aid, which side
Do we need to monitor	Yes/No - what do we need
Bed Space	Wires, chairs, drains
Attachments	Drains, monitoring, CVL, art line, EVD?, Femoral art line?