Ethics in Critical Care?

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Objectives

- Case based discussion on ethical scenarios that we encounter in the ICU
- Review strategies for having difficult conversations
- Discuss the resources available to the team for dealing with difficult situations
- Review healthy strategies for coping

Disclaimer

- I am not an expert in ethics nor a member of the CAMC Ethics team
- The cases to be presented have been altered (do not have any identifying patient information) in order to be HIPAA compliant
- **Very grey area** of medicine and answers/decisions WILL vary depending on attending physician/circumstances

Case #1

- 18 yo s/p GSW to head:
  - GCS 3T, HD unstable, PE: brain matter visible
  - Present reflexes: cough, breathing over the ventilator
- "CGI are the most lethal of all firearm injuries, with reported survival rates of only 7% to15%."
- All reflexes lost, HD supported wh stable vasopressor dosing
- Brain Death Exam
  - One examiner (depends on state)
  - If apnea test /full brain death cannot be completed, blood flow or other adjunct exams

TABLE 38-2

Glasgow Coma Scale

BEHAVIOR	RESPONSE	SCORE
Eye opening response	Spontaneously	4
	To speech	3
	To pain	2
	No response	1
Best verbal response	Oriented to time, place, and person	5
	Confused	4
	Inappropriate words	3
	Incomprehensible sounds	2
	No response	1
Best motor response	Obeys commands	6
	Moves to localized pain	5
	Flexion withdrawal from pain	4
	Abnormal flexion (decorticate)	3
	Abnormal extension (decerebrate)	2
	No response	1
Total score:	*Best response*	15
	Comatose client	8 or less
	Totally unresponsive	3

25 ASSESSMENTS TO DECLARE A PATIENT BRAIN DEAD

PREREQUISITES (ALL MUST BE CHECKED)

1. ☐ Coma, irreversible and cause known
2. ☐ Neuroimaging explains coma
3. ☐ Sedative drug effect absent *(if indicated, order a toxicology screen)*
4. ☐ No residual effect or paralytic drug *(if indicated, use peripheral nerve stimulator)*
5. ☐ Absence of severe acid-base, electrolyte, or endocrine abnormality
6. ☐ Normal or near normal temperature *(core temperature ≥ 36°C)*
7. ☐ Systolic blood pressure ≥ 100mmHg
8. ☐ No spontaneous respirations

EXAMINATION (ALL MUST BE CHECKED)

9. ☐ Pupils non-reactive to bright light *(typically mid-position at 5-7 mm)*
10. ☐ Corneal reflexes absent *(use both saline jet and tissue touch)*
11. ☐ Eyes immobile, oculocephalic reflexes absent *(tested only if C-spine integrity ensured)*
12. ☐ Oculovestibular reflexes absent *(50 cc of ice water in each ear sequentially)*
13. ☐ No facial movement to noxious stimuli at supraorbital nerve or temporomandibular joint compression *(absent snout and rooting reflexes in neonates)*
14. ☐ Gag reflex absent *(gloved index finger to posterior pharynx)*
15. ☐ Cough reflex absent to tracheal suctioning *(at least 2 passes)*
16. ☐ No motor response to noxious stimuli in all 4 limbs *(triple flexion response is most common spinal-mediated reflex)*

APNEA TESTING (ALL MUST BE CHECKED)

17. ☐ Patient is hemodynamically stable *(systolic blood pressure ≥ 100mmHg)*
18. ☐ Ventilator adjusted to normocapnia *($PaCO_2$ 35-45mmHg)*
19. ☐ Patient pre-oxygenated with 100% oxygen for 10 minutes *(PaO2 ≥ 200mmHg)*
20. ☐ Patient maintains oxygenation with a PEEP of 5cm H_2O *(if not, consider recruitment maneuver)*
21. ☐ Disconnect ventilator
22. ☐ Provide oxygen via an insufflation catheter to the level of the carina at 6 liters/min or attach T-piece with CPAP valve @ 10-20 cm H_2O and resuscitation bag
23. ☐ Spontaneous respirations absent
24. ☐ Arterial blood gas drawn at 8-10 minutes, patient reconnected to ventilator
25. ☐ *$PaCO_2$* ≤ 60mmHg, or 20mmHg rise from normal baseline value
    or
    Apnea test aborted and confirmatory ancillary test *(EEG or cerebral blood flow study)*

DOCUMENTATION

- Time of death *(use time of final blood gas result or use time of completion of ancillary test)*

DISCLAIMERS

- A guideline from a professional organization is an educational tool not a mandate.
- US state laws may have additional requirements (type of specialties, need to repeat the examination by a separate examiner).
- Major differences exist throughout the world.
- Religious and cultural objections may exist.

Case #1

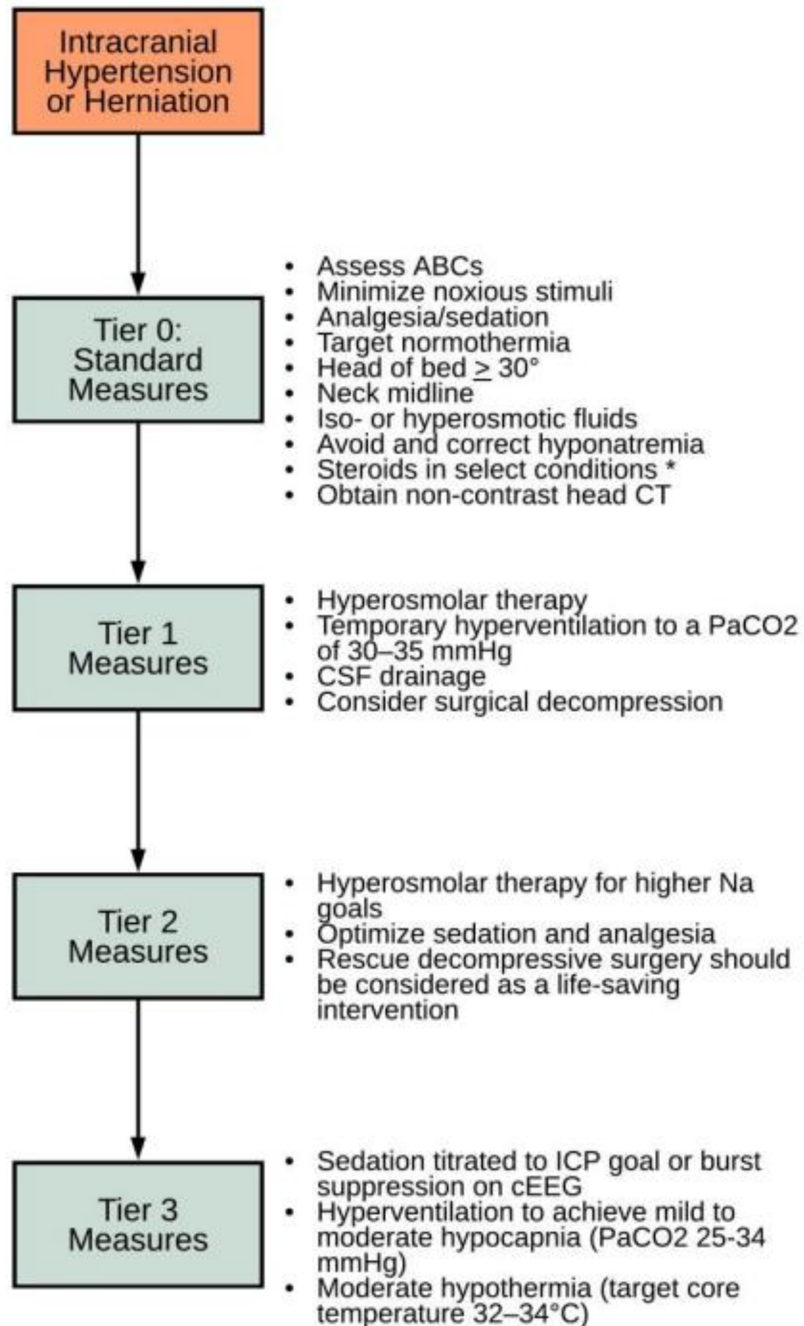
- Patient declared brain death
  - TOD
- Family did not accept death pronouncement
  - Family meeting
- 2nd Physician performed brain death exam
  - Concurrent wh 1st exam

Take home Points

- Establish rapport early, be honest
  - Sit with the family in a private setting
- Very fine line between giving hope, taking it away and being honest
- Brain dead means death
- Do not have the conversation alone!
  - Have a conversation with your team BEFORE family meeting
  - Everyone needs to be in the same page or it creates confusion

Case #2

- 82yo FFS, Plavix and asa
  - PmHx: Parkinson’s
  - GCS 3, Bradycardic and hypertensive (called?)
  - Emergent intubation
  - Imaging concerning for herniation
  - s/p emergent Craniectomy



Intracranial Hypertension or Herniation
Tier 0: Standard Measures
• Assess ABCs
• Minimize noxious stimuli
• Analgesia/sedation
• Target normothermia
• Head of bed ≥ 30°
• Neck midline
• Iso- or hyperosmotic fluids
• Avoid and correct hyponatremia
• Steroids in select conditions *
• Obtain non-contrast head CT
Tier 1 Measures
• Hyperosmolar therapy
• Temporary hyperventilation to a PaCO2 of 30–35 mmHg
• CSF drainage
• Consider surgical decompression
Tier 2 Measures
• Hyperosmolar therapy for higher Na goals
• Optimize sedation and analgesia
• Rescue decompressive surgery should be considered as a life-saving intervention
Tier 3 Measures
• Sedation titrated to ICP goal or burst suppression on cEEG
• Hyperventilation to achieve mild to moderate hypocapnia (PaCO2 25-34 mmHg)
• Moderate hypothermia (target core temperature 32–34°C)

Case #2

- Craniectomy & neurodegenerative disease
  - How affects prognosis
- Trial of extubation & reintubation/DNI/comfort
- **What does the pt want vs what does the family want?**
  - No living will/previous conversations
  - Emotional(guilt), Economical implications

Take Home points

- Early Conversation wh Family
  - Allow for time to come to terms with new situation
  - How much time?
- Know your resources
  - SW: what long term care facilities available?
  - No WV long term care facilities that accept ventilators

‘The PEG tube’

- Not “just a simple surgery”
- Culture and eating
- Advanced Dementia
  - Does not prevent aspiration
  - Does not prolong survival
  - Does not improve quality of life

Resources

- Social Work:
  - Help navigate surrogacy, insurance, discharge options (instate and out)
- Palliative Care
  - Helpful to have another specialty weight in
- Partners
- Other Physician colleagues
  - PCCM
  - Neurology
- Ethics committee
- Hospital Administration/Lawyers

How to Cope?

- Outcomes & complicated patients/situations
  - Cause of burnout
- Debrief with team
- Healthy Outlets
  - Pets
  - Exercise
  - Reading/Mediation
- Mentors/Partners
  - It’s ok to talk abut it
- Therapy

Conclusion

- Be Honest
- Have a sit-down conversation with family early
- Have a goals of care conversation regarding quality vs quantity
- Ask for HELP
- Have a Healthy way (s) to cope

References

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