

DIFFICULT ISSUES SURROUNDING THE NEURO-DEVASTATED PATIENT: A PRIMER FOR SURGEONS

PROGNOSTIC UNCERTAINTY

- GCS helps predict mortality but is less useful for understanding long-term functional and cognitive outcomes.²
- IMPACT and CRASH TBI models were developed to help with prognostication, but one should use caution when applying results to individual patients.¹
- ACS TQIP Guidelines and Neurocritical Care Society recommend aggressive medical care for 72 hours to decrease prognostic uncertainty.^{1,4}

SELF-FULFILLING PROPHECY

- Early limitation of treatment is linked to worse outcomes independent of patient characteristics.¹
- Early goals of care discussions help avoid life-sustaining interventions which may lead to an undesired life state.³
- In cases where devastating head injury is suspected, immediate transition to comfort care may be considered if consistent with family wishes – otherwise consider a time limited trial (see below).

TIME-LIMITED TRIAL (TLT)

- TLT is an approach for early management of severely injured patients that allows for shared decision-making and management of prognostic uncertainty.³
- Elements include deciding what **specific treatments** will be implemented for a **defined time** to observe for an **agreed-upon outcome**.³
- TLT may decrease LOS and invasive interventions without increasing mortality.³

OLDER ADULTS

- Patients ≥ 65 years with TBI have worse functional outcomes, more chronic psychosocial and cognitive impairments, and greater overall mortality.^{1,3}
- Age alone is not a reason for treatment-limiting decisions.¹
- Comorbid conditions can impact outcomes after TBI in older patients.¹ Discussion with surrogate decision makers (SDM) and advanced directives help guide treatment.²

PALLIATIVE CARE

- Patients require palliative care assessment (identify SDM and advanced directives, provide information and support to family, and address urgent decision-making needs) and screening for palliative care needs within 24 hours.²
- Providers should be familiar with goal setting, code status discussions, family meetings, and spiritual support services.
- Palliative Care consultation is recommended for complex transitions of care, conflicts in the family or care team, and end of life decisions.
- Palliative Care should be utilized regardless of race or socioeconomic status to help mitigate disparities in decision-making.⁵

FAMILY SUPPORT

- Early, frequent, and consistent communication about patient status, including prognostic uncertainty, is valued by families.⁴
- A family meeting, ideally multidisciplinary, should take place within 72 hours.²
- Recommend early organ procurement organization (OPO) notification for severe TBI cases.

REFERENCES

1. ACS TQIP - The American College of Surgeons. "Best Practices in the Management of Traumatic Brain Injury." (2015). https://www.facs.org/media/mkej5u3b/tbi_guidelines.pdf
2. ACS TQIP - The American College of Surgeons. "Palliative Care Best Practices Guidelines." (2017). https://www.facs.org/media/g3rfegcn/palliative_guidelines.pdf
3. Miranda, Stephen P et al. "Early Shared Decision-Making for Older Adults with Traumatic Brain Injury: Using Time-Limited Trials and Understanding Their Limitations." *Neurocritical care* vol. 39,2 (2023): 284-293. doi:10.1007/s12028-023-01764-8
4. Souter, Michael J et al. "Recommendations for the Critical Care Management of Devastating Brain Injury: Prognostication, Psychosocial, and Ethical Management : A Position Statement for Healthcare Professionals from the Neurocritical Care Society." *Neurocritical care* vol. 23,1 (2015): 4-13. doi:10.1007/s12028-015-0137-6
5. Williamson, Theresa L et al. "Palliative Care Consultations in Patients with Severe Traumatic Brain Injury: Who Receives Palliative Care Consultations and What Does that Mean for Utilization?" *Neurocritical care* vol. 36,3 (2022): 781-790. doi:10.1007/s12028-021-01366-2



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WHERE TO HANG:

- Surgeon Lounge
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- Resident Workroom
- ICU Workroom

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with mailing information.*

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- Clinicians should be familiar with goal setting, code status discussions, family meetings, and spiritual support services.
- Palliative Care consultation is recommended for complex transitions of care, conflicts in the family or care team, and end of life decisions. Consider Palliative Care consultation prior to tracheostomy/PEG.
- Palliative Care should be utilized regardless of race or socioeconomic status to help mitigate disparities in decision-making.

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References available:

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2. ACS TQIP- The American College of Surgeons. "Palliative Care Best Practices Guidelines." (2017). https://www.facs.org/media/g3rfegcn/palliative_guidelines.pdf
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