Devastating Brain Injury: Adult Population in the Emergency Setting
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Problem: Devastating brain injuries (DBI) often leads to potential organ donation in which the death of one may sustain or improve the well-being of others. Clinical algorithms are critical to guide the management of these patients through efforts to ensure successful transplantations. The goal: reduce variation and optimize care of the adult patient with a DBI increasing the eligibility of donors. The Donor Alliance (2012) recognizes that one donor could positively affect more than 100 lives and potentially reduce the number of nearly 113,000 people awaiting the opportunity for health improvements.

Evidence: Current evidence was obtained: Donor Alliance Organization; One-Legacy (California Donor Network); expert practitioner consultation; and literature search.

Strategy: A clinical algorithm, for the management of adult patients with DBI, was established to maintain hemodynamic stability through transplantation. Intubated DBI patients with loss of one or more brain stem reflexes and a non-survivable injury prompt notification of One-Legacy for family counseling. Simultaneously emergency staff adheres to clinical guidelines to maintain optimal organ perfusion and palliative care for the brain injured patient.

Practice Change:
- Early palliative care consult
- Increased number of successful donor candidates and subsequent transplant
- Expedient intervention

Evaluation: The algorithm promotes collaborative practice in the ED and is serving as a basis for research.

Results: Standardization achieved a 97% transplantation of eligible donors. Since 2007, the medical center is a leading referral source and a significant contributor to the number of lives saved. DBI cases in the ED have risen from four cases in 2010 to 16 in 2011. The increase in numbers is congruent with early recognition of the severity of the case and early interventions to promote hemodynamic stability.

Recommendations: Continue utilization of the algorithm to further enhance the MD/RN approach to the clinical management of these patients.

Lessons Learned: Earlier palliative care and patient family involvement would have been beneficial in establishing key points to be included in the development of the algorithm.

Bibliography: