Palliative and Supportive Care Needs in the NeuroICU

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Background 1: Severe Acute Brain injury

• A distinct group of neurological catastrophes for which both the patient and their families are typically unprepared

• Main players:
  – Traumatic brain injury
  – Inflammatory brain injury (infectious and non-infectious)
  – Vascular brain injury (stroke and cardiac arrest)

• Because patients are typically too impaired, the family members are faced with decisions about goals of care:
  – Either CMO (→ death) OR aggressive care (→ possibility of life but with the possibility of severe neurological impairment)

→ High degree of Palliative care needs
Background 2: Palliative Care

- An *interdisciplinary* approach to medical care for patients with serious illness *not* limited to those with a terminal prognosis
- focuses on improving communication about goals of care and maximizing comfort and quality of life of patients and families
- Palliative care teams are increasing nationwide, but good research, let alone scientific knowledge is still lacking
- Cancer literature suggests improved quality of life *and* survival with early integration of palliative care

Temel JS et al. NEJM 2010
Project overall goals

1. To better understand the palliative care needs of patients with severe acute brain injury and their families.

1. To explore prognosis communication with the hypothesis that it takes up an important part of their palliative care needs.

2. To develop the clinical and educational tools needed to improve the quality of palliative care and prognosis communication for these patients and their families.
Integrating Palliative Care into the ICU

- Palliative Care *consultation triggers* are recommended in ICUs:
  (a) ICU admission following a hospital stay >10 days
  (b) age > 80 with ≥ 2 life-threatening comorbidities (as defined by APACHE2)
  (c) diagnosis of active stage IV malignancy
  (d) status post cardiac arrest
  (e) diagnosis of intracerebral hemorrhage requiring mechanical ventilation.

Palliative Care consultation triggers in the Neuro-ICU

- Retrospective review of an ICU database (Project IMPACT from 2001–2008)
- 15.8% of neuro-ICU admissions vs. 13.9% of non-neuro ICU admissions met one or more triggers (p=0.44).
- The most common trigger
  - in the neuroICU was intracerebral hemorrhage with MV (n=92; 7.3%).
  - in non-neuroICUs was ICU admission following ≥10-day hospital stay (n=805; 5.9%).
- NeuroICU patients were significantly more likely to have withdrawal of life-sustaining therapies (17% vs 7.2%, p<0.0001).

Creutzfeldt CJ, Wunsch H, Curtis JR, Hua MS. Neurocrit Care 2015 (in press)
Palliative Care in the Neuro-ICU

• Rather than a list of consultation triggers, we wanted to develop a checklist of palliative care needs

• We implemented a palliative care needs screening tool as a Pilot QI project:
  – Distressing symptoms
  – Support needs
  – Goals of care
  – Disagreements
PNST – Pilot QI Project

• 130 patients over 3 months were screened
• 132 “controls”
• Most common diagnosis was stroke: 46.2%, then TBI: 23.8%
• Checklist was associated with
  – more documented family conferences (p=0.019)
  – a trend towards more PC consultations (p=0.056)
SUNicu:
Supporting Families in the NeuroICU

- Palliative Care Needs Checklist
- Qualitative Interviews
  - Family members
  - Clinicians
- Outcome survey
Plan Of the Day – NCCS II

Patient’s Name: ______________________ Date: ______________________

Day Shift Nurse: ______________________ Night Shift Nurse: ______________________

Primary Service: ______________________ Pager: ______________________

A.M. Rounds Update by: ______________________ P.M. Evening Update by: ______________________

1. ______________________

2. ______________________

3. ______________________

4. ______________________

5. ______________________

6. ______________________

7. ______________________

8. ______________________

Quality Safety Checklist - Issues to be addressed

☐ Review previous Plan of the Day
☐ Spine Orders/Clearance, Mobility Orders
☐ CAM-ICU Delirium/Anti Delirium Measures
☐ Restraints
☐ Nutrition/IV Fluids

☐ SAT/ SBT unless contraindicated
  If planning extubation, review checklist on back of page

☐ Remove tubes/lines
  ex. Foley, Chest Tube, Central Line, A line

☐ Antibiotics
  Prophylaxis? Organism Coverage? Duration?

☐ GI prophylaxis

☐ DVT prophylaxis

☐ LNOP/DPOA Identified ☐ Last update ______

☐ Today’s mobility goal ______

☐ Resource Utilization – What do we need?
  eg. Q_hr labs? QDay? QOD? Xrays, CT Scans, EKGs

☐ Anti-VAP Care
  ex. Oral Care, HOB Elevation

Palliative or Supportive Needs – review suggestions on back of page

☐ Does this patient have pain or distressing symptoms?

☐ Do patient and/or family need social support or help with coping?

☐ Do we need to (re-)address goals of care or adjust treatment according to patient-centered goals?

→ What needs to be done today?

03/19/2015_cjc
Next steps

• Evaluate interventions to optimize and standardize
  – prognosis communication
  – preference diagnosis
  – treatment decisions

• Develop and implement decision support tools

• Develop educational resources for palliative care specific to severe acute brain injury
Thank you