Integrating Palliative Care as Standard Care in Sepsis Treatments

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May 18, 2016

2008 Surviving Sepsis Campaign Guidelines

- Consideration for limitation of support (1D)
  - Discuss end-of-life care for critically ill patients
  - Promote family communication to discuss use of life-sustaining therapies

  - 1D = Very Low Quality of Evidence

Dellinger RP et al Crit Care Med 2008; 36:296-437

2012 Surviving Sepsis Campaign Guidelines

- Recommendation: Change from 1D (very low grade of evidence) to 1B (moderate degree of evidence)
- Rationale: There has been a synthesis review of 21 trials of intervention studies (4 of which were randomized control trials) aimed at improving communication with family members in the ICU, a number of single center cohort studies addressing palliative care and end-of-life , a multicenter cross sectional study, a Delphi consensus study, several literature synthesis reviews and clinical practice guidelines which reviewed over 300 publications, since the last SCC guidelines revision.

Setting Goals of Care

- Recommendation 1:
  - We recommend that identification of goals of care, prognosis for achieving those goals and the level of certainty for the prognosis be discussed with patients and families. (Grade 1B)
- Recommendation 2:
  - We recommend that these communications should be incorporated into treatment plans with integration of palliative care principles, and as appropriate, end-of-life care planning (Grade 1B)
- Recommendation 3:
  - It is suggested that goals of care be addressed as early as feasible but no later than within 72 hours, depending on cultural considerations (Grade 2C)

What is Palliative Care?

- Specialized medical care for people with serious illness.
- It focuses on providing relief from the **symptoms** and stress of a serious illness.
- The goal is to improve **quality** of life for both the patient and the family.

How is it different from hospice?

- Palliative care is for anyone with a serious illness.
  - You can have it at any age and any stage of an illness.
  - You can have it along with curative treatment.
  - It is not dependent on prognosis.

- Hospice is an important Medicare benefit that provides palliative care for **terminally ill** patients who may have only months to live.
- People receiving hospice no longer receive curative treatment for their underlying disease.

Case 1

- Gladys is an 83 year old woman with advanced dementia admitted to the hospital for the third time in the last eight months
  - Admitting diagnosis: aspiration pneumonia
  - Patient is a DNR-CCA
  - Baseline functional status: up in WC, non-ambulatory, assisted feeds and ADL's, verbal communication is limited
  - Frequent doses of hydrocodone for arthritic pains
  - Daughter is dPOA-HC; spouse deceased

What makes Gladys at risk for sepsis?

- Respiratory infections – most common associated condition
  - Pneumonia is the single most common cause of sepsis
  - Oropharyngeal colonization with GNB
  - “Silent Aspiration”
- Genitourinary infections are second most common
  - Is Gladys at risk for this?
- Age-related comorbidities
- Declining functional status

Ideally…

- Goals setting discussion had on admission that includes:
  - Realistic discussion of resuscitation survival for a patient like Gladys
  - Discussion as to whether repeated hospitalizations really in patient's best interest
  - Risks, benefits, burdens of antibiotic therapies, artificial nutrition and hydration, and other aggressive treatment options (pressors, etc.)
  - What is Quality of life (versus Quantity)

Let’s assume that discussion didn’t happen…

Gladys' assessment

- T-38.9, P-98, R-22, BP 101/45
- AAOx1 (daughter)
- Breath sounds coarse rhonchi throughout
- Weak cough; expectorate thick, yellow
- SpO2 = 91% on 3L O2 via NC

- What now?

Likely next steps

- Blood draw
- Antibiotics
- ICU
- Telemetry
- Copious IV fluids

What happens next?

Perfect World

- Gladys responds to fluid resuscitation and antibiotics
- Gladys's condition stabilizes to her prior level of function***
- Gladys goes to skilled nursing facility
- Gladys then returns home to her extended care facility

Probable World

- Gladys deteriorates, agitates, desaturates
- Gladys has a prolonged ICU stay
- Gladys ends up on pressors, intubated, Cdiff from broad spectrum antibiotics, lines, more lines, wounds, tubes, codes, resuscitated, codes, **DIES….**

Even if Gladys responds to treatment this time…chances are she will re-aspirate, re-admit and repeat her sepsis journey all over again.

What will NOT happen

- Gladys fully recovers from her pneumonia and sepsis
- Gladys never aspirates again
- Gladys' dementia improves or reverses
- Gladys walks again
- Gladys lives independently

Where do we intervene?

- ER physician – can start to prep family for decompensation probability; get gears turning about what pt might have wanted
- Nursing – can prompt family and physician "what about a goals discussion?"
- ICU physician/hospitalist/GME – follow up on these conversations and repeat daily. Be realistic but not dismal. Honesty about what getting better looks like, getting worse.
- Entire team – WWGW? What Would Gladys Want?

******None of this needs to delay sepsis bundles******

Sepsis does not mean dying in pain

- Goals of palliative care remain the same whether dying or recovering:
  - Management of pain, dyspnea, anxiety, restlessness/delirium
- Goals of palliative care at the end of life TAKE AWAY
  - Painful testing – repeat blood draws, arterial lines, invasive monitoring
  - Life (Death) prolonging treatments that can be painful and offer no additional benefit

What if Gladys does survive?

- Palliative care goals don't have to change!
- Symptom management plan follows her to the ECF
- Consideration of hospice
- Updated DNR status including "no further hospitalizations"
- Discussion with family of benefits/burdens of repeated antibiotics for the next time…
- Discussion with family (and sometimes ECF staff) of artificial nutrition
  - Does not prevent aspiration
  - Found to be as safe as careful spoon feeding

The aftermath

- Infection, sepsis often viewed as acute problems
- Chronically ill patients do not return to normal when infection is “fixed”.
  - On average, elderly sepsis survivors have 1.5 new functional limitations, compared to their pre-sepsis baseline
  - Especially in elderly, decreased functional status, increased reliance on caregivers, more medications for more problems = more side effects

So what if 83yo Gladys is suddenly 43yo George?

Case 2

- George is a 43yo gentleman with borderline htn, HLD and a 15 p/y smoking history. He is married, has 2 kids in high school ages 15 and 17, and works as a manager at the local car dealership.
- George presents with a high fever, chills, rigors to the ER after his wife forced him to come in.
- On further review, you find that George was working in his garage over the weekend and suffered a severe gash to his forearm that he cleaned and bandaged himself.

More about George

- George's parents are alive and well in their early 70's.
- George and his wife have a will, because they have kids, but his wife tells you there is no paperwork about end of life care – why would you even ask?!
- She further tells you she is his POA, but on careful questioning, you find out this is financial only.
- They have never had discussions about this sort of thing because they're not "old" yet.

Likely next steps

- Blood draw
- Antibiotics
- ICU
- Telemetry
- Copious IV fluids

- Looks familiar…

What happens next?

Perfect World

- George responds to fluid resuscitation and antibiotics
- George's condition stabilizes to his prior level of function
- George goes to a skilled nursing facility or home with some HHC or even just home
- George then returns to his old ways (minus the smoking because this is a perfect world) with his wife hovering every time he works in the garage.

- There is little chance that George will experience something like this again as it was a 'freak' sort of thing.

Possible World

- George has waited long enough to come in OR this infection is so aggressive that George doesn't respond to fluids and antibiotics.
- George requires ICU transfer, pressors and intubation with mechanical ventilation. He is in septic shock.
- In the ICU it is discovered George has positive blood cultures and a vegetation on his mitral valve. He begins to show signs of heart failure.
- Further, George develops AKI, his lactate level rises, there are troponin elevations…
- George has a prolonged ICU stay
- George develops Cdiff from broad spectrum antibiotics
- George codes, resuscitation attempted but unsuccessful and George **DIES….**

How similar?

- Septic
- No code status
- Family available and present
- Family has no clue, needs guidance

How different?

- Young
- Healthy
- Kids are kids
- Very different baseline

- This one hurts more, doesn't it?

How do we treat 43 v. 83?

- Medically, we treat George and Gladys the same
- But ask yourself:
  - Do you take George home with you perhaps a little more?
  - Do you push George's wife for further, more invasive treatments?
  - Do you allow George to stay on pressors, or intubated, a little longer before "giving up hope"?
  - Do you postpone or put off end of life or goals of care discussions with George's wife longer than you would with Gladys' daughter?
  - **Many of us do this (you're normal)**

Why is Prognostication Difficult?

- Tools out there but not aware or utilized
- Tough questions may penetrate our “shield” or increase responsibility in decision making
  - “Doc, what should I do?”
  - “What if it was your mother/father/husband/daughter?”
- We are humans
  - Emotionally difficult
  - Our own mortality
  - Our own baggage
- We do not like to take away hope

Prognostication Tools

- Intensive Care Unit
  - APACHE II (Acute Physiology and Chronic Health Evaluation)
    - Estimates ICU *mortality* based on a number of laboratory values and patient signs taking both acute and chronic disease into account.
  - SAPS (Simplified Acute Physiology Score)
    - Designed to measure the severity of disease for patients admitted to ICU ages 15 or more. Calculates mortality risk from 0% to 100%.
  - ProVent Score
    - A prognostic model for one-year mortality in patients requiring prolonged mechanical ventilation

Harm with poor prognostication?

- Large number of DNR orders are written in last 48 hours of life and patient preference is poorly known.
- May lead to late hospice referrals (days vs. months)
  - LOS decreasing – 17 days
- Leads to patients/families requesting futile care

Doctors are Overly Optimistic

- One study asked 343 US doctors to provide survival estimates for 468 new hospice enrollee with a cancer diagnosis
- Only 20% pf predictions were within 2-3 weeks of actual survival.
- Over 60% overestimated by a factor of **3-5**
- Worse accuracy the longer the doctor-patient relationship.

Why should we involve Palliative Care Teams?

- Prognostication is difficult. Even in the ICU, a second opinion on dying can be valuable.
  - Chance to be wrong
- Recent medical traditions show physicians, nurses:
  - Not taught natural history of illnesses
  - No emphasis on best therapy at end of a disease
  - No prognostication training or mentoring in clinical setting
  - No feedback or reflection on outcomes
  - Dying is not emphasized and often lose continuity of care
    - "Hot Potato Syndrome"

Difficult Conversations

- Never easy to tell someone they or a loved one is dying – even in hospice/palliative medicine.
- Key Phrases
- Get to know your audience
- Stop talking (Listen!)
- Ask – Tell – Ask

How : Ask – Tell - Ask

- Ask
  - If it is ok to talk about prognosis at this time
  - Review what they already know, and sources of information
- Tell
  - Give information in small amounts
  - Build on what they already know
  - Use simple straight-forward language
- Ask
  - Repeat understanding of what has been said
  - If they would like to hear more
  - Repeat as needed

When to call Palliative Care?

Criteria for a Palliative Care Assessment at the Time of Admission

- A potentially life-limiting or life-threatening condition and . . .
- Primary Criteria
  - The "surprise question": You would not be surprised if the patient died within 12 months or before adulthood 23–25
  - Frequent admissions (e.g., more than one admission for same condition within several months)
  - Admission prompted by difficult-to-control physical or psychological symptoms (e.g., moderate-to-severe symptom intensity for more than 24–48 hours)
  - Complex care requirements (e.g., functional dependency; complex home support for ventilator/antibiotics/feedings)
  - Decline in function, feeding intolerance, or unintended decline in weight (e.g., failure to thrive)
- Secondary Criteria
  - Admission from long-term care facility or medical foster home
  - Elderly patient, cognitively impaired, with acute hip fracture
  - Metastatic or locally advanced incurable cancer
  - Chronic home oxygen use
  - Out-of-hospital cardiac arrest
  - Current or past hospice program enrollee
  - Limited social support (e.g., family stress, chronic mental illness)
  - No history of completing an advance care planning discussion/document

What if there is no Palliative Care team at my hospital/facility?

Resources

- CAPC (Center to Advance Palliative Care
  - Hospitals can have membership
  - User-friendly, goldmine of palliative care information, resources and metrics
  - https://www.capc.org/
- IPAL-ICU (Improving Palliative Care in the ICU)
- FAST FACTS
  - Practical & peer-reviewed summaries on key topics important to *palliative* care clinicians and trainees
  - App Store – "Palliative Care Fast Facts"

Resources

- Death Foretold: Prophecy and Prognosis in Medical Care – Nicholas Christakis
- Ira Byock, MD
  - The Four Things that Matter Most
  - Dying Well
- Atul Gawande, MD
  - Being Mortal
- Maggie Callanan, RN
  - Final Gifts
  - Final Journeys
- Tuesdays with Morrie – Mitch Albom

References

- Dellinger, R. et al (2013). Surviving Sepsis Campaign: International Guidelines for Management of Severe Sepsis and Septic Shock: 2012. Critical Care Medicine, 41(2), 580-637.
- Iwashyna, T. et al (2010). Long-term Cognitive Impairment and Functional Disability Among Survivors of Severe Sepsis: 2010. JAMA, 304(16):1787-1794. doi:10.1001/jama.2010.1553.
- Nelson, J. et al (2015). Integration of Palliative Care in the Context of Rapid Response: 2015. Chest, 147(2):560-569.
- Murphy DJ, Burrows D, Santilli S, et al. New England Journal of Medicine 1994;330:545-549.
- Christakis N, Lamont E. Extent and determinants of error in doctors' prognoses. BMJ 2000;320: 469-73
- Le Gall JR, Lemeshow S, Saulnier F. A new Simplified Acute Physiology Score (SAPS II) based on a European/North American multicenter study. *JAMA*. 1993;270(24):2957-63. PMID 8254858.
- Knaus WA, Draper EA, Wagner DP. APACHE II: a severity of disease classification system. *Crit Care Med*. 1985;13(10):818-29. PMID 3928249.
- Carson, S.S., Garrett, J., Hanson, L.C., Lanier, J., Govert, J., Brake, M.C., Landucci, D.L., Cox, C.E., Timothy, S.C. (2008). A prognostic model for one-year mortality in patients requiring prolonged mechanical ventilation. *Critical Care Medicine, 36*(7), 2061-2069.
- Weissman, D. et al (2011). Identifying Patients in Need of a Palliative Care Assessment in the Hospital Setting: 2011. J of Palliative Medicine, 14(1), 1-7. DOI: 10:1089/jpm.2010.0347.