

# End of Life Care in the ICU

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# Disclosures

- The speaker has nothing to disclose.
- Exhibits coordinated through the Henry Jackson Foundation.
- Refreshments provided through the Henry Jackson Foundation.

# Outline

- (Sobering) epidemiology
- Definitions / Problem
- **Common ICU Cases**
- Protocols?

# Statistics

- 50% of patients with chronic illness who die in a hospital are admitted to ICU within last 3 days of their life
- 15% of patients admitted to ICU (500,000) per year experience death
- 22% of all deaths occur in ICU

# Definition

- Comfort care:
  - Care with the primary goal of promotion of comfort, not to cure or prolong life
  - Aimed at improving quality of life and should address psychological, social, and spiritual needs
  - May involve withholding or withdrawal of treatments intended to extend life

# Problem

- Medical education dedicated to saving life yet little attention directed at end of life
- Is comfort care in the ICU a 'procedure?'

# Case 1

- 89 M with ESRD, respiratory failure, & sepsis.
- Wife selects comfort care.
- Fluids, labs, rads, and feeds are stopped.
- Daughter arrives from NY. Very angry about no feeding. “Starving him! Barbaric!”
- What do you tell her?

# Case 1 Response

- Appetite / hunger are lost close to death
- Risk of increasing pulmonary secretions or causing pulmonary edema
- No compelling evidence that dehydration or forgoing nutrition in the dying patient leads to significant suffering

# Case 2

- 89 M with ESRD, respiratory failure, & sepsis.
- Wife selects comfort care.
- Fluids, labs, rads, feeds are stopped.
- Nurse asks, “Is it is ok to turn off the monitors?”

# Case 2 Response

- Monitoring does NOT provide any additional comfort to the patient
- Can assess distress using physical exam and observation
- Family members may focus on monitor instead of the patient

# Case 3

- 89 M with ESRD, respiratory failure, & sepsis.
- Wife selects comfort care and extubation.
- Nurse predicts that patient will have significant respiratory distress and suggests a dose of paralytic.
- What is your response?

# Case 3 Response

- Giving paralytics to make a patient “look” comfortable is unacceptable
- These agents have no sedative or analgesic effects
- Paralytics makes it impossible to assess a patient’s level of comfort

# Case 4

- 89 M with ESRD, respiratory failure, and sepsis.
- Wife selects comfort care and desires extubation.
- Call Resp Therapy and prepare the team
- Nurse reminds you that patient is receiving continuous infusion of vecuronium
- What do you do?

# Case 4 (Controversial) Response

- Allow paralytic medication to wear off
- Pharmacologically reverse the medication
- If restoring neurologic function would pose an unacceptable delay (high doses, liver/renal failure), withdrawal may proceed, with attention given to ensuring comfort of patient

# Case 5

- 89 M with ESRD, respiratory failure, and sepsis.
- Wife selects comfort care and desires extubation.
- You are nervous about pulling the tube.
- What are signs of respiratory distress?
- What medications may be helpful?
- What is an appropriate dose?

# What are signs of resp distress?

- Respiratory distress:
  - Tachypnea
  - Tachycardia
  - Fearful facial expression
  - Accessory muscle use
  - Paradoxical breathing
  - Nasal flaring

# What meds may be helpful?

- Narcotics reduce sensation of dyspnea
- Goal: alleviate, prevent pain and dyspnea
- Infusion is most common method
- Emergence of symptoms should prompt bolus and increase in rate to rapidly address issue

# What meds may be helpful?

- Morphine preferred agent for pain/dyspnea
- Advantages:
  - Effective, low cost, euphoric properties, familiarity
- Disadvantages:
  - More histamine release

# How much do I give?

- Retrospective review of 3 Canadian ICUs over 1 year period
- 417 patients underwent withdrawal of care
- 86% received some form of morphine
- Median dose at time of death: **14.4 mg/hr**
- Range at time of death: 0.7 – 350 mg/hr

# Open ended orders?

- *“Begin morphine at 1 mg/hr, then titrate to comfort”*
- ICU nurses were asked to interpret clinical scenarios and the use of narcotics
- Significant variability in nursing interpretation of “open-ended” orders
- Problematic

# Doctrine of Double Effect

- *“It is widely recognized that the provision of pain medication is ethically and professionally acceptable even when the treatment may hasten the patient’s death if the medication is intended to alleviate pain and severe discomfort, not to cause death.”*

– US Supreme Court Chief Justice Rehnquist

# Doctrine of Double Effect

- Intentions are critically important
- Verbal and written communication must express intention to relieve pain and suffering

# Case 6

- 89 M with ESRD, respiratory failure, and sepsis.
- Wife selects comfort care and desires extubation.
- Nurse wants to use O2 via NC
- Resp Therapy objects and starts argument
- Wife is distressed and asks you if O2 is a good idea?

# Case 6 Response

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- Debatable
- Probably has no physiologic benefit
- One more tube on their face
- Probably not harmful
- Driven by family / care giver expectations

# Case 7

- 89 M with ESRD, respiratory failure, and sepsis.
- Wife selects comfort care and desires extubation.
- His breathing is loud, sounds like a 'rattle,' eventually changes to a slow and irregular rate
- His wife asks is this normal?

# Case 7 Response

- 25% imminently dying patients have noisy breathing (*death rattle*)
- “Agonal breathing” is term for slow, irregular pattern near death
- Avoid term which may connote agony
- Educate family in advance
- Consider adjunctive medications

# Protocol? Yes!

- Withdrawal of life-sustaining therapy is a critical care procedure
- Follow clearly organized steps to success
- No second chance to get this right



# Process

- Create committee with stake holders
- Create order set to facilitate end of life care in ICU (not ward)
- Establish education for nursing and medical staff
- Review staff and family satisfaction

# NMCSD Protocol

- Multidisciplinary committee:
  - Physicians
  - Nurses
  - Respiratory Therapy
  - Social Work
  - Chaplain
  - Pharmacy

# NMCSD Protocol

- 4 basic sections
  - General – preparation
  - Sedation and analgesic medications
  - Mechanical ventilator
  - Medication for symptom control

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