Withdrawing & Withholding Life Support: Ethical and Practical Issues in the ICU

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Disclosure

I have no relationship that could be perceived as placing me in a real or apparent conflict of interest in the context of this presentation.
“One can survive anything nowadays, except death.”

- Oscar Wilde
“Death is not an option!”
-Son of 100 year-old patriarch in multiple organ failure to treating intensivist.
A National Survey of End-of-life Care for Critically Ill Patients

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AM J RESPIR CRIT CARE MED 1998;158:1163–1167
• 6,303 deaths in 131 ICUs at 110 institutions in 38 states.
• 393 patients were brain dead.
• Remaining 5,910 patients who died,
  – 1,544 (23%) received full ICU care including failed cardiopulmonary resuscitation (CPR);
  – 1,430 (22%) received full ICU care without CPR;
  – 797 (10%) had life support withheld
  – 2,139 (38%) had life support withdrawn.
• Wide variation in practice among ICUs,
• limitation of life support prior to death is the pre-dominant practice in American ICUs associated with critical care training programs.

Edmonton area ICUs 2011

- 3421 admissions to multisystem ICUs in 5 hospitals
- 20,653 patient days
- Average APACHE II score 20-22
  - Total deaths 448 (13%)
- Deaths with CPR 72 (16%)
- 84% of ICU patients died with therapy withheld or withdrawn
“No wind is the right wind if you don’t know what port you are sailing for.”

-Seneca

Requires accurate diagnosis, prognosis, communication and trust
Walter was a 67 year old man who was the primary care-giver for his wife. He developed cough with production of large amounts of watery sputum and increasing shortness of breath over 4 months. Had multiple courses of antibiotics. Admitted to hospital in mid-August with apparent severe left sided pneumonia. His condition deteriorated and he was resuscitated and admitted to ICU where he needed intubation and mechanical ventilation. Investigations eventually showed that he had a rare but extensive form of lung cancer spread primarily throughout his left lung. This cancer produced large quantities of mucus and was drowning his other lung. Walter explained, by writing, that he was the primary care-giver for his wife and, if possible, would value any extra time to get his affairs in order. Discussions with thoracic surgeon.
• Had right pneumonectomy Sept 5.
• Condition improved since no more mucus from right lung.
• Left lung function improved.
• Weaned from ventilator and recovered from surgery.
• Returned home Sept 13. Sorted out financial issues and care issues for wife.
• Readmitted to hospital Nov 7
• Died Nov 29.
Decision Making

• **How?**
  – Usually incremental
  – Often, no CPR order precedes withdrawal

• **Who has input?**
  – Patient (rarely competent)
  – Advance directive (rarely)
  – Family
  – Multidisciplinary team
  – Family physician
  – Intensivist
  – Ethics committee

• **Who makes decision?**
  – Patient/Family
  – MD
Family satisfaction with family conferences about end-of-life care in the intensive care unit: Increased proportion of family speech is associated with increased satisfaction*

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Crit Care Med 2004; 32:1484–1488
What matters most in end-of-life care: perceptions of seriously ill patients and their family members

Daren K. Heyland, Peter Dodek, Graeme Rocker, Dianne Groll, Amiram Gafni, Deb Pichora, Sam Shortt, Joan Tranmer, Neil Lazar, Jim Kutsogiannis, Miu Lam, for the Canadian Researchers, End-of-Life Network (CARENET)

The most important elements were:

- To have trust in the treating physician,
- To avoid unwanted life support,
- To have effective communication,
- To have continuity of care and life completion.

Variation in the perception of what matters the most indicates the need for customized or individualized approaches to providing end-of-life care.
Margaret and Harry

Married in U.K. Immigrated to Canada, No children
Harry worked for Edmonton Transit System
Margaret worked as executive secretary
Margaret developed severe Rheumatoid Arthritis age 48 yrs
Progressive joint deformities and immobility
Seriously disabled by age 60 yrs
Treated with many medications
Developed severe lung fibrosis, required oxygen
Not particularly short of breath-minimal activity however
Harry retired early to devote himself to Margaret’s care
Margaret (age 76) developed a severe chest infection which progressed to pneumonia
No advance directive. Discussions with Harry who insisted on full aggressive therapy and life support.
Margaret and Harry

Admitted to ICU and required intubation and mechanical ventilation
CXR showed lungs severely damaged by fibrosis and, now, new pneumonia
Despite full intensive therapy for 4 weeks remained completely dependent on ventilator.
Tracheotomy performed.
Margaret was delirious but seemed to be asking to be taken of the ventilator.
Multiple discussions with Harry – adamant that he wanted ongoing aggressive care. Ethics consult. Threatened to bring criminal charges and civil suit if Margaret removed from life support.
Family physician, Dr. Zetter contacted. He had cared for Margaret and Harry for 26 years.
Further discussions with Harry, Dr. Zetter and intensivists. Dr. Zetter reiterated what had been previously stated. Harry agreed to allow withdrawal of life support.
Margaret was palliated and life support was withdrawn. She died peacefully with Harry at the bedside.
Harry visited the ICU every Sunday morning for the next year to chat with staff.
Trust

It takes years to build up trust, and only seconds to destroy it.

-Francisco J. Garcia Seijas
Care of the dying patient

• Communication as much as possible
• Respect wishes, make a will etc.
• Avoidance of suffering in all its forms
• Maintenance of dignity and respect
• Nursing comfort care
• Continue to review patient on rounds
Withdrawal of intensive therapies

• First establish medical consensus
  – Assemble all the information needed
  – Several days may sometimes be required
  – Establish definitive prognosis
  – Consensus of intensivists and others
  – Medical recommendation for withdrawal
  – Document all of these issues explicitly
Withdrawal of therapies

• Another family meeting
  – Explain prognosis in detail
  – Explain medical recommendation “withdrawal of intensive therapies”
  – Answer any and all questions
  – Seek assent – do not ask permission
  – Explain exactly what will happen

• After the meeting
  – Care is not withdrawn, only therapies
Role of Pastoral Care/Social Work

• Vital for:
  – Family support, troubleshooting
  – Spiritual support
  – Completion of information loop
    • Resolution of poorly understood issues
    • Resolution of poorly communicated issues

• Consider:
  – Religious and cultural beliefs, rites
Withdrawal of Life Support

• Discontinuation of hemodialysis/CRRT
• Vasopressor withdrawal
  – In severe septic shock
  – Usually no further changes required
• Oxygen concentration reduction
  – Room air
• Discontinuation of ventilatory support
  – PEEP discontinuation
  – Low level pressure support
  – T-piece
• Extubation
Withdrawal of ventilatory support

• Netherlands – no issues
• Israel – must use timer
• Italy – technically legal but risk of prosecution
Terminal Sedation/Analgesia in ICU

• Analgesia –usually by infusion
  – Morphine
  – Fentanyl
  – Dilaudid

• Sedation
  – Benzodiazepines
    • Diazepam, Midazolam, Lorazepam
  – Propofol
Analgesia/Sedation Regimes

- Morphine 10-20 mgs/hr - titrate to:
  - Patient comfort
  - Resp rate 6-30/min
  - Abolish nasal flaring
  - Lorazepam 2-4 IV mgs q1H and prn.
- Morphine 10-15 mgs/hr with midazolam 5-10 mgs/hr by infusion
- Morphine 10-15 mgs/hr with propofol infusion 1 mg/kg/hr with titration.
- Fentanyl 100-300 mcg/hr used instead of morphine.
“Death is a punishment to some, to some a gift and to many a favor.”

-Seneca
Euthanasia or Palliative Care?

• Determined by clinical situation and intent (principle of “double-effect”)
  – If only issue is timing of inevitable death issue is clear providing intent is to relieve suffering.
  – If uncertain, continue aggressive therapy but often with clear (but changeable) limits.
    • no CPR
    • no dialysis
    • blood product limit
    • vasopressor/inotrope ceiling.
Relieving suffering or intentionally hastening death: Where do you draw the line?*

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Spectrum of actions between palliative care and euthanasia.

**Palliation**
- Relieve pain
- Partially relieve pain
- Explicitly hasten death

**Euthanasia**
- Inadequate dose to shorten life
- Adequate dose of drug to sometimes hasten death
- Adequate dose of drug to usually hasten death
Management of Secretions

• Consider keeping artificial airway
• Suction prn.
• Reduce volume of oral secretions - glycopyrrolate
Special requests
Madeline and Hans had lived together in a common-law relationship for over 20 years.
She was a heavy smoker and developed severe emphysema requiring continuous oxygen therapy.
Madeline developed a severe chest infection and was rushed to the emergency dept where she was found to be in respiratory failure and required emergency intubation and mechanical ventilation.
Had tracheotomy performed after a week.
No progress weaning from ventilator after 3 weeks.
Discussions were initiated around end-of-life choices.
Madeline indicated that she did not want to prolong life support indefinitely.
ICU Wedding
• 85 year-old man living at home with home care assistance. Widower.
• Ex-heavy smoker, emphysema, home oxygen
• SOB with minimal exertion
• Multiple other medical problems
  – Previous stroke, myocardial infarction, high blood pressure, chronic kidney disease, hyperlipidemia.
• Good quality of life, friends visited.
• 3 very attentive children, no personal directive.
• Mar 19 admitted to hospital with confusion, weakness and shortness of breath
• Found to be in respiratory failure due to pneumonia. Admitted to ICU and placed on ventilator.
• Course complicated by septic shock, acute myocardial infarction, acute liver injury and acute kidney injury
Thomas and family

• Despite very unstable initial course, stabilized somewhat but remained dependent on ventilator. Tracheostomy.
• Kidney function slowly continued to deteriorate.
• Children indicated Thomas’ father lived to 95 years of age and he wished to outlive his father!
• Weeks passed with a different intensivist most weeks
• Each intensivist indicated that Thomas was very sick and probably would not survive. Children consistently insisted that continued support be provided. Agreement on no CPR, no dialysis.
• Progressive mental decline despite receiving minimal sedation. CT and MRI scan showed severe cerebral atrophy with old strokes.
• 8 weeks into course. Developed new pneumonia. Treated with antibiotics. Developed pleural effusions bilaterally. Treated with pleural drains.
• Comatose. Family at bedside insisting Thomas would rally. Taking notes. Arguing with staff.
Thomas and family

• Intensivist met with family, expressed sympathy for their situation and admiration for their dedication but indicated clearly that Thomas was dying and that further ongoing therapy would only delay the inevitable. Indicated that life support therapies would be withdrawn the day after next and patient would be allowed to die in peace and dignity.
• Children asked for basis of that opinion which was given. They then asked about how withdrawal and palliation would happen. It was agreed that this should occur the next day. They subsequently indicated they had already made contact with a funeral home.
• They asked if Thomas could be brought home to die.
• They needed to push the critical care team to the bitter end and needed to hear that there was no hope and that death was inevitable in order to fulfill their perceived responsibilities.
Dying at home

- Need experienced ICU transport team and strong linkage with community home care and community palliative care.
- Allows for patients/families in minority/ethnic groups to have their values respected at end-of-life.
Summary

• Team consensus that patient is dying.
• Trust.
• Clear communication to patient/family that patient is dying
• Agreement on treatment plan to achieve attainable goals.
• Development on plan for palliation of symptoms and withdrawal of life support.
What the caterpillar calls the end of the world, the master calls a butterfly.

- Richard Bach
Thank You For Your Attention!

Questions?

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