Palliative Sedation

Objectives

- Define Palliative Sedation
- Understand methods to achieve palliative sedation
- Be familiar with ethical dilemmas and controversies surrounding palliative sedation

Palliative Sedation

- “the monitored use of medications intended to induce varying degrees of unconsciousness to induce a state of decreased or absent awareness in order to relieve the burden of otherwise intractable suffering”
- “the intent is to provide adequate relief of distress”

> Oxford Textbook of Palliative Medicine
**Palliative Sedation**

- IS NOT
  - Euthanasia
  - Physician assisted suicide

**Uses of Sedation**

- Transient controlled sedation
- Refractory symptoms at the end of life
- Emergency sedation
- Respite sedation
- Relieve existential or psychological suffering

**Refractory Symptoms at EOL**

- Refractory
  - Symptoms that cannot be adequately controlled despite aggressive efforts to identify a tolerable therapy that does not compromise consciousness
Refractory Symptoms at EOL

- Dyspnea
- Pain
- Restlessness or agitation/delirium
- Studies give varying prevalence for indication of use of PS (palliative sedation)

Refractory Symptoms at EOL

- Diagnostic Criteria
  - Physician must perceive that further invasive or non invasive interventions are either:
    - Incapable of providing adequate relief
    - Associated with an excessive or intolerable acute or chronic morbidity—or-
    - Unlikely to provide relief within a tolerable timeframe

Emergency Sedation

- Immediately pre-terminal patients present with overwhelming symptoms as they are dying
  - Sudden, severe dyspnea
  - Massive bleeding
  - Uncontrolled pain
Respite Sedation

- Patient not imminently dying, but does have severe emotional and physical fatigue influencing their perception of tolerability of symptoms
- Sedation for a limited period of time

Psychological or Existential Suffering

- Hopelessness, futility, meaninglessness, disappointment, remorse, death anxiety, disruption of personal identity
- Most controversial use of PS

Guidelines: NHPCO

- Position statement
- Recommends questions and issues to be addressed when PS considered
- Assist healthcare organizations in developing policies for use of PS
- Covers indications of use, overview of ethical issues, and processes for addressing those
- Does not make pharmacologic recommendations
Use of case conferences
- Individual clinician bias
- Multispecialty/interdisciplinary forum
- Experts in symptom control must be involved
- If not locally available, then telephone consultation is encouraged

Other recommendations
- Goals of care must be clear
- Informed consent
- Family involvement
- Full documentation of clinical condition and medications to be used
- Agreement that CPR will NOT be initiated

Goals of care
- Prolonging survival
- Optimizing comfort
- Optimizing function
- Are there other goals that need to be met prior to starting sedation??
- Family should always be aware of patients consent, to prevent family suffering
Other recommendations

- Do Not Resuscitate status
  - Futility
  - Inconsistent with goals of care
  - Sedating pharmacotherapy should not be initiated until there is agreement CPR will not be initiated

Opioids

- Benzodiazepines
  - Midazolam most commonly used
- Barbiturates
  - Phenobarbital most commonly used
- Antipsychotics
  - Chlorpromazine most commonly used
- Propofol

Midazolam

- Given IV, SQ - most commonly used
- Initial 1-5 mg bolus, 1 mg per hour basal
- Onset IV 30-60 seconds, Peak IV 3-6 minutes, T1/2 IV 3 hours
- Benefits-penetrates CNS, anxiolytic, amnestic, anticonvulsant, muscle relaxant, synergistic with opioids and antipsychotics
- Limits- tolerance, paradoxical agitation
Opioids

- Pain management
- May not achieve adequate sedation or may develop neuroexcitatory effects
- Second agent often needed

Benzodiazepines

- Short half life
- Requires continuous infusion (IV)
- Allows for rapid dose titration
- Usual dose range 1-7 mg/hour

Barbituates/Antipsychotics

- Phenobarbital available IV/SQ, rectal
- Chlorpromazine
  - Agitated delirium and refractory dyspnea
  - Available IV/IM/SQ/rectal and can be given every 4-12 hours
Phenobarbital

- IV, SQ, PR no analgesia, alternative to Midazolam, reversal of sedation difficult
- Initial 200 mg bolus, 25 mg per hour basal, 50-100 mg per hour usually effective
- Onset IV 5 minutes, Peak 15 minutes, T1/2 IV 79 hours
- Benefits: reliable, anti-convulsant, sedating
- Limits: cannot exceed 600 mg/day, cannot be mixed

Chlorpromazine

- IV/PR no analgesic effect, need to dilute 1 mg/ml, give no faster than 1 mg/min
- Initial 50-100 IV/PR q 6 hrs, usually 100-200 q 6 hrs effective
- Onset: IV 15 minutes, Peak 2-4 hours, T1/2 6 hr
- Benefits: widely available, anti-psychotic effect for delirious patients
- Limits: reduce dose in hepatic failure, do not exceed 2,000 mg per day

Propofol

- Less commonly used
- Reserved for patient in whom other agents are inadequate ("refractory refractory")
- Rapid onset and short duration of action
- Requires continuous infusion and monitoring (cannot be done safely in home, nursing home or in patient hospice)
Propofol

- IV only - requires strict asepsis, change tubing q 12 hours, requires central line, not >50 mg/min
- Initial 10 mg bolus, 0.25-0.5 mg/kg/hr basal, effective 1-4 mg/kg/hr
- Onset IV 10-15 seconds, peak IV 1-2 minutes, T1/2 3-12 hours
- Benefits - antiemetic, antipruritic, bronchodilation, good for agitated pt.
- Limits - short expiration, egg/soy allergies

Dexmedetomidine

- IV only - better for terminal delirium, sedated but able to maintain some alertness
- Initial - 1 mcg/kg bolus, 0.2-0.6 mcg/kg/hr basal, effective 0.5-1 mcg/kg/hr
- Onset - IV <5 minutes, Peak IV 10-20 minutes, T1/2 2-4 hours
- Benefits - no respiratory depression, opioid sparing effect, anxiolytic, rapid onset/titration
- Limits - reduce dose ½ for >65 year old patient

Ketamine

- IV/SQ - dissociative effect can compound agitation, bolus over 15 minutes
- Initial - 0.25-0.5 mg/kg bolus, 0.1-0.5 mg/kg/hr basal, effective 0.5 mg/kg/hr
- Onset - IV 1-5 minutes, Peak 2-5 minutes, T1/2 2-3 hours
- Benefits - no respiratory depression, analgesic effect
- Limits - cannot exceed 1 mg/kg/hr, >0.5 mg/kg associated with psychomimmetic effects
**Goals of Care**

- Ensure comfort
  - Observe symptoms, not vital signs
  - Unlikely to titrate downward

- Less sedation and death not imminent
  - Monitor level of sedation and vital signs
  - Administer drug to lowest effective dose but comfortable
  - Widely variable depth of sedation

**Ethical Dilemmas**

- Basic tenets of Medical Ethics
  - Autonomy
  - Beneficence
  - Nonmaleficence
  - Justice
  - Dignity
  - Truth and honesty

**Palliative Sedation**

- Autonomy
- Beneficence
- Nonmaleficence
- Justice
- Dignity
- Truth and honesty
Ethical Dilemmas

- Distinction from euthanasia
  - Duration of survival of patients receiving PS versus not receiving PS
  - Not significantly shortened
  - Doctrine of double effect
  - Conflict with personal beliefs

Bibliography

- Salacz, M., Weissman, D. Fast Fact #106 Controlled sedation for refractory suffering. CAPC 12/2015
- Burke, A. Palliative Sedation JAMA 2005;294(14):1850
- AAHPM position paper Palliative Sedation
- Emanuel, E. et al, Attitudes and Desires Related to Euthanasia and Physician-Assisted Suicide Among Terminally Ill Patients and Their Caregivers JAMA Nov 2015; Vol. 284, #19 page 2460-2468