Managing Pain at the End of Life

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Disclosures

• None

Objectives

• Describe challenges in managing pain at end of life and discuss the implications to patient care and how to implement into practice.

• Discuss the appropriate use of specialty palliative care and be able to implement into clinical practice.
Pain Management @ End of Life

• Just Do It…

• Mic drop

Pain at End of Life

• Prevalence estimated to be about 50% of patients at end of life. 1,2
  • ~65% of patients with cancer experience pain at end of life, 1/3 rated pain at moderate to severe. 3
  • 60% of patients with arthritis experience pain in last month of life. 4

• Optimal end-of-life care aims to prevent or relieve this suffering. 5

Barriers to Care: Patient/Family

• Denial by the patient and/or family, causally linking pain as a sign of deterioration.

• Fear that increasing pain is a herald of disease progression.

• Patients’ and families’ belief that pain is a natural part of illness and cannot be relieved.

• Fear of addiction and abuse
  • American Society for Pain Management Nursing Position Statement: Pain Management at the End of Life (2013)
Denial

• Admitting pain = admitting decline in condition, deterioration

  • American Society for Pain Management Nursing Position Statement: Pain Management at the End of Life (2013)

Fear

• Concern that increasing pain = worsening of disease (progression of cancer)

• False belief that morphine hastens death

  • American Society for Pain Management Nursing Position Statement: Pain Management at the End of Life (2013)

Morphine & Fear of Hastened Death

• Inaccurate belief = morphine has an unusually or unacceptably high risk of an adverse event that may cause death, particularly when the patient is frail or close to the end of his or her life.

• US National Hospice Outcomes Project found no difference in survival with absolute opioid dose or change in opioid dose.

• Morphine-related toxicity will be evident in sequential development of drowsiness, confusion, then loss of consciousness before respiratory drive is significantly compromised.

  • Fast Fact #8
• All medical treatments have both intended effects and the risk of unintended, potentially adverse, secondary consequences, including death.

• Some examples are total parenteral nutrition, chemotherapy, surgery, amiodarone, etc.
  • Fast Fact #8

Intent to Relieve Pain/Suffering
• If the intent for using morphine is to relieve pain and not to cause death, and accepted dosing guidelines are followed:
  • the treatment is considered ethical,
  • the risk of potentially dangerous adverse secondary effects, particularly hastening death, is minimal, and
  • the risk of respiratory depression is vastly over-estimated.
  • Fast Fact #8

Secondary, Unintended Consequence
• “Although the principle of “double effect” is commonly cited with morphine, in fact, it does not apply, as the secondary adverse consequences are unlikely.”

• US National Hospice Outcomes Project found no difference in survival with absolute opioid dose or change in opioid dose.

  • Regnard D. Double effect is a myth leading a double life [letter] BMJ. 2007; 334:440.
Accepted Dosing Guidelines

• For ongoing moderate to severe pain increase opioids doses by 50-100%, regardless of starting dose.
• For ongoing mild to moderate pain increase by 25-50%, regardless of starting dose.
  • assuming the patient is tolerating the opioid well (with no or minimal sedation)
  • be more cautious and consider expert help for patients with ongoing uncontrolled pain despite sedation
• When dose escalating long-acting opioids or opioid infusions, do not increase the long-acting drug or infused basal rate more than 100% at any one time.
• Elderly or with kidney/liver disease: dose escalation percentages should be reduced.
• Short-acting oral single-agent opioids (e.g., morphine, oxycodone, hydromorphone), can be safely dose escalated every 2 hours.
• Sustained release oral opioids can be escalated every 24 hours.
• For methadone, levorphanol, or transdermal fentanyl no more frequently than every 72 hours is recommended.

Belief in Suffering

• Some patients/families believe that pain is a natural part of illness and cannot/should not be relieved.

Fear of Addiction/Abuse

• Patients/families have fear that they/loved one will become addicted or abuse their opioids
  • They must be educated that opioids that alleviate pain, dyspnea, or other symptoms will lead to tolerance and dependence, but not addiction/abuse
  • If causing euphoria or escape, then rotate/discontinue
Tolerance

• Normal reaction by all patients that will necessitate increasing doses of opioid to achieve the same relief over time

Dependence

• Our bodies will depend on a level of medication for relief
• Discontinuation requires taper to avoid withdrawal symptoms
• Opioid withdrawal does not lead to death
  • “but the person will wish they were dead.”

Development of Adverse Effects

• Fatigue
• Pruritis/itching
• Nausea
• Constipation
Barriers to Care: Health Care Providers

• Non-recognition of the pain, including denial of its presence.
• Non-recognition of the global nature of pain, including psychological, social, and cultural aspects.
• Fear of doing harm, causing adverse effects, and/or tolerance to opioid effectiveness.
• Fear of diversion.
• Prescriber hubris—when a prescriber chooses not to ask for assistance from pain specialists.
• Exclusion of effective concurrent non-pharmacological measures.
  • American Society for Pain Management Nursing Position Statement: Pain Management at the End of Life (2013)

Nonrecognition/denial of the pain

• Health care providers not educated on subtle signs of pain (delirium, behavioral signs, etc)
• Denial of conditions not comfortable managing

Nonrecognition of the global nature of pain

• Psychological
• Social
• Cultural beliefs
• Spiritual/existential
Fear of Harm

- Concerns of causing respiratory suppression, sedation, death
- Discomfort treating pain adequately before patient agrees to comfort care or hospice

Diversion

- Very real problem
- Doctors choosing not to prescribe ANY opioids due to this fear
- Doctors not wanting to “police” patient behavior

Prescriber hubris

- Prescriber chooses not to ask for assistance from pain specialists
  - “I know enough/how to manage pain.”
  - “I’m an expert, I don’t need any help.”
Non-use of Non-opioids

- Steroids (dexamethasone) – once daily dosing often effective
- Palliative radiation – single fraction effective for bony mets
- Gabapentin/pregabalin – neuropathic pain (renal dosing)
- SNRIs – neuropathic pain

Non-use of non-pharmacologic measures

- Exclusion of effective concurrent non-pharmacological measures
- Lack of prescriber belief in effectiveness
- Lack of evidence of effectiveness
- Lack of access – Medicaid in Missouri does not readily cover outpatient PT

Non-pharmacologic measures

- Therapy – physical (PT/OT)
- Therapy – cognitive behavioral
- Massage
- Yoga
- Meditation
- Music
- Pet
**Special Population - Geriatric**

- **Physiological Changes with Aging**
  - Increased pain threshold, but a decreased pain tolerance
  - Stoic – less likely to identify pain
  - May present as depression, insomnia, agitation, delirium

- **Pharmacokinetic Changes**
  - Decreased liver flow, intestinal motility, lean body mass, liver enzyme activity, and kidney function
  - More sensitivity to medication benefits (Tylenol may work, lower doses more effective and longer lasting) and adverse effects (stomach bleeds and kidney failure with ibuprofen and naproxen; morphine may cause delirium)

**Non-Pharmacological Interventions in the Elderly**

- Cognitive-behavioral therapy
- Exercise (walk in water when walking painful), PT/OT
- Use of assistive devices
  - Neoprene sleeve for painful joint
  - Walker, wheelchair, lift chair, bathroom handle bars

**Topical agents**

- Analgesic balms
- Lidocaine cream
- Capsaicin

- Topical NSAIDs
  - Diclofenac topical = oral in effectiveness, 158x less serum level = decreased effects on stomach, kidneys, and heart
Adjuvant Analgesics in the Elderly

- Tricyclic antidepressants
  - Nortriptyline better tolerated than amitriptyline
  - Adverse anticholinergic effects still common (delirium, falls)

- SNRIs
  - Venlafaxine and duloxetine (kidney and/or liver dosing)

- Gabapentin/pregabalin
  - Ensure renal dosing to avoid delirium and other adverse effects

Barriers to Care: Systems

- Restrictive formularies or cost prohibitions which prevent appropriate treatment.

When do these issues apply?
End of Life Stages

• Early
  • Bed bound
  • Loss of interest and/or ability to drink/eat
  • Cognitive changes: increasing time spend sleeping and/or delirium

• Middle
  • Further decline in mental status to obtundation (slow to arouse with stimulation; only brief periods of wakefulness)

• Late
  • Death rattle – pooling oral sections that are not cleared due to loss of swallowing reflex
  • Coma
  • Fever – usually from aspiration pneumonia
  • Altered respiratory pattern – periods of apnea, hyperpnea, or irregular breathing
  • Mottled extremities
  • Fast Fact #3 – Syndrome of Imminent Death

Time Course

The time to traverse the various stages can be less than 24 hours or as long as ~14 days.

Patients who enter the trajectory who are nutritionally intact, with no infection (e.g. acute stroke), are apt to live longer than cachectic cancer patients

Treatment at End of Life

• Confirmation of treatment goals; recommend stopping treatments that are not contributing to comfort – pulse oximetry, IV hydration, antibiotics, finger sticks, et

• Clear communication what is going on: “patient is dying,” not “prognosis is poor”

• Treatment of symptoms/signs as they arise: common among these are: oral secretions (glycopyrrolate or hyoscine), delirium (Haldol or similar); dyspnea (opioids, fan), fever (Tylenol suppository) and pain (sublingual/IV/subQ opioids).

• Excellent mouth and skin care.

• Daily counseling and support to families.

• Fast Fact #3
Common Family Concerns

Family members present during the dying process often express the following concerns/questions. Clinicians can best help families by expecting these questions, providing education, reassurance, and responding to emotions.

• Is my loved one in pain; how would we know?
• Am I just starving my loved one to death?
• What should we expect; how will we know that time is short?
• Should I/we stay by the bedside?
• Can I/my loved one hear what we are saying?
• What do we do after death?

End of Life Care in the Hospital

• Comfort Care Orders/Pathways
• Palliative Care consult
• General Inpatient Hospice

Comfort Care Orders/Pathways

• Code status DNAR
• RN to position/reposition for comfort, ensure calm environment
  • Turn off monitors – we are looking at patient, not test results
• Remove restraints/wires/tubes if present (telemetry wires, pulse oximeter, physical restraints)
• Allow pet dog to visit
• Hourly assessment of pain score and respiratory rate by RN
• Regular diet
• Supplemental oxygen for comfort only (usually not needed)
Comfort Care Orders/Pathways
• Visiting hours unlimited, children under 13 may visit by unit approval
• Suction if comfortable
• Bladder catheter if comfortable
• Fan at bedside
• Compassionate Companion volunteer

Comfort Care Orders/Pathways - Meds
• Discontinue previous medications/labs/tests/xrays
• Artificial tears
• Glycopyrrolate for terminal secretions
• Laxative suppository for constipation
• Anti-nausea medications
• Anti-anxiety medications

Comfort Care Orders/Pathways
• Pain/dyspnea (shortness of breath, air hunger)
  • Morphine IV or sublingual solution
  • Hydromorphone (dilaudid)
  • Oxycodone sublingual solution
• If on a ventilator/hi-flow nasal cannula/bipap machine:
  • Pre-medicate with above medication plus a benzodiazepine midazolam (Versed) (sedative, amnestic)
  • Continue every 10 minutes as needed x 2 hours, then hourly as needed
• If not:
  • Opioid plus benzodiazepine (lorazepam) every hour as needed
Palliative Care Consult
- Varies by facility/hospital
- Nurses – triage patient/family needs, explain role of palliative care
- Social workers – counseling, bereavement, discharge planning
- Chaplains – spiritual support
- Physicians – may be board certified in hospice & palliative medicine or may simply have an interest

Palliative Care Consult
- Assist with complex pain and symptom management
- Support families in difficult situations, facilitate resolution of family conflict
- Assist with identification of DPOA and completion of advance directive and DPOA documentation
- Assist with determination of decisional capacity
- Assist with hospital discharge

General Inpatient Hospice
- For patients with symptoms that a hospice agency could not reasonably manage outside the hospital setting, they may be evaluated by a hospice agency for GIP.
  - The agency would need to be contracted with the facility to provide such services.
  - The patient/family have chosen a hospice plan of care and would enroll in hospice.
Outside the Hospital

• Hospice
• Palliative care consultation

Hospice

• Prognosis < 6 months
  • Medicare/Insurance benefit for which a patient qualifies with a prognosis of <6 months, in opinion of 2 physicians.
  • Interdisciplinary agency w/RN, SW, home health aides, volunteers, hospice attending MD and hospice medical director

Hospice

• Agency that consists of interdisciplinary team(s) of:
  • Nurses (visit patients minimum of once every 2 weeks)
  • Nurses on call 24/7, 365 (with physician support)
  • Aides – assist with bathing and other daily cares
  • Social workers – assist with transitions, equipment, legal documents and other needed supports
  • Chaplains – spiritual support
  • Bereavement counselors – x 13 months after death of patient
  • Volunteers
  • Physicians/medical directors and administrators
Palliative Care consultation

• Outpatient version of inpatient team
  • Nurses, physicians, SW, chaplains
  • University of Missouri – Ellis Fischel Cancer Center
    • Anna Hubert, MD
    • Mary Cunningham, CNS
    • 573-882-8445

Resource

• Fast Facts in Palliative Care
  • Free website and smart-phone app

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Questions?

Thank you!

Citations
5. Hospice and Palliative Care Nursing Association (2008)
Citations

12. Product Information: VOLTAREN(R) GEL topical gel, diclofenac sodium 1% topical gel. Endo Pharmaceuticals Inc. (per FDA), Malvern, PA, 2014