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EDUCATIONAL RESOURCES

HOSPICE PALLIATIVE CARE

Palliative Sedation

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Objectives

- Define palliative sedation and goals of palliative sedation therapy (PST)
- Review position statements, processes, and conditions of sedation
- Define refractory symptoms, emphasizing the importance of documentation and planning
- Review patient assessment, prognostication, ethical concerns, and medication selection

What is palliative sedation?

- Exhaust Alternatives
- Lower Consciousness
- Preserve Ethics
- Monitor Outcomes

Key Components of Palliative Sedation

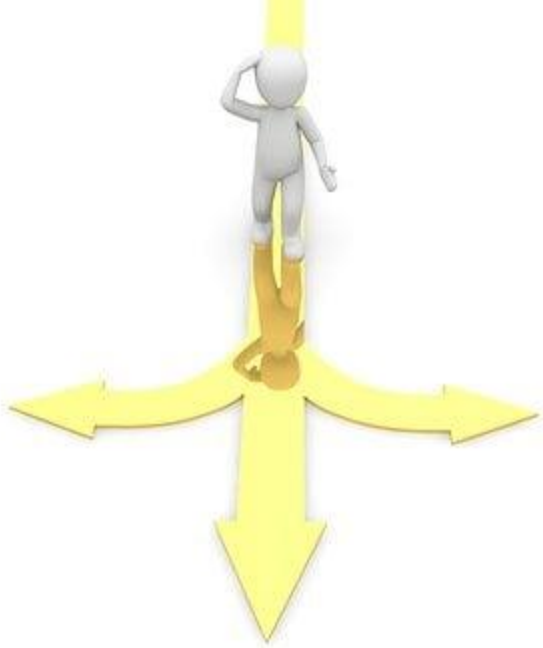
- Presence of refractory and intolerable symptom(s)
- Absence of viable alternative solution
- Reduce awareness of suffering
- Proportionality of sedation to symptom severity

JPSM 2010
JPM 2007

Palliative sedation is…

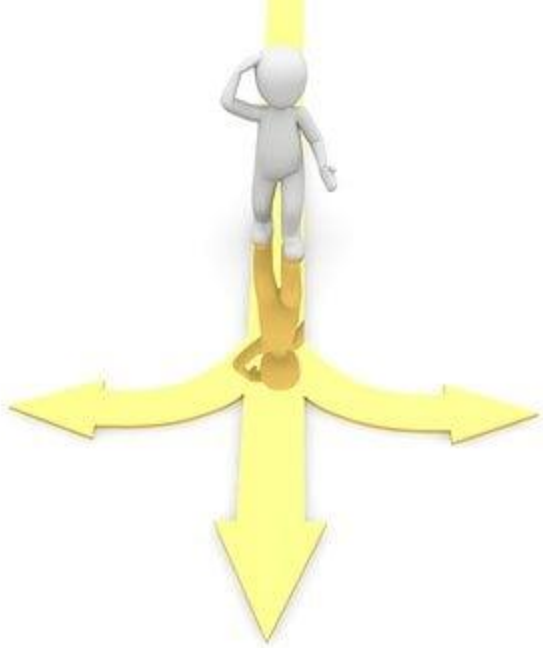
- **AAHPM** "…the intentional lowering of awareness towards, and including, unconsciousness for patients with severe and refractory symptoms."
- **HPNA** "…is the monitored use of medications intended to induce varying degrees of unconsciousness, but not death, for relief of refractory and unendurable symptoms in imminently dying patients."
- **NHPCO** "…the lowering of patient consciousness using medications for the express purpose of limiting patient awareness of suffering that is intractable and intolerable."

Patient Case #1



- 43-year-old male admitted to hospice with primary dx = malignant neoplasm of rectosigmoid junction
- **CC**: abdominal and pelvic pain
  - Intensity rating 6/10
  - Describes as sharp, stabbing as well as dull and continuous
- **Hx**: Seizure disorder; recently diagnosed depression and anxiety
- **Social**: father of two children; wife (physician) is primary caregiver

Patient Case #1



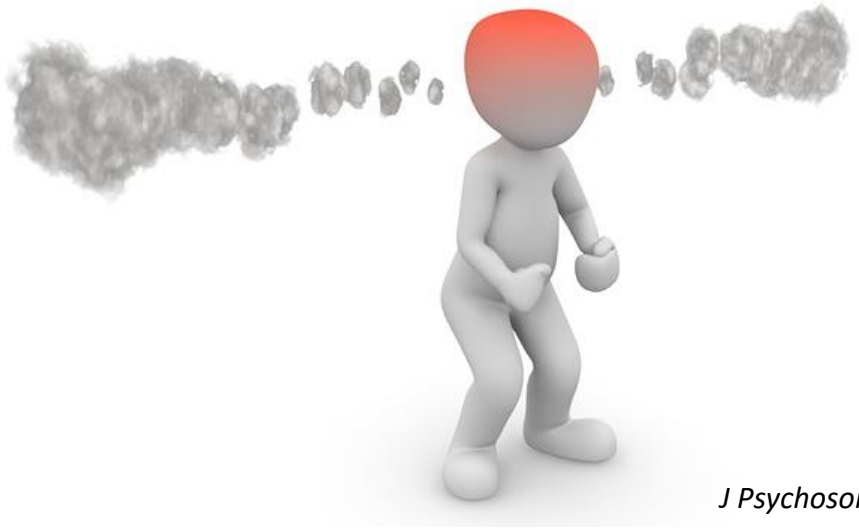
- Transdermal fentanyl patches discontinued
- IV hydromorphone titrated:
  - 3.5mg/hour continuously
  - 1 mg every 10 minutes prn pain
- Dexamethasone 4mg po q8h initiated
  - Pain intensity rating decreased to 4/10 at baseline
  - Patient and caregiver noticed increased aggression and anxiety
- Patient developed myoclonus with hydromorphone titrations
  - Hallucinations on morphine previously
- Patient transitioned to IV fentanyl 200mcg/hour continuously with 50mcg q15 minutes prn pain

Position Statements

- **AAHPM** American Academy of Hospice and Palliative Medicine
- **HPNA** Hospice & Palliative Nurses Association
- **NHPCO** National Hospice and Palliative Care Organization

Presence of Refractory Symptoms

- Physical suffering that is intractable and intolerable
  - Delirium
  - Dyspnea
  - Pain
  - Seizures



JPM 2007
J Psychosom Res 2008

Absence of Alternatives

- Suffering is uncontrolled by available alternative therapies
- Alternative therapies are…
  - Incapable of providing adequate relief
  - Associated with unacceptable adverse effects
  - Unlikely to provide relief within an acceptable time frame

JPSM 2010

Patient Assessment

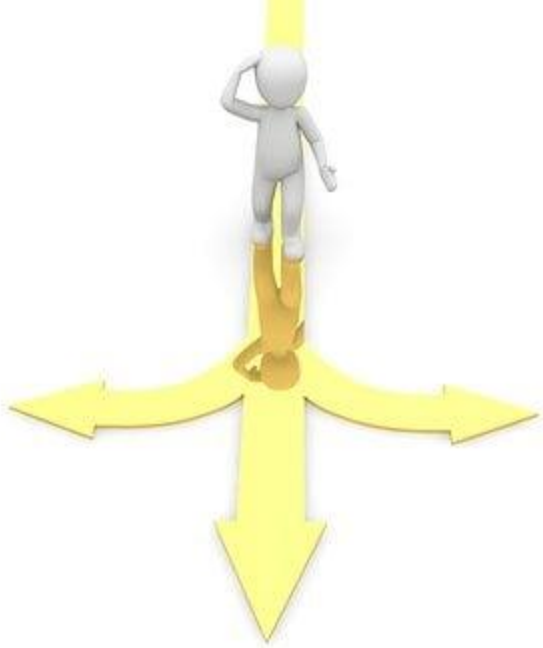
- Initial discussion
  - May include patient, family, friends, caregivers, interdisciplinary team (IDT)
  - Goals of care

Patient Assessment

- Involve the interdisciplinary care team in the assessment of the patient
  - Pain specialist, psychiatrist, nurse, pharmacist
- Determine whether there are reversible or treatable factors
  - If yes, then re-evaluate once treated
- Consider prognosis

J Palliat Med 2003
Am J Health Syst Pharm 2011

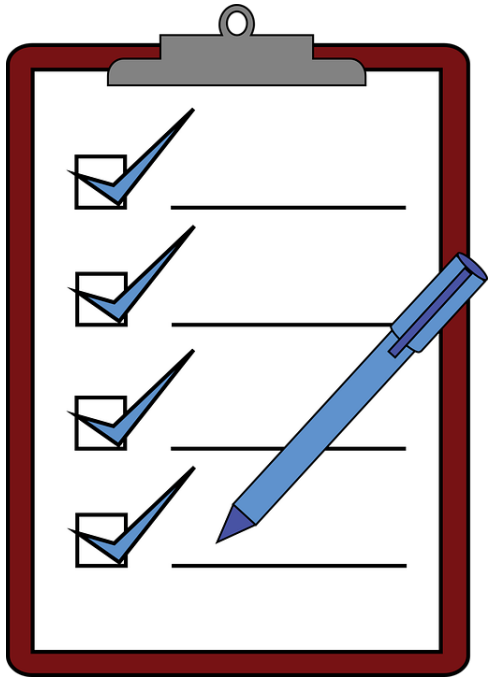
Patient Case #1



- 3 months later: ⬆ pain, anxiety, restlessness
  - IV fentanyl 550mcg/hour continuously
  - IV fentanyl 100mcg q15 minutes prn breakthrough pain
  - Requesting approximately twice the available breakthrough pain doses
- Significant ascites with solid food ingestion
- Best pain rating is 5/10 approximately one hour after promethazine 25mg PO and Diazepam 10mg PO

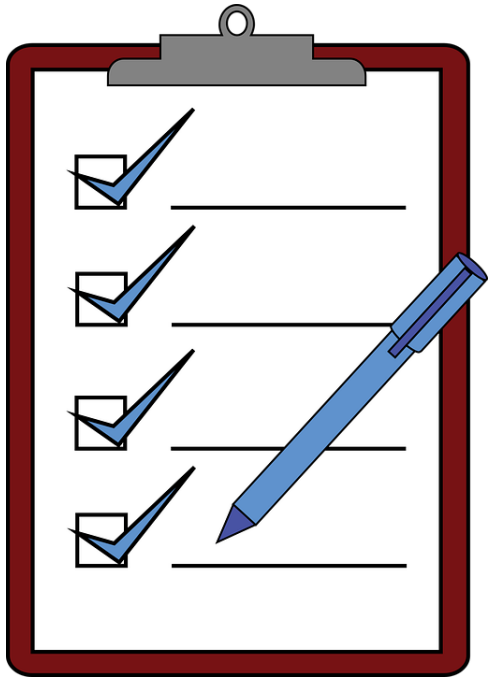
Documentation and Planning

- Level of sedation
  - Mild
  - Intermediate
  - Deep
- Types of sedation
  - Continuous
  - Intermittent



Documentation and Planning

- Outcome criteria
  - Relief of suffering
  - Level of consciousness
- Physiological parameters
  - Clinical assessment of symptom relief
- Monitoring frequency



JPSM 2015

Ethical Concerns

- Inappropriate application or use of sedation
- Misconception as euthanasia
- Concern for hastening death

JPM 2007

Ethical Concerns

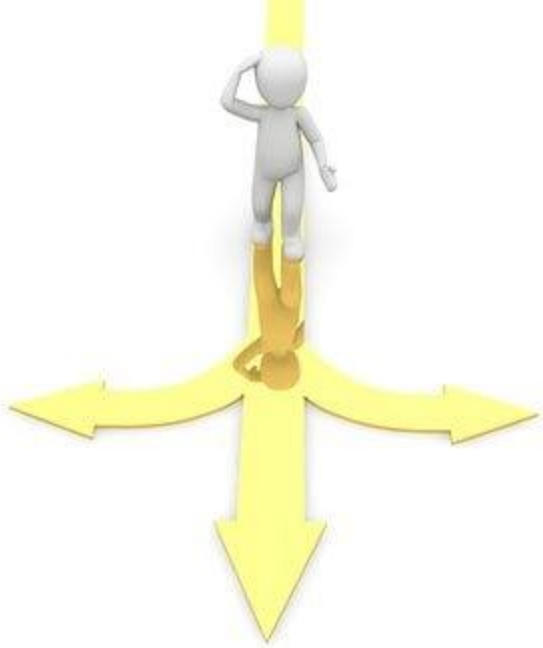
Problematic Practices

- Large, single dose of sedatives
- Absence of titration
- Infrequent or absent monitoring

Appropriate Practices

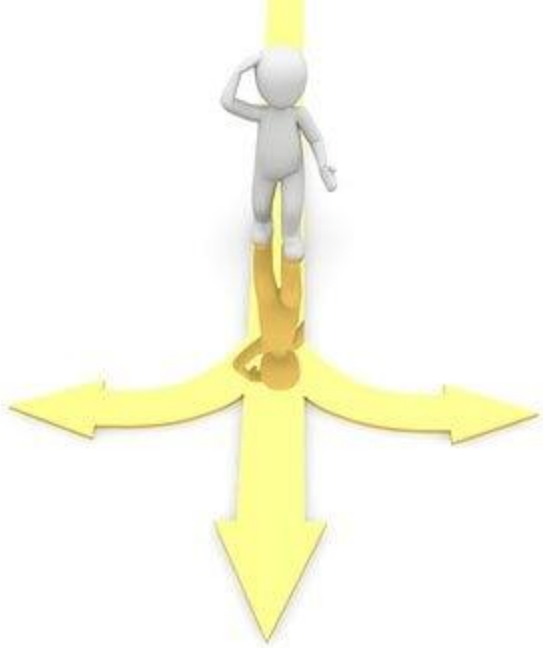
- Low, safe initial dose of sedatives
- Titration schedule
- Planned monitoring with defined parameters

Patient Case #2



- 65-year-old female admitted to hospice with primary dx = progressive supranuclear palsy
- **CC**: Increasing falls, aggression
  - Requires full-time supervision
- **Hx**: Gout, Glaucoma, HTN, Hypercholesterolemia, Depression, Hypothyroidism, Reflux
- **Social**: previously lived alone; estranged from only son; currently living with sister and sister's spouse

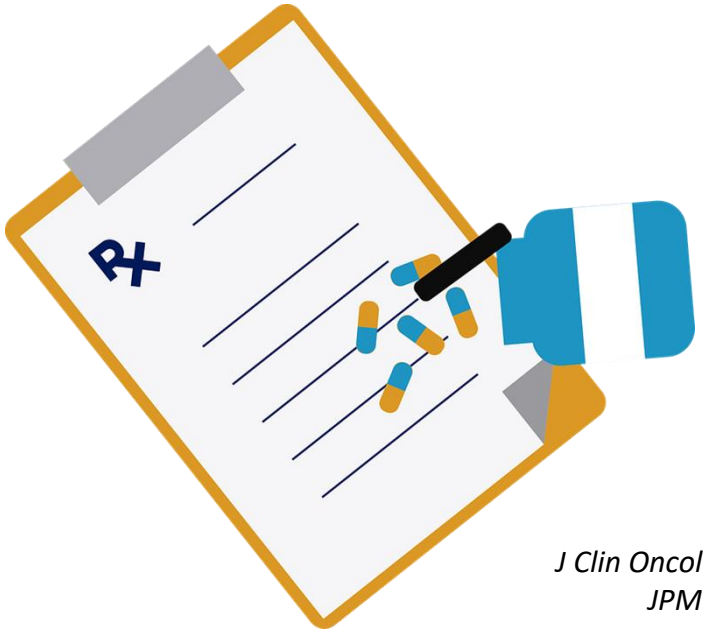
Patient Case #2



- Pharmacologic and non-pharmacologic therapy
- Past seven days, patient receiving:
  - Haloperidol 4mg po bid
  - Lorazepam 0.5mg po tid
  - Olanzapine 10mg bid
  - Trialed therapies: ziprasidone, valproate, divalproex
- Behaviors initially improved but returned to baseline
- Escalation: Haloperidol decanoate 50mg IM qmonth
- Patient not sleeping, symptoms progressing
- Family request for palliative sedation

Palliation versus Euthanasia

- Palliative sedation is distinct from euthanasia because it differs in main aspects:
  - Intent
  - Proportionality
  - Criterion for success of treatment



J Clin Oncol 2012
JPM 2007

Palliation versus Euthanasia

Palliative Sedation

- Intent: Intentional relief of suffering by sedation
- Proportionality: Sedation is proportional to severity of symptom
- Criterion of treatment success: Relief of suffering

Euthanasia

- Intent: Intentional termination of life
- Proportionality: dose is not proportional to severity of symptom
- Criterion of treatment success: Death

Principle of Double Effect

- Double effect
  - Relief of suffering
  - Possible foreshortening of life
- Moral permissibility is derived from intent
  - Intent to relieve suffering
- There is no evidence that palliative sedation shortens survival in retrospective studies

Lancet Oncol 2016

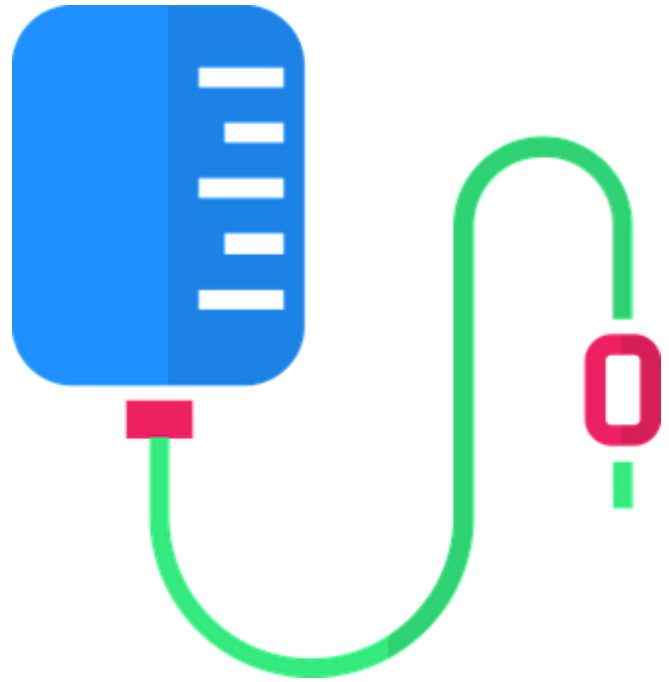
Medication Selection

- First-line agents are often benzodiazepines, specifically midazolam
- If agitation is present, concomitant use of an antipsychotic is recommended
  - Haloperidol
  - Chlorpromazine
- Propofol is a last-resort option
- Do not use opioids for purposes of sedation, but continue opioids for pain and to prevent withdrawal

JPSM 2015

Medication Administration

- Setting
  - Inpatient
  - Homecare settings
- Initial dose titration and monitoring
- Route of administration
  - IV, IM, SUBQ, PR
  - Emergency bolus



Pharmacologic Agents: Benzodiazepines

Drug	Adult Dose	Notes
Midazolam	Initial: 0.5-1mg/hr IV or SUBQ • Short-acting, often requires continuous infusion	• Available/administered IV or SUBQ • Water soluble • Paradoxical agitation may occur • Development of tolerance, especially in younger patients
Lorazepam	Intermittent: 0.5-2 mg SL/PR/IV/IM/ SUBQ q2h* Continuous: 0.01 – 0.1 mg/kg/hr IV or SUBQ	• Alternative to midazolam • Slower onset compared to midazolam • IV and CSUBQI line incompatibilities; risk of precipitation • Also beneficial for seizures, muscle spasms, N/V

JPSM 2015

Pharmacologic Agents: Antipsychotics

Drug	Adult Dose	Notes
Chlorpromazine	Initial: 25-100mg PR/IM/IV q4h* Continuous: 3-5mg/hr IV	• Sedating antipsychotic with rapid onset • May be used in conjunction with midazolam for delirium • QTc prolongation potential
Haloperidol	Initial: 0.5-2 mg SL/PR/IV/SUBQ/IM q4h* • May also be administered as continuous infusion	• Oral solution allows for passive swallowing

BMC Palliat Care 2016

Pharmacologic Agents: Barbiturates

Drug	Dose	Notes
Phenobarbital	Initial: 60-120mg PR/IV/IM q4h* Initial dosing consideration: 1-3 mg/kg IV/IM/PR Continuous Infusion: 0.5 mg/kg/h (IV or SUBQ)	• Paradoxical excitement, especially in older adults • Drug interactions, CYP450 enzyme inducer • Alternative for patients who have developed tolerance or have not responded to first-line agents • Long half-life; less frequent dosing

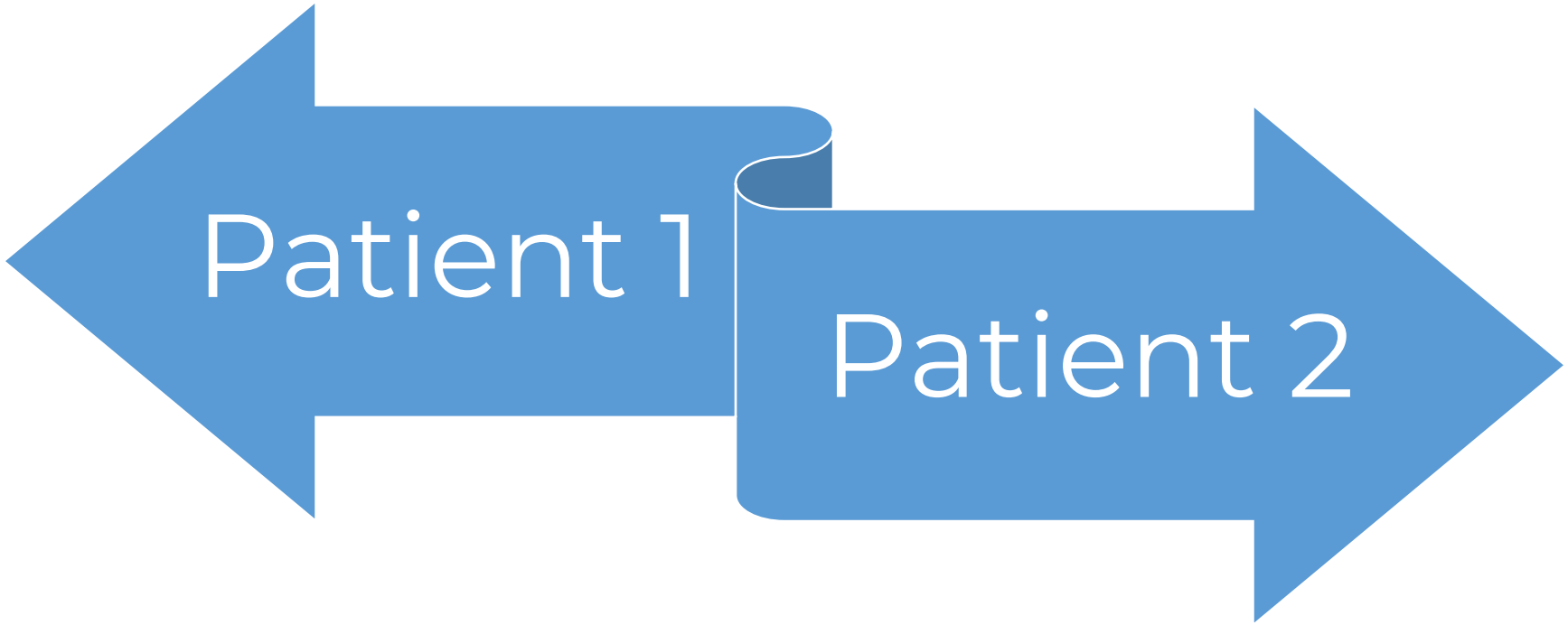
Am J Hosp Palliat Care 2019

Pharmacologic Agents: Anesthetics

Drug	Dose	Notes
Propofol	Continuous infusion 5 mcg/kg/**min** IV Titrate every 5-10 minutes in increments of 5-10 mcg/kg/**min**	• Requires monitored setting • Requires central line administration • Not first-line option • Reliable, rapid unconsciousness when deep sedation is necessary

JPSM 2015

Patient Cases



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Thank you

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Selected References

- Cherny, N. (2021). Palliative sedation. UpToDate. Retrieved June 29, 2021, from https://www.uptodate.com/contents/palliative-sedation
- de Graeff, A., & Dean, M. (2007). Palliative sedation therapy in the last weeks of life: a literature review and recommendations for standards. *Journal of palliative medicine*, 10(1), 67–85. https://doi.org/10.1089/jpm.2006.0139
- Kirk, T. W., Mahon, M. M., & Palliative Sedation Task Force of the National Hospice and Palliative Care Organization Ethics Committee (2010). National Hospice and Palliative Care Organization (NHPCO) position statement and commentary on the use of palliative sedation in imminently dying terminally ill patients. *Journal of Pain and Symptom Management*, 39(5), 914–923. https://doi.org/10.1016/j.jpainsymman.2010.01.009
- Leonard, M., Agar, M., Mason, C., & Lawlor, P. (2008). Delirium issues in palliative care settings. *Journal of psychosomatic research*, 65(3), 289–298. https://doi.org/10.1016/j.jpsychores.2008.05.018
- Morita, T., Tsuneto, S., & Shima, Y. (2002). Definition of sedation for symptom relief: a systematic literature review and a proposal of operational criteria. *Journal of pain and symptom management*, 24(4), 447–453. https://doi.org/10.1016/s0885-3924(02)00499-2
- Schildmann, E. K., Schildmann, J., & Kiesewetter, I. (2015). Medication and monitoring in palliative sedation therapy: a systematic review and quality assessment of published guidelines. *Journal of pain and symptom management*, 49(4), 734–746. https://doi.org/10.1016/j.jpainsymman.2014.08.013

Selected References

- Maltoni M, Scarpi E, Rosati M, et al. (2012). Palliative sedation in end-of-life care and survival: a systematic review. *J Clin Oncol,* 30:1378.
- Maeda I, Morita T, Yamaguchi T, et al. (2016). Effect of continuous deep sedation on survival in patients with advanced cancer (J-Proval): a propensity score-weighted analysis of a prospective cohort study. *Lancet Oncol*, 17:115.
- Schur S, Weixler D, Gabl C, et al. (2016). Sedation at the end of life - a nation-wide study in palliative care units in Austria. *BMC Palliat Care*, 15:50
- Lux MR, Protus BM, Kimbrel J, Grauer P. (2017). A Survey of Hospice and Palliative Care Physicians Regarding Palliative Sedation Practices. *Am J Hosp Palliat Care*, 34:217.
- Mercadante S, Porzio G, Valle A, et al. (2014).Palliative sedation in patients with advanced cancer followed at home: a prospective study. *J Pain Symptom Manage,* 47:860.
- Setla J, Pasniciuc SV. (2019). Home Palliative Sedation Using Phenobarbital Suppositories: Time to Death, Patient Characteristics, and Administration Protocol. *Am J Hosp Palliat Care*, 36:871.

Selected References

- Cherny NI, Radbruch L, Board of the European Association for Palliative Care. (2009). European Association for Palliative Care (EAPC) recommended framework for the use of sedation in palliative care. *Palliat Med*, 23:581.
- Ghafoor VL, Silus LS. (2011). Developing policy, standard orders, and quality-assurance monitoring for palliative sedation therapy. *Am J Health Syst Pharm*, 68:523.
- Kirk TW, Mahon MM, Palliative Sedation Task Force of the National Hospice and Palliative Care Organization Ethics Committee. (2010). National Hospice and Palliative Care Organization (NHPCO) position statement and commentary on the use of palliative sedation in imminently dying terminally ill patients. *J Pain Symptom Manage*, 39:914.
- Braun TC, Hagen NA, Clark T. (2003). Development of a clinical practice guideline for palliative sedation. *J Palliat Me*d, 6:345.
- Gurschick L, Mayer DK, Hanson LC. (2015). Palliative Sedation: An Analysis of International Guidelines and Position Statements. *Am J Hosp Palliat Care*, 32:660.
- American Academy of Hospice and Palliative Medicine. Statement on palliative sedation; 2013. http://aahpm.org/positions/palliative-sedation (Accessed July 2, 2021).