

**AN EXAMINATION OF KNOWLEDGE IN:**

**PALLIATIVE CARE: ALL DOMAINS**

**(EPERC TEST #2)**

**40 QUESTIONS; MULTIPLE CHOICE; SINGLE-BEST ANSWER**

**Supplied by:**

**End of Life Physician Education Resource Center (EPERC)**

**[www.eperc.mcw.edu](http://www.eperc.mcw.edu)**

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## Test #2 Content Domains

### **A. Pain**

1. Pain Assessment
  - types
  - causes
2. Pain treatment
  - opioid pharmacology
  - opioid toxicity
  - transdermal opioids
  - dose conversion
  - use of oral opioids
  - parenteral opioids
  - adjuvant analgesics
3. Addiction/tolerance/physical dependence

### **B. Non-pain symptoms/syndromes**

Nausea/vomiting  
Dyspnea  
Constipation/diarrhea  
Delirium  
Depression/suicide  
Imminent death  
Persistent Vegetative State

### **C. Communication/Ethics**

Giving Bad News  
Discussing Prognosis  
Advance Directives  
Decision Making Capacity  
Treatment Withdrawal  
Death Pronouncement  
Physician Assisted Suicide

### **Terminal Care**

Spirituality  
Grief and Bereavement  
Medicare Hospice Benefit  
Prognostic factors-cancer

### **Special Interventions**

Artificial Hydration  
Artificial Feeding

1.  
2 (two) oxycodone/acetaminophen tablets (5 mg/325 mg) given q4h is equal to what dose of oral morphine given every 4 hours?
- A. 5 mg
  - B. 10 mg
  - C. 20 mg
  - D. 35 mg
  - E. 50 mg
2.  
When using morphine in a patient controlled analgesia device, the lockout interval for a bolus (prn) dose should be set in the range of:
- A. 2-4 minutes
  - B. 5-15 minutes
  - C. 16-20 minutes
  - D. 21-30 minutes
  - E. 31-45 minutes
3.  
A 67 y/o man with prostate cancer has increasingly severe pain over the Left hip. Over the past two weeks the pain has worsened requiring increasing doses of opioid analgesics. The pain is constant, aching and well localized; there is no referred pain. Increasing pain in this patient most likely represents:
- A. Drug seeking behavior
  - B. New onset depression
  - C. Opioid addiction
  - D. Opioid tolerance
  - E. Worsening metastatic cancer
4.  
Pain that is described as “dull and achy” and is well localized, is best described as:
- A. Autonomic pain
  - B. Neuropathic pain
  - C. Somatic pain
  - D. Vascular pain
  - E. Visceral pain
5.  
After ingesting a dose of acetaminophen/oxycodone (Percocet), when would you expect a patient to report the maximal analgesic effect; in:
- A. 10--15 minutes
  - B. 30--45 minutes
  - C. 60--90 minutes
  - D. 120-150 minutes
  - E. 180-210 minutes

6.

A patient is taking 12 oxycodone/acetaminophen tablets (5/325) per day with only partial relief. The most appropriate next step in drug therapy for this patient would be to discontinue Percocet, and start:

- A. oral hydrocodone (e.g. Vicodin, Lortab)
- B. oral hydromorphone (Dilaudid)
- C. oral long-acting morphine (e.g. MS Contin, Oramorph SR)
- D. oral meperidine (Demerol)
- E. oral tramadol (Ultram)

7.

The most appropriate adjuvant analgesic for use when treating somatic pain is:

- A. amitriptyline (Elavil)
- B. clonidine (Catapres)
- C. ibuprofen (Motrin)
- D. lorazepam (Ativan)
- E. neurontin (Gabapentin)

8.

The most appropriate adjuvant analgesic for use when treating neuropathic pain is:

- A. amitriptyline (Elavil)
- B. clonidine (Catapres)
- C. dexamethasone (Decadron)
- D. ibuprofen (e.g. Motrin)
- E. lorazepam (Ativan)

9.

The single most important supplemental therapy to consider when starting patients on opioids for pain is:

- A. Amphetamines to increase alertness
- B. Antidepressants to supplement pain relief
- C. Antiemetic to treat nausea
- D. Laxatives to prevent constipation
- E. Non-steroidals (NSAID's) to treat inflammation

10.

Neuropathic pain is often characterized by episodes of:

- A. Achy pain
- B. Colicky pain
- C. Gnawing pain
- D. Shock-like pain
- E. Squeezing pain

11.

If 2 mg of oral hydromorphone (Dilaudid) is given at 12:00 pm (noon) and there is no pain relief by 1:30 pm, a second dose of 2 mg should be administered at:

- A. 2 pm
- B. 3 pm
- C. 4 pm
- D. 5 pm
- E. 6 pm

12.

Which one of the following statements concerning nausea while taking opioids is true:

- A. Nausea to opioids is due to bowel distention and stimulation of the vagus nerve
- B. Nausea to opioids is due to decreased bowel motility
- C. Nausea to opioids is usually accompanied with itching
- D. Nausea to opioids represents a drug allergy
- E. Nausea to opioids resolves in most patients within 7 days

13.

Therapeutic analgesic levels from first application of a Duragesic (fentanyl) patch should not be expected patch until:

- A. 2-6 hours
- B. 7-12 hours
- C. 13-24 hours
- D. 24-36 hours
- E. 48-72 hours

14.

Compared to morphine, which one of the following opioids is more likely to result in respiratory depression during dose escalation:

- A. hydrocodone (e.g. Vicodin or Lortab)
- B. hydromorphone (Dilaudid)
- C. meperidine (Demerol)
- D. methadone (Dolophine)
- E. oxycodone (e.g. Percocet)

15.

For patients on chronic opioids, the most appropriate equianalgesic conversion ratio between oral and intravenous morphine is:

- A. 3 mg oral = 18 mg intravenous
- B. 3 mg oral = 9 mg intravenous
- C. 3 mg oral = 3 mg intravenous
- D. 3 mg oral = 1 mg intravenous
- E. 3 mg oral = 0.3 mg intravenous

16.

The single most important feature that defines opioid drug addiction (psychological dependence) is:

- A. An increasing need for the drug over time
- B. Complaint of pain exceeding that expected for a given medical problem
- C. Development of a withdrawal syndrome when the drug is stopped
- D. Evidence of adverse life consequences from drug use
- E. Requesting a specific opioid by name

17.

The single best predictive factor in determining prognosis in patients with metastatic cancer is:

- A. Functional ability
- B. Number of metastatic lesions
- C. Presence of brain metastases
- D. Serum albumin
- E. Severity of pain

18.

A woman with metastatic pancreatic cancer is losing weight and spending >75% of time in bed or lying down; no further anti-neoplastic treatments are planned. The patient asks you: "how much time do you think I have?" The best approach is to say:

- A. "I believe time is short, only a few weeks to a few months"
- B. "I really can't tell how much time you have left"
- C. "Life is mystery, you must not give up hope"
- D. "On average patients with your condition live for about six-nine months"
- E. "Only God can determine how long someone has to live"

19.

Current evidence suggests that a feeding gastrostomy in advanced dementia, will ..

- A. Improve quality of life
- B. Improve resistance to infections
- C. Increase the need to use physical restraints
- D. Prevent episodes of aspiration pneumonia
- E. Prevent the development of bedsores

20.

Under the Medicare Hospice Benefit, which one of the following admission criteria is not required:

- A. A physician-of-record is identified
- B. Agreement by the patient not to return to the hospital for acute care
- C. DNR (no code) status
- D. Expected prognosis of 6 months or less
- E. The approach is limited to a palliative, symptom-oriented approach

21.

As part of the Medicare Hospice Benefit which of the following is not provided:

- A. Bereavement program for surviving families
- B. Chaplaincy support
- C. Night-time custodial care
- D. Payment for all medications related to the terminal illness
- E. Skilled nursing visits

22.

A 65 y/o anuric, end-stage renal failure patient has been receiving hemodialysis three-times per week for nine years. She is considering stopping dialysis as it is increasingly a burden due to infections, vascular access problems and fatigue. The patient wants to know how long she would likely survive if she stops dialysis. The best response would be to say:

- A. "About 2-3 days"
- B. "About 1-2 weeks"
- C. "About 2-4 weeks"
- D. "Only god can determine how long someone has to live"
- E. "There is no way to tell for sure"

23.

Which one of the following statements about treating terminal delirium is true:

- A. Family members should leave the room to help decrease the agitation
- B. Paradoxical worsening may occur after administration of a benzodiazepine
- C. Placing the patient in a dark room will decrease sensory input and reduce agitation
- D. The drug treatment of choice is lorazepam (Ativan)
- E. The drug treatment of choice is an opioid analgesic

24.

Which one of the following statements about depression at end-of-life is true:

- A. Clinical depression is a normal stage of the dying process
- B. Depression associated with HIV is more difficult to treat than in cancer patients
- C. Feelings of hopelessness/worthlessness are indicators of a clinical depression
- D. The degree of appetite and sleep disturbance is predictive of response to anti-depressant medication
- E. Tricyclic antidepressants are the first choice for drug therapy

25.

Which one of the following statements is closest to the definition of "physician assisted suicide":

- A. Discontinuing intravenous fluid administration in a patient who can no longer take oral medication
- B. Discontinuing tube feedings in an end-stage dementia patient
- C. Raising the dose of intravenous morphine with the intent of depressing respiration to the point of death
- D. Removing a respirator at the request of a decisional patient
- E. Writing a prescription for a lethal dose of a medication that the patient can use at the time of their choice

26.

Which of the following statements is true regarding medical decision making capacity?

- A. A major psychiatric diagnosis does not prevent one from having the capacity to make medical decisions.
- B. For emergency procedures, decision making capacity must be confirmed by a psychiatrist or psychologist.
- C. Refusing a recommended medical treatment indicates that the patient does not have decision making capacity.
- D. Scoring over 25 on a Folstein mini-mental status exam indicates that a patient has decision-making capacity.
- E. The lack of *medical decision making capacity* and court determined *incompetence* are equivalent medico-legal terms.

27.

The best class of drugs to treat "death rattle" is a(n):

- A. anti-cholinergic/anti-muscarinic (e.g. scopolamine)
- B. benzodiazepine (e.g. lorazepam (Ativan))
- C. butyrophenone (e.g. haloperidol (Haldol))
- D. local airway anesthetic (e.g. inhaled lidocaine)
- E. opioid analgesic (e.g. morphine)

28.

A patient dies an expected death in the hospital, from congestive heart failure. You are called to "pronounce the patient"; the family is at the bedside. Which of the following is not appropriate:

- A. Ask the family to leave the room while you perform your examination.
- B. Offer to remove medical paraphernalia (e.g. oxygen mask, IV line).
- C. Stand quietly for a moment and offer consolation to the family
- D. Volunteer to contact a chaplain
- E. Volunteer to contact family members not present.

29.

A long-term patient of yours comes to see you 3 months after the death of his wife. He says that he sometimes thinks that his wife is in the house talking with him, that he imagines he hears her voice, he has gained 10 pounds since her death, but otherwise feels well. He is concerned that he is "going crazy". These symptoms are most consistent with a:

- A. Complicated grief reaction
- B. Major depression
- C. Minor depression
- D. Normal grief reaction
- E. Psychotic disorder



30.

Which one of the following statements is true about medical futility:

- A. A physician is ethically bound to comply with a patient or family's wish for treatment, even when the physician believes that the treatment requested by the patient has no likelihood of medical benefit.
- B. Decisions about futility should be made on the basis of the financial resources of the patient.
- C. Futility refers to a specific medical intervention applied to a specific patient at a particular time.
- D. Futility refers to any treatment with less than a 5% chance of positive outcome.
- E. The term, "futility" should be used with patients and family when discussing medical treatment that the physician believes will not help the patient.

31.

A 74 y/o man suffers an anoxia brain injury after cardiopulmonary resuscitation. On the fifth hospital day the patient is comatose, there has been no neurological improvement since the cardiac arrest. There is no pupillary response to light and no motor response to pain. The patient has not been on any sedative medication for the past 4 days. The family asks you, "What is the likelihood the patient will recover". The best response would be to say:

- A. "Approximately 20% of patients in this situation show improvement"
- B. "Only god can determine what will happen"
- C. "There is almost no chance of meaningful neurological recovery."
- D. "There is a 50/50 chance for neurological improvement"
- E. "There is no way to be sure until at least 6 weeks after the event"

32.

Rick is a 45 y/o man who had a sudden, unexpected cardiac arrest during cosmetic surgery. Resuscitation efforts succeeded in restoring Rick's heartbeat, and he was placed on a ventilator. Brain studies show that due to the anoxic event, only brain stem functions remain; Rick is in a persistent (permanent) vegetative state. Rick's wife asserts that she clearly knows that her husband would not want to be kept alive by machines when there is no hope he can regain consciousness. She is able to recount his past statements of wanting "the plug to be pulled" if he wasn't going to recover. Which statement best characterizes the obligations of Rick's doctors:

- A. They should require Rick's wife to get a court order authorizing the removal of the ventilator, in order to prevent a lawsuit
- B. They should continue Rick's ventilator and other treatments because the surgery was elective
- C. They should discontinue Rick's ventilator and other treatments because the surgery was elective
- D. They should discontinue Rick's ventilator and other treatments because Rick's wife presents clear and convincing information that Rick would not want them
- E. They should continue Rick's ventilator and other treatments because Rick did not put his wishes in writing

33.

Death resulting from side effects of opioid analgesics, used with the intent to treat severe dyspnea in a dying patient, is an example of:

- A. Acceptable medical practice
- B. Assisted suicide
- C. Euthanasia
- D. Murder
- E. Unprofessional practice

34.

The best drug to palliate the sensation of dyspnea, in a patient with advanced pulmonary fibrosis who is on maximal medical management, is?

- A. acetaminophen
- B. diazepam
- C. haloperidol
- D. ibuprofen
- E. morphine

35.

Which of the following is a characteristic of a patient who is in a *Persistent Vegetative State*?:

- A. The patient has no corneal, gag, or cough reflexes.
- B. The patient has the ability to recognize family and friends
- C. The patient is clinically brain dead
- D. The patient is in a coma at first, but then recovers sleep-wake cycles
- E. There is a 5% chance that the patients will recover higher cognitive function

36.

When discussing bad news over the telephone the first thing you should do is:

- A. Ask the person to describe their understanding of the medical issues.
- B. Clarify who it is you are talking to—their relationship to the patient
- C. Explain that you are calling with some bad news
- D. Give a fair “warning shot” that you have bad news
- E. Offer to contact another family member or friend

37.

Mr. Phillips is in a home hospice program with end-stage COPD. He has lost 25 pounds in the last two months. His wife calls you and expresses concern that he is lethargic and appears dehydrated. She wonders whether an intravenous line should be started at home so that he can receive fluids. Your response should be to:

- A. Admit the patient to an inpatient hospice program for terminal care.
- B. Begin home intravenous therapy.
- C. Place a nasogastric (NG) tube and give plain water through the tube.
- D. Reassure the wife that dehydration is an expected aspect of dying.
- E. Recommend inpatient hospital care to manage terminal symptoms.

38.

At the time of death, following a long chronic illness, all of the following are helpful phrases to say to the family, except:

- A. "I am very sorry for your loss"
- B. "He fought for a very long time"
- C. "People really cared for him"
- D. "This must be hard for you"
- E. "This will make your faith stronger"

39.

Withdrawal of artificial feeding through a feeding tube, from a patient dying of end-stage heart disease, who is comatose with death expected within a few days, is an example of:

- A. Acceptable medical practice
- B. Assisted suicide
- C. Euthanasia
- D. Murder
- E. Unprofessional practice

40.

Spirituality is best defined as a persons understanding of:

- A. Heaven and hell in the context of imminent death
- B. How a higher being values life accomplishments
- C. The origins of life and the universe
- D. Their relationship between one's self, others and the universe
- E. Their religious traditions and rituals

## ANSWER KEY

1. B
2. B
3. E
4. C
5. C
6. C
7. C
8. A
9. D
10. D
11. A
12. E
13. C
14. D
15. D
16. D
17. A
18. A
19. C
20. C
21. C
22. B
23. B
24. C
25. E
26. A
27. A
28. A
29. D
30. C
31. C
32. D
33. A
34. E
35. D
36. B
37. D
38. E
39. A
40. D