PALLIATIVE CARE KNOWLEDGE EXAMINATION

1. A patient is taking 2 oxycodone/acetaminophen tablets (5 mg/325 mg), 6 times a day. What is the equivalent dose of a long-acting morphine preparation:
   a. 15 mg q8h
   b. 30 mg q12
   c. 30 mg q8h
   d. 45 mg q12

2. Mrs. Jensen is a 72 year/old woman with multiple sclerosis. She is dying, is at home, and has severe pain. The home hospice nurse feels she needs parenteral opioids. She is unable to swallow medication and has no intravenous access. Which of the following is the most appropriate route to recommend for opioid analgesic administration:
   a. Intramuscular injections
   b. Intravenous via Hickman catheter or Mediport
   c. Intravenous via PICC line catheter
   d. Subcutaneous

3. A 55 y/o woman with metastatic breast cancer comes to see you complaining of 2 weeks of progressive right shoulder pain. All of the following are possible causes for her shoulder pain except:
   a. Liver metastases with capsular distention
   b. Metastases to the right scapula
   c. Metastases at C7 causing nerve root irritation
   d. Spinal cord compression at C3-4

4. Which one of the following is a large bowel stimulant:
   a. docusate (Colace)
   b. lactulose (Chronulac)
   c. magnesium citrate
   d. senna concentrate (Senokot)

5. You are seeing an elderly bed bound man with cognitive dysfunction. His daughter is concerned that he may be experiencing pain. Which of the following statements is true regarding pain management in a cognitively impaired patient.
   a. Family members tend to under estimate the degree of pain in cognately impaired loved ones.
   b. Opioids tend to worsen behavioral problems in these patients due to disinhibition.
   c. Patients with end-stage Alzheimer’s dementia lose the ability to perceive discomfort.
   d. The best indicator of pain is a change in behavior.

6. Which one of the following anti-depressants has no demonstrated efficacy for treating neuropathic pain:
   a. duloxetine (Cymbalta)
   b. imipramine (Tofranil)
   c. fluoxetine (Prozac)
   d. venlafaxine (Effexor)

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7. Which one of the following opioids accumulates with continued usage, leading to a higher risk of CNS depression:
   a. codeine
   b. hydrocodone (Vicodin)
   c. hydromorphone (Dilaudid)
   d. methadone (Dolophine)

8. A man is receiving a subcutaneous infusion of hydromorphone (Dilaudid) at 0.6 mg/hr. You decide to change this to intravenous hydromorphone continuous infusion. Which of the following is the correct dose to set as the hourly infusion rate:
   a. 0.1 mg/hr
   b. 0.2 mg/hr
   c. 0.4 mg/hr
   d. 0.6 mg/hr

9. In which one of the following clinical scenarios is it most appropriate to use methadone for cancer related pain:
   a. concern about patient non-compliance
   b. currently using illicit opioids to maintain opioid addiction
   c. first opioid treatment for moderate to severe bone metastases
   d. presence of chronic renal failure

10. A hydromorphone continuous infusion of 1 mg/hr is equivalent to what dose of transdermal fentanyl (Duragesic):
   a. 100 ug
   b. 225 ug
   c. 350 ug
   d. 475 ug

11. A patient with metastatic cancer is admitted to the hospital. His pain has been well controlled on 180 mg of long-acting oral morphine twice per day. What would be a most appropriate prn (as needed) dose of oral morphine for breakthrough pain:
   a. 50 mg q2h
   b. 50 mg q4h
   c. 100 mg q2h
   d. 100 mg q4h

12. Gabapentin should be dose reduced for which of the following conditions:
   a. congestive heart failure
   b. hypercalcemia
   c. jaundice
   d. reduced creatinine clearance

13. Which of the following is the most appropriate starting dose of gabapentin in a relatively healthy 40 y/o man with neuropathic pain:
   a. 50 mg qhs
   b. 100 mg qhs
   c. 100 mg q6h
   d. 100 mg q8h
14. A man is receiving oral hydromorphone (Dilaudid) 10 mg every 4 hours. He needs to be NPO. What would be the best equivalent Intravenous dose of Dilaudid, administered as a continuous infusion?

a. 0.1 mg per hour  
b. 0.5 mg per hour  
c. 1.0 mg per hour  
d. 1.5 mg per hour

15. After ingesting a dose of oral hydromorphone (Dilaudid), when would you expect a patient to report the maximal analgesic effect:

a. 30--45 minutes  
b. 60--90 minutes  
c. 120--150 minutes  
d. 180--210 minutes

16. Which of the following statements concerning the Medicare Hospice Benefit (MHB) is true:

a. once enrolled, a patient may not revoke the MHB and return to regular Medicare Part A (inpatient hospital payments)  
b. once enrolled, a patient may not revoke the MHB unless the terminal illness fails to run its expected course  
c. once enrolled, a patient may revoke the MHB, resume regular Medicare Part A, and subsequently elect the MHB again at a future time  
d. once enrolled, a patient may revoke the MHB and return to Medicare Part A, but only if a new medical illness, unrelated to the terminal illness, develops.

17. If a patient responds to megesterol acetate, he/she can expect a weight gain of:

a. 2-5 pounds  
b. 6-10 pounds  
c. 11-15 pounds  
d. > 15 pounds

18. Which one of the following is the best choice for emergency treatment of severe dyspnea in an opioid-naïve dying patient:

a. hydromorphone 4 mg IV q 5-10 minutes  
b. morphine 2-4 mg IV q 5-10 minutes  
c. morphine 10 mg po q 1-2 hours prn  
d. Oxycontin 15 mg Q12 and sublingual oxycodone 10 mg q one hour prn
Marcus is 33 y/o with HIV; Robert, his partner is his health care proxy. Marcus has instructed Robert that he would not want to be maintained on artificial life support if he is terminally ill or permanently unconscious. Six months later Marcus develops pneumonia and lacks decision making capacity. His respiratory status is worsening and he may soon require ventilator support. (Questions 19-20)

19. A health care proxy in Wisconsin, as designated on a Power of Attorney for Health Care form, can make all the following health care decisions, except:
   a. Cardiac resuscitation status
   b. Discontinue artificial feedings in cases of persistent vegetative state
   c. Remove a ventilator against a physician’s recommendation
   d. Reverse a patient’s written instructions on the POA document

20. What would be the best justification for a decision to intubate Marcus and place him on ventilatory support?
   a. At this point, it can not be said that Marcus is terminally ill
   b. Marcus is only in his thirties and has not completed his life story
   c. Marcus wrote his advance directive when he was not sick, and would now probably change his mind
   d. Physicians must intubate any patient with a potentially reversible respiratory condition

21. Which one of the following is most likely to predict the shortest prognosis in a patient with end-stage COPD?
   a. O₂ level after exercise
   b. FEV₁
   c. Progressive functional decline
   d. Resting heart rate

22. Which one of the following is the most likely cause of a new delirium in a cancer patient:
   a. adverse drug effect
   b. alcohol withdrawal
   c. brain metastases
   d. hyponatremia

23. Which one of the following is the most appropriate drug regimen to recommend for treatment of delirium in a dying patient:
   a. diazepam (Valium) 2.5 mg q8h and 5 mg q 2h prn agitation
   b. haloperidol (Haldol)1 mg q8h and 2 mg q1h prn agitation
   c. lorazepam (Ativan) 1 mg q1h prn agitation
   d. quetiapine (Seroquel) 75 mg qday and 50 mg q2h prn agitation

24. Which of the following statements is an exception to the need to obtain informed consent?
   a. A conscious decisional adult needing a life-saving blood transfusions
   b. A non-decisional patient requiring emergency treatment
   c. A patient who does not speak English
   d. An emancipated minor with a hand laceration needing stitches
25. Which of the following statements is true regarding decision making capacity?

a. A court declaration of incompetence is synonymous with the inability to make medical decisions.
b. A major psychiatric diagnosis does not prevent one from having the capacity to make medical decisions.
c. For emergency procedures, decision making capacity must be confirmed by a psychiatrist or psychologist.
d. Scoring high on a mini-mental status exam indicates that a patient has decision-making capacity.

26. A 48 y/o man patient suffered an anoxic brain injury two weeks ago. He is shown little neurological improvement since the event; he is currently on no sedatives. On exam he is in a coma, does not open his eyes and has an abnormal oculocephalic reflex. Which of the following best describes a statement of his prognosis:

a. At least six months must ensue before an accurate assessment of future function can be made
b. The patient meets criteria for persistent vegetative state which has an uncertain prognosis
c. The patient has a 30% chance of recovering some neurologic function in the next 3 months
d. The patient has virtually no chance of recovery to an independent level of functioning

27. Mr. Phillips is in a home hospice program with end-stage COPD. He has lost 25 pounds in the last two months and has been bedbound for 4 weeks. 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. Suggest that home intravenous therapy may help him live longer
c. Place a nasogastric (NG) tube and give plain water through the tube
d. Tell the wife that providing intravenous fluids may worsen his dyspnea

28. Spirituality is best defined as a person's understanding of:

a. Heaven and hell in the context of imminent death
b. How a higher being values life accomplishments
c. Their relationship between one's self, others, and the sense of meaning of one's existence
d. Their religious traditions and rituals as interpreted through the individual's cultural traditions

29. A patient has nausea and vomiting thought to be due to stimulation of the chemoreceptor trigger zone; which one of the following drugs would be most appropriate:

a. haloperidol (Haldol)
b. lorazepam (Ativan)
c. meclizine (Antivert)
d. scopolamine

30. In patients with advanced dementia, current best evidence suggests that a feeding gastrostomy tube will ..

a. Improve quality of life
b. Decrease the risk of infections
c. Increase the need to use physical restraints
d. Reduce the risk of aspiration pneumonia
Answers

1. b
2. d
3. d
4. d
5. d
6. c
7. d
8. d
9. d
10. b
11. a
12. d
13. d
14. b
15. b
16. c
17. a
18. b
19. d
20. a
21. c
22. a
23. b
24. b
25. b
26. d
27. d
28. c
29. a
30. c