Intraspinal (Neuraxial) Analgesia

Community Self-Learning Package

Intraspinal (Neuraxial) Analgesia Community Nurses Competency Test

WATERLOO WELLINGTON HPC EDUCATION COMMITTEE; INTRASPINAL EDUCATION TASK FORCE
Intraspinal (Neuraxial) Analgesia for Community Nurses Competency Test

1) Name the two major classifications of pain.
   i. __________________________
   ii. __________________________

2) Neuropathic pain is usually responsive to opioids only.
   a. True
   b. False

3) Name the third step in the transmission of pain:
   a. Nociception
   b. Modulation
   c. Perception
   d. Reception

4) The difference(s) between the epidural space and the subarachnoid or intrathecal space is:
   a. CSF is found in the intrathecal space
   b. epidural space contains no CSF, but is full of fat, blood vessels, lymphatics & nerves
   c. analgesics given in the intrathecal space are only 1/10th the dose needed for the epidural space
   d. all the above
   e. a, b

5) The spinal cord and brain are surrounded by 3 layers of meninges: pia mater, arachnoid mater and dura mater.
   a. True
   b. False

6) The vertebral column is made up of 33 vertebrae these include:
   a. 9 cervical, 10 thoracic, 5 lumbar, 5 sacral, 3-4 coccygeal
   b. 7 cervical, 12 thoracic, 4 lumbar, 4 sacral, 5-6 coccygeal
   c. 7 cervical, 12 thoracic, 5 lumbar, 5 sacral, 3-4 coccygeal
   d. 5 cervical, 14 thoracic, 5 lumbar, 5 sacral, 3-4 coccygeal

7) All of the following are true regarding assessment of sensory block except:
   a. sensory block should be assessed when a patient is receiving an opioid infusions via the epidural route
   b. sensory block can be tested using an ice cube
   c. diminished sensation in a particular skin surface area or dermatome gives an indication of sensory loss
   d. spinal nerves innervate specific skin surface areas called dermatomes
8) Sensory fibers of spinal nerves are only able to detect pain, stretch and pressure but not touch or sensations?
   a. True
   b. False

9) The benefits of intrathecal analgesia include:
   a. pain relief without losing motor function
   b. ability to manage pain with a smaller amount of opioid resulting in less side effects
   c. pain relief using greater amounts of opioids resulting in prolonged and effective pain relief
   d. the ability to perform this method of anaesthesia in the most unstable patients
   e. a and b

10) Intrathecal opioids:
    a. include all opioids which are preservative free
    b. bind with exogenous opioids at the opiate receptors at the dorsal horn and analgesia occurs
    c. block pain transmission as the painful stimuli is entering the nerve root
    d. cause pruritis and should be avoided unless ordered by the physician

11) Intrathecal local anaesthetics:
    a. bind with exogenous opioids at the opiate receptors at the dorsal horn and analgesia occurs
    b. block nerve conduction in small nerve fibres faster and at lower concentrations than in large fibers
    c. cannot be used in combination with intrathecal opioids
    d. are stored in the fridge

12) Morphine is a(n):
    a. hydrophilic opioid which can be injected into the subarachnoid space as long as it is preservative free
    b. opioid that should not be confused with hydromorphone
    c. lipophilic opioid which can be injected into the subarachnoid space as long as it is preservative free
    d. safe drug that can be given into the space above the dura whether it is preservative free or not
    e. a and b

13) Morphine administered into the intrathecal space:
    a. has a slower onset of action
    b. has a duration which lasts only 4 hours
    c. has a duration which lasts up to 24 hours
    d. a and c
    e. a and b
14) After receiving intrathecal opioids, patients should be monitored:
   a. for side effects such as motor and sensory blockade and low oxygen saturations
   b. for side effects such as pruritis, urinary retention, nausea and vomiting, increased sedation
   c. using the PQRST pain assessment
   d. b and c

15) Using both local anaesthetic and opioid in the intrathecal space provides better pain relief at lower doses than using an opioid alone.
   a. true
   b. false

16) Patients who receive intrathecal morphine and intrathecal local anaesthetic should be monitored for:
   a. motor function using the Bromage motor scale
   b. sedation using the Pasero opioid induced sedation scale to assess for early signs of respiratory depression
   c. changes in blood pressure and heart rate
   d. effective pain control using the PQRST pain assessment
   e. all of the above

17) When a patient is receiving Intraspinal Analgesia in the community, the pump delivering the Intraspinal / Neuraxial Analgesia should:
   a. Be set for boluses q1h
   b. Be clearly labeled, as well as the tubing as the Intraspinal Analgesia pump/ tubing.
   c. not be initiated unless the nurse and another healthcare provider or family member independently double check the solution and pump settings with the written prescription
   d. All of the above.

18) When assessing pain in a patient receiving Intraspinal Analgesia, there needs to be daily documentation of:
   a. The severity of the pain using a reliable pain assessment scale
   b. The quality of the pain
   c. Side effects
   d. the number of demands requested and boluses doses taken of opioids in past 24 hours
   e. All of the above

19) Your patient’s sedation score yesterday was 2. This means your patient was:
   a. occasionally drowsy
   b. Somnolent, minimal or no response to stimulus
   c. frequently drowsy, drifts off to sleep during conversation
   d. awake and alert
20) Today, when you visit your patient, he tells you he has been having wild dreams. His sedation score is 3. You do a full pain assessment, and document on your agency flow sheet. Given this assessment, you should also:

a. Open the Symptom Response Kit, and administer Haldol for mild delirium.

b. Nothing: continue to monitor as you suspect he might be starting to show side effects.

c. Call the physician to receive orders.

d. None of the above.

e. All of the above.

21) Your patient has been on Haldol 1 mg po bid for 4 weeks now, and is not experiencing any psychotomimetic side effects. At this time, you should:

a. Continue the Haldol as ordered. as part of the Intraspinal / Neuraxial Anesthesia / opioid protocol

b. Recommend decreasing the dose to the patient and physician

c. Hold Haldol for a few days to assess if this medication is still needed, or if the patient has developed tolerance to the side effects

d. Recommend increasing the dose of Haldol, due to expected tolerance to this low dose.

22) You receive a call from your patient’s wife this evening. He has been receiving Intraspinal Analgesia for 9 weeks and has been quite stable. She states that he is “not quite himself”. She says that says he has a headache and fever. In response to this, you instruct the wife to:

a. stay with the patient and you will make a visit shortly.

b. give him acetaminophen 650mg po and put him to bed for the night and you will assess him in the morning

c. call the anesthesiologist as he will have to prescribe an antibiotic

d. not to worry that this is normal in a patient with intraspinal catheter and is not of any concern

23) While assessing your patient who is receiving Intraspinal Analgesia he describes tingling in his legs. He reports back pain and rates 5/10 on the numeric rating scale (NRS). He states it becomes worse when he receives a PCA bolus and he describes this pain as aching. You assess that he has no sensory loss to cold. He has no motor block. He states, “I guess I can expect this, I have cancer”. As his nurse you:

a. continue your assessment and take full set of vital signs including TPR & BP

b. assess his gait as he walks

c. further question him about the timing of his pain and effect the PCA bolus had on his back pain

d. you call the physician to report the findings of your assessment

e. all of the above

f. a, c & d
24) Local Anesthetic Toxicity

a. can result from vascular uptake or injection of infusion of local anesthetic directly into the systemic circulation
b. may occur as a result of inadvertent intravascular administration or overdose
c. always occurs in older adults receiving Intraspinal Analgesia because most seniors have a decreased ability to clear local anesthetics
d. a & c
e. a & b

25) _______________ is used to cleanse the subcutaneous port used to deliver Intraspinal Analgesia.

a. Alcohol
b. Chlorhexidine
c. Hydrogen peroxide
d. Betadine

Pass = 20/25

Note: Please contact HPC Consultation Services to receive the answer key.
Email: hpcinfo@hospicewaterloo.ca
Phone: (519)743-4114
Intraspinal (Neuraxial) Analgesia for Community Nurses Competency Test
Answer Sheet

1) _________________________ and _________________________
2) a b c d e f
3) a b c d e f
4) a b c d e f
5) a b c d e f
6) a b c d e f
7) a b c d e f
8) a b c d e f
9) a b c d e f
10) a b c d e f
11) a b c d e f
12) a b c d e f
13) a b c d e f
14) a b c d e f
15) a b c d e f
16) a b c d e f
17) a b c d e f
18) a b c d e f
19) a b c d e f
20) a b c d e f
21) a b c d e f
22) a b c d e f
23) a b c d e f
24) a b c d e f
25) a b c d e f