

1. Explain the cause of morphine contraindication in patient with head trauma?

- Morphine increases the intracranial tension through the cranial vasodilatation induced by the accumulating CO₂ because of the respiratory center depression.

2. What is the drug of choice in treating morphine acute toxicity? Mention its contraindication?

- Naloxon.
- Contraindicated in chronic opioid toxicity for fear of abstinence syndrome

3. What are the contraindications behind the spasmogenic activity of morphine?

- Biliary colic because of the spasmogenic activity of the sphincter of Oddi-
- Asthmatic patient because of spasmogenic effect on the bronchial smooth ms

4. Classify opioid?

5. Mention pharmacological effect, side effect of morphine?

6. Why we add atropine to morphine in sever colic?

- Because morphine is spasmogenic and atropine is spasmolytic
- To counter excessive vagal stimulation by morphine

7. GIVE three difference () morphine and codeine?

	Morphine	Codeine
Oral bioavailability:	25%	60%
Analgesic effects:	Strong	Weak (20%).
Antitussive effect:	Weak	Strong
Uses:	Mention its 4 uses	Analgesic and antitussive

8. Why methadone is preferred in chronic opiate addiction?

- Less addictive features
- Withdrawal symptoms less sever

1. A 34-year-old woman was admitted to the emergency department because of multiple fractures sustained in a car accident. The patient complained of severe pain, and an intramuscular injection of morphine was given. Which of the following molecular actions most likely mediated the analgesic effect of the drug in this patient?

- A. Opening of Ca^{2+} channels on presynaptic nerve terminals
- B. Closing of chloride channels on postsynaptic neurons
- C. Stimulation of substance P release from nociceptive nerve terminals
- D. Opening of K^{+} channels on postsynaptic neurons
- E. Closing of Na^{+} channels on presynaptic nerve terminals
- F. Stimulation of glutamate release from nociceptive nerve terminals

D

2. A 61-year-old woman complained of severe pain a few hours after surgery for renal cancer. An intramuscular injection of morphine was given. Which of the following actions most likely contributed to the analgesic effect of morphine?

- A. Activation of brain stem neurons that modulate pain transmission
- B. Stimulation of substance P release from nerve terminals in the spinal cord
- C. Induction of dissociative feeling and dysphoria
- D. Inhibition of adrenergic pathways from the locus ceruleus
- E. Inhibition of serotonergic pathways from the raphe nuclei

A

<p>3. Which drug will be most effective in alleviating the symptoms of acute morphine toxicity?</p> <p>(A) Naloxone (B) Codeine (C) Methadone (D) Naltrexone (E) Tramadol</p>	A
<p>4. A 47-year-old woman is recovering from a hysterectomy. Her physician prescribes an opioid analgesic as needed for postoperative pain. Opioids can cause many effects in addition to analgesia including constipation, respiratory depression, euphoria, miosis, and drowsiness. With prolonged use, tolerance develops to most of these effects. Which of the following effects persists despite tolerance?</p> <p>A. Analgesia B. Constipation C. Drowsiness D. Euphoria E. Nausea and vomiting</p>	B
<p>5. Morphine, all are true EXCEPT:</p> <p>A. Acts as an agonist at opioid receptors (especially μ) in the brain and spinal cord B. Causes pupillary constriction by stimulation of the Edinger- Westphal nucleus in the mid-brain C. Acts as an antihistamine D. Is subject to presystemic metabolism E. Stimulates the chemoreceptor trigger zone</p>	C

<p>6. A 34-year-old woman complained to her physician of annoying constipation. One week earlier, she had developed a sore throat and a dry, nonproductive cough and was diagnosed with acute bronchitis. A drug treatment was started, and the cough gradually disappeared. Which of the following drugs most likely caused the constipation reported by the patient?</p> <p>A. Buprenorphine B. Fentanyl C. Albuterol D. Codeine E. Theophylline F. Morphine</p>	D
<p>7. Features of opioid intake are all of the following except:</p> <p>(a) Feeling of relaxation (c) Analgesia (b) Euphoria (d) Dilated pupils</p>	D
<p>8. Tolerance develops to all of the following actions of opioids except?</p> <p>(a) Constipation (b) Analgesia (c) Euphoria (d) Nausea and vomiting</p>	A
<p>9. Actions of opiates in man include all except:</p> <p>(a) Constipation (b) Vomiting (c) Analgesia (d) Mydriasis</p>	D

<p>10. Morphine is contraindicated for a patient with head trauma because of:</p> <p>A. Respiratory center stimulation</p> <p>B. Increased intracranial tension by cerebral vasodilatation</p> <p>C. Decreased intracranial tension by cerebral ischemia</p> <p>D. Increased cerebrospinal fluid formation</p> <p>E. Decreased cerebrospinal fluid formation</p>	B
<p>11. Which one of the following actions will happen when the morphine bind to the presynaptic opioid receptor.</p> <p>A- inhibit influx of Ca²⁺.</p> <p>B- influx of Ca²⁺.</p> <p>C- hyperpolarization.</p> <p>D- depolarization</p>	A
<p>12. Naltrexone is used for which of the following function in opioid addiction?</p> <p>(a) Prevention of relapse</p> <p>(b) Treatment of withdrawal</p> <p>(c) Treatment of overdose</p> <p>(d) Prevention of withdrawal</p> <div style="border: 1px solid black; padding: 10px; margin-top: 10px;"> <p style="text-align: center;">Note:</p> <ul style="list-style-type: none"> • Beta-blockers and clonidine treat withdrawal symptoms. • Methadone prevents withdrawal symptoms. • Naltrexone is used to prevent relapse. • Naloxone is used to treat overdose. </div>	A
<p>13. Buprenorphine is?</p> <p>(a) Partial agonist at mu Receptor</p> <p>(b) Partial agonist at kappa Receptor</p> <p>(c) Full Agonist at mu Receptor</p> <p>(d) Full Agonist at kappa receptor</p>	A

<p>14. Which one of the following analgesic drugs has mixed agonistic and antagonistic actions?</p> <p>A- heroin. B- fentanyl. C- pentazocine. D- naloxone.</p>	C
<p>15. Naloxon is a specific receptor blocker for:</p> <p>a) Morphine b) Zaleplon c) Barbiturates d) Histamine e) Serotonin</p>	A
<p>16. Indicate the pure oral opioid antagonist which has a long half-life:</p> <p>a) Naloxone b) Naltrexone c) Tramadol d) Pentazocine e) Nalorphine</p>	B
<p>17. Which of the following drugs may be used as a narcotic antagonist?</p> <p>a) Propoxyphene b) Fentanyl c) Naloxone d) Meperidine</p>	C
<p>18. Which of the following drug is NOT opioid?</p> <p>a) Morphine b) Codeine c) Fentanyl d) Meperidine e) Diazepam</p>	E

<p>19. Actions of morphine include the following except:</p> <ul style="list-style-type: none"> A. Vagal stimulation B. Miosis C. Antiemetic D. Postural hypotension 	<p>C</p>
<p>20. Morphine causes all of the following EXCEPT:</p> <ul style="list-style-type: none"> A Diarrhea B. Increased intrabiliary pressure C. Histamine release D. Reduced sensitivity of the respiratory centre to carbon dioxide E. Hypotension 	<p>A</p>
<p>21. Which drug does not activate opioid receptors, has been proposed as a maintenance drug in treatment programs for opioid addicts, and with a single oral dose, will block the effects of injected heroin for up to 48 h?</p> <ul style="list-style-type: none"> A. Fentanyl B. Nalbuphine C. Naloxone D. Naltrexone E. Propoxyphene 	<p>D</p>
<p>22. Which drug is a full agonist at opioid receptors with analgesic activity equivalent to morphine, a longer duration of action, and fewer withdrawal signs on abrupt discontinuance than morphine?</p> <ul style="list-style-type: none"> A. Fentanyl B. Hydromorphone C. Methadone D. Nalbuphine E. Oxycodone 	<p>C</p>

<p>23. In a comatose patient suspected of poisoning, which of the following findings would be against the drug being morphine:</p> <p>A. Mydriasis B. Marked respiratory depression C. Cyanosis D. Fall in blood pressure</p>	A
<p>24. The antidote of choice for acute morphine poisoning is:</p> <p>A. Nalorphine B. Nalbuphine C. Naltrexone D. Naloxone</p>	D
<p>25. Use of morphine in the following category of patients does not carry any special risk:</p> <p>A. Ischemic heart disease patients B. Bronchial asthma patients C. Elderly male patients D. Biliary colic patients</p>	A
<p>26. Morphine is contraindicated in head injury because:</p> <p>A. It does not relieve the pain of head injury B. It can raise intracranial tension C. It can cause constipation D. It is liable to cause addiction</p>	B
<p>27. All of the following are narcotics except:</p> <p>a) Morphine b) Codeine c) Fentanyl d) Meperidine e) Diazepam</p>	E

<p>28. In equianalgesic doses, methadone and morphine are similar in each of the following effects EXCEPT:</p> <ul style="list-style-type: none"> a) Analgesic potency b) Antitussive action c) Duration of analgesic action d) Degree of respiratory depression 	C
<p>29. Each of the following is an acceptable and satisfactory method for overcoming addiction to opioids EXCEPT:</p> <ul style="list-style-type: none"> A. Administration of clonidine and methadone B. Acute withdrawal C. A gradual daily reduction of the dose until no drug is being given D. Substituting methadone for morphine or heroin and then reducing the dose of methadone by 50% every other day E. Shifting the addict onto a methadone maintenance program 	B
<p>30. All the following are involved in the mechanism of action of morphine Except:</p> <ul style="list-style-type: none"> A. Most effects are mediated by activation of kappa receptors. B. Inhibition of calcium influx resulting in inhibition of transmitter release. C. Increase in K⁺ outflux resulting in hyperpolarization of neuronal membrane. D. Reduction of emotional response to pain. 	A
<p>31. Indications of morphine do not include:</p> <ul style="list-style-type: none"> A. Analgesic in cancer pain. B. Acute pulmonary edema in acute left ventricular failure & myocardial infarction C. In anesthesia D. Severe pain following head injury. 	D

<p>32. The following is not true concerning codeine:</p> <ul style="list-style-type: none"> A. Inhibits cough center in medulla. B. Less potent antitussive than morphine. C. Diarrhea is a troublesome side effect. D. Analgesic. 	<p>C</p>
<p>33. Which of the following is an opioid used in management of heroin withdrawal?</p> <ul style="list-style-type: none"> A. Buspirone. B. Bupropion. C. Buprinorphine. D. Bromocriptine. 	<p>C</p>
<p>34. A 42-year-old man with chronic pain is brought to the emergency room because of over-sedation and respiratory depression while using fentanyl patches. He is given intravenous naloxone. He is not given oral naloxone because naloxone:</p> <ul style="list-style-type: none"> a. is not absorbed from the GI tract. b. undergoes first-pass metabolism in the liver. c. is metabolized to an inactive metabolite in the GI lining. d. is excreted unchanged in the urine. e. is destroyed by stomach. 	<p>B</p>
<p>35. Which drug does not activate opioid receptors, has been proposed as a maintenance drug in treatment programs for opioid addicts?</p> <ul style="list-style-type: none"> (A) Fentanyl (B) Nalbuphine (C) Naloxone (D) Naltrexone (E) Propoxyphene 	<p>D</p>

<p>36. A young man is with known heroin addiction is brought in the emergency in unconscious state. On examination, the patient has decreased bowel sounds, depressed respiration and pinpoint pupil. The treatment of choice for this patient is:</p> <p>(a) Oral naltrexone (b) IV naloxone (c) Oral diazepam (d) Oral Buprenorphine</p>	B
<p>37. Which of the following is 100 times more potent than morphine?</p> <p>a) Pethidine b) Fentanyl c) Pentazocine d) Meperidine e) Codeine</p>	B
<p>38. One of the opioid analgesic used for relieving acute severe pain of renal colic, biliary colic , obstetric labor , inferior MI is:</p> <p>a) Morphine b) Naloxone c) Methadone d) Meperidine e) Nalorphine</p>	D
<p>39. Indicate the opioid analgesic that is used as transdermal patch for chronic and cancer pain:</p> <p>A. Morphine B. Pentazocine C. Fentanyl D. Tramadol</p>	C

<p>40. Select the analgesic which acts through opioid as well as additional spinal monoaminergic mechanisms:</p> <p>A. Tramadol B. Ethoheptazine C. Dextropropoxyphene D. Alfentanil</p>	A
<p>41. Pethidine differs from morphine in all the following Except:</p> <p>A. It is preferred for long term treatment of chronic pain B. It is less liable to cause asphyxia neonatorum C. It is less liable to cause biliary colic D. It has atropine like action.</p>	A
<p>42. A 53-year-old man is requesting meperidine for his chronic back pain. His physician is reluctant to use meperidine for the treatment of chronic pain because of:</p> <p>a) metabolite toxicity. b) poor oral absorption. c) increased addiction potential. d) patient noncompliance. e) likelihood that meperidine will be diverted or sale on the street.</p>	A