King Saud University 1st semester 1433-1434 H

College of Pharmacy 322 PHL “Quiz”

Pharmacology department

**Student’s name: ID. number:**

**Total marks ( / 6)**

**Q1: Choose the correct answer: ( / 3 )**

1. A 16-year-old woman suffer from toothache, she asks advise on **which over the counter product is best to relieve her symptoms :**
2. Ibuprofen
3. Pethidine
4. Dexamethasone
5. Morphine

**I. The mechanism by which the selected drug produce it analgesic effect is :**

1. It Stimulate ɱ- ҡ –δ receptors lead to release of endorphine.
2. Inhibit the cyclo-oxygenase enzyme decrease prostaglandin synthesis
3. Inhibit the cyclo-oxygenase enzyme increase prostaglandin synthesis
4. Induce lipoprotein synthesis inhibit phospholipase enzyme A2

**II. The pharmacological classification of selected drug is :**

1. Peripheral causal analgesic
2. Peripheral non causal analgesic
3. Central narcotic analgesic
4. Central non narcotic analgesic

**III. Other screening method could be used to evaluate the analgesic activity of the selected drug is:**

1. Tail flick method
2. Hot plate method
3. Electrical method
4. Corneal method

**IV. The main adverse effect associated with selected drug :**

1. Gastric bleeding
2. Nausea and vomiting
3. Addiction
4. Osteoprosis
5. **In the chemical method for analgesic screeing, increasing the dose of sodium salicylate will :**
6. Increase the number of writhing and delay the onset of the writhing
7. decrease the number of writhing and delay the onset of the writhing
8. Increase the number of writhing and accelerate the onset of the writhing
9. decrease the number of writhing and accelerate the onset of the writhing
10. Non steroidal anti-inflammatory drugs (NSAIDs) cause significant bronchoconstriction in patient who have asthma**. Which of the following mechanism explain why aspirin provoked this problem :**
11. NSAIDs mediate hypersensitivity of histaminergic receptor on airway smooth muscle
12. NSAIDs mediate hypersensitivity of muscarinic receptor on airway smooth muscle
13. NSAIDs inhibit synthesis of prostaglandin that have bronchodilator activity
14. NSAIDs block epinephrine binding to β2 adrenergic receptor on airway smooth muscle

**4. Regarding the local anesthetic drugs, all the following are true EXCEPT:**

1. Reversible block of nerve conduction.
2. Blocking conduction of action potential .
3. Increase the threshold of excitability .
4. Increase the activity of Na / Ca exchange

**12. All of the following pairs are correctly matched EXCEPT:**

1. Psychomotor stimulant/ Cannabis
2. Cerebellum +Pons/ Equilibrium & coordination of movement.
3. Medulla oblongata/ Contain the vital center
4. Medullary stimulant/ Cardizole.
5. **In term of inflammatory responses , which of the following enzymes is the main targets of glucocorticoids:**
6. Cycloxygenase
7. 5- lipoxygenase
8. Xanthine oxidase
9. Phospholipase A2
10. **The depressant effect of Phenobarbital is due to:**
11. Phenobarbital facilitate GABA action opening of chloride channel.
12. Phenobarbital facilitates GABA action closing of chloride channel.
13. Phenobarbital antagonize GABA action opening of chloride channel.
14. Phenobarbital facilitate GABA action opening of potassium channel.
15. **Loss of righting reflex is present in all of the following drugs EXCEPT:**
16. Thiopental
17. Phenobarbital
18. Chloropromazine
19. Chloralhydrate
20. **The tonic convulsion can be removed by:**
21. Decapitation.
22. Pithing.
23. Complete removal of the brain and destruction of the spinal cord.
24. Anticonvulsant.

**10 - Regarding the non steroidal anti-inflammatory drugs (NSAIDs), all the following are true EXEPT:**

1. They have peripheral analgesic properties
2. They act on subcortial “thalamus.
3. They used for dull pain .
4. They have low analgesic potency.
5. **The local anesthetic that is injected subcutaneously in order to paralyze nerve ending at the site of operation, is called:**
6. Surface anesthesia
7. Spinal anesthesia
8. Nerve block anesthesia
9. Infiltration anesthesia
10. **All of the following are central non-narcotic analgesics EXCEPT:**
11. Piroxicam
12. Codeine
13. Diclofenac
14. a & c
15. **Regarding aspirin, all of the following are true EXCEPT:**
    1. It is contraindicated in bronchial asthma
    2. It causes shifting to lipoxygenase pathway
    3. It decreases the levels of leukotrienes
    4. It inhibits COX enzyme
16. **Non-narcotic Analgesics can be screened by:**
17. Hot plate method
18. Writhing method
19. Tail flick method
20. a & c
21. **Regarding nerve block method, the painful stimulus used in this method is:**
22. Phosphoric acid
23. Carrageenin
24. Sulforic acid
25. Hydrochloric acid
26. **All of the following mediators are released in response to inflammation EXCEPT:**
27. Prostaglandin
28. Bradykinin
29. Histamine
30. Leukotrienes
31. **Which of the following method(s) is/are used in the evaluation of local anesthetics:**
32. Writhing method
33. Surface method
34. Infiltration method
35. b & c

**2. Chlorpromazine produces its depressant effect by:**

1. Blocking dopaminergic D2 & histaminergic H1- receptors
2. Blocking adrenergic α2& serotinergic 5-HT receptors
3. Blocking adrenergic α1& serotonergic 5-HT receptors
4. a & c

**3. All of the following are non-benzodiazepine non barbiturate depressant EXCEPT:**

1. Buspirone.
2. Chlorpromazine.
3. Chloralhydrate.
4. Promethazine.

**4. Which of the following statement is/are TRUE:**

1. Caffeine block A1-A2 receptors
2. Picrotoxin block glycine receptors
3. Strychnine block GABAA
4. a & c

**5. Which of the following reduces the activity of phospholipase A2 :**

1. Aspirin .
2. Leukotriene .
3. Dexamethasone .
4. Ibuprofen .

**6. Regarding the local anesthetic drugs, all the following are true EXCEPT:**

1. Reversible block of nerve conduction.
2. Blocking conduction of action potential .
3. Increase the threshold of excitability .
4. Increase the activity of Na / Ca exchange

**7. All of the following pairs is correctly matched EXCEPT:**

1. Glucocorticoids / Steroidal anti inflammatory drugs (SAID)
2. Granulation pouch method / Acute stage .
3. Surface anesthesia / Corneal method .
4. Nerve block anesthesia / Vicinity of brachial plexus .

**Q2: Indicate whether each of the following statement is true (T) or false (F) then correct the false: ( / 1.5 )**

1. Tonic convulsion can be removed by decapitation. ( )

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1. Procaine is a local anesthetic in the corneal method ( )

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1. Pin prik is the painful stimulus in nerve block method . ( )

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1. Clonic convulsion is produced by a dose of medullary stimulants ( )

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1. Chloralhydrate produce a characteristic gait called creeping gait ( )

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1. The tail-flick method is an example of electrical method ( ).

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1. Strychnine is a glycine receptor antagonist ( ).

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**Q3: Match the following with an appropriate statement: ( / 1.5 )**

|  |  |  |
| --- | --- | --- |
| 1. Strychnine |  | A symmetric, coordinated convulsion |
| 1. Repair stage of inflammation |  | Short acting barbiturate |
| 1. Thiopental |  | Migration of the leukocytes |
| 1. Non selective COX inhibitor |  | Symmetric, uncoordinated convulsion |
| 1. Cocaine |  | Stretching of the body |
| 1. Diluted hydrochloric acid |  | Ultra short acting barbiturate |
|  |  | Inhibits catecholamine uptake |
|  |  | Cause bronchoconstriction |
|  |  | Proliferation of fibroblast |
|  |  | Nerve block method |

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| --- | --- | --- |
| 1. Exudative stage of inflammation |  | Stretching of the body |
| 1. Levallorphan |  | Prostaglandin analogue |
| 1. Misoprostol |  | Loss of muscle control |
| 1. Acetic acid |  | Inhibits catecholamine uptake |
| 1. Chloropromazine |  | Proliferation of fibroblast |
| 1. Caffeine |  | Cause convulsion in high dose |
|  |  | Narcotic antagonist |
|  |  | Medullary Stimulant |
|  |  | Migration of the leukocytes |
|  |  | Loss of righting reflex |

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| --- | --- | --- |
| 1. Dreaming stage | ( ) | 1. Loss of righting reflex |
| 1. Superficial pain |  | 1. Catalepsy |
| 1. Amobarbital | ( ) | 3. Short acting barbiturate |
| 1. Sedatives | ( ) | 4. Non rapid eye movement (NREM) |
| 1. Spinal anesthesia | ( ) | 5. Rapid eye movement (REM) |
| 1. The end point of tranquilizer | ( ) | 6. Withdraw of the limb |
|  | ( ) | 8. Intermediate acting barbiturate |
|  |  | 9. Subarachniod space |
|  |  | 1. Subcutaneous region 2. Induce sleep in large dose |
|  |  | 1. Slow response |
|  |  |  |

***GOOD LUCK.***