

**SELF ASSESSMENT RSPT 1200 – MODULE F:  
MEDIATOR ANTAGONISTS AND STEROIDS**

1. What do the initials HPA stand for?
  - A. H - **HYPOTHALAMIC**
  - B. P - **PITUITARY**
  - C. A - **ADRENAL**
  
2. Is HPA insufficiency a problem with aerosol or systemic administration of steroids?
  - A. Aerosol
  - B. **Systemic**
  
3. Where are glucocorticoids (steroids) produced? **ADRENAL CORTEX**
  
4. List two ways to prevent fungal infections after steroid aerosol administration
  - A. **RINSE MOUTH**
  - B. **USE SPACER**
  
5. Glucocorticoids are considered **FIRST LINE DRUGS** in the treatment of Asthma
  - A. **True**
  - B. False
  
6. Are Steroids considered controllers or relievers in the treatment of asthma?
  - A. **Controllers - INHALED**
  - B. **Relievers - SYSTEMIC**
  
7. What is the indication for administering steroids? **ANTI-INFLAMMATORY**
  
8. List three common side effects of steroids:
  - A. **IMMUNOSUPPRESSION**
  - B. **INCREASED SUSCEPTIBILITY TO INFECTION**
  - C. **EDEMA**
  - D. **HYPERTENSION**
  - E. **EUPHORIA**
  - F. **INSOMNIA**
  - G. **THIN SKIN**
  - H. **IMPAIRED WOUND HEALING**
  - I. **BRUISING**
  - J. **ALTERED FAT DISTRIBUTION**
  - K. **DIABETES**
  - L. **CUSHINGOID STATE**
  - M. **ELECTROLYTE IMBALANCE**
  - N. **NEGATIVE NITROGEN BALANCE**
  - O. **MUSCLE WEAKNESS**
  - P. **OSTEOPOROSIS**

- Q. **GROWTH SUPPRESSION**
- R. **GLAUCOMA**
- S. **MOON FACE**
- T. **BUFFALO HUMP**
- U. **CENTRAL OBESITY**

9. Which two steroids can be given by small volume nebulizer?

- A. **dexamethasone (DECADRON)**
- B. **budesonide (PULMICORT) \* I'M NOT SURE THIS IS AVAILABLE AS AN INHALANT SOLUTION IN US.**

10. List the trade names of the following steroids

- A. Beclomethasone **BECONASE AQ, QVAR 40**
- B. Flunisolide **AEROBID, AEROSPAN, NASAREL**
- C. Dexamethasone **DECADRON**
- D. Fluticasone **FLOVENT, FLONASE**
- E. Budesonide **PULMICORT, RHINOCORT**

11. Anti-Leukotrienes (also referred to as Leukotriene inhibitors) are non-steroidal anti-inflammatory drugs. Name the three Leukotriene inhibitors.

- A. **zileuton – ZYFLO**
- B. **zafirlukast – ACCOLATE**
- C. **montelukast - SINGULAR**

12. Which of the following should **not** be used to treat an acute asthmatic attack (more than one answer)

- A. Solumedrol
- B. **Intal**
- C. **Singular**
- D. **Zyflo**

13. How specifically does Cromolyn sodium prevent inflammation?

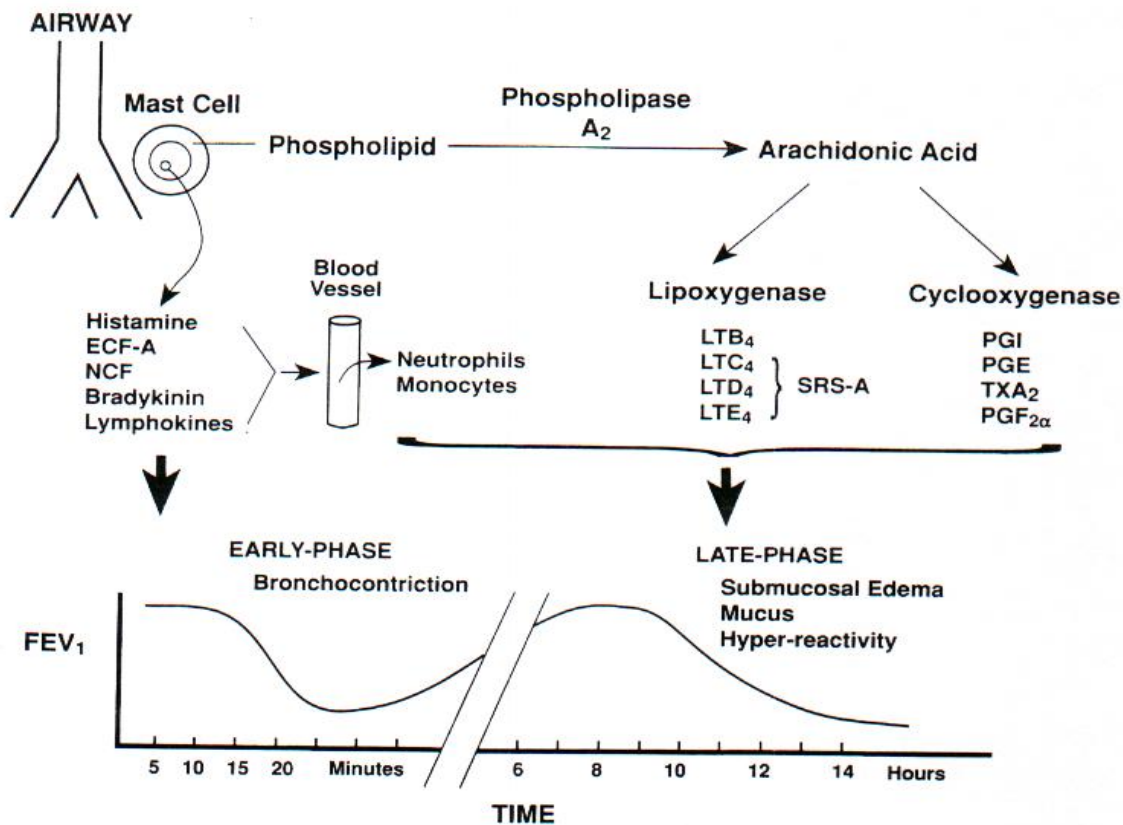
**PREVENT CA<sup>2+</sup> INFLUX INTO THE CELL, THEREBY PREVENTING MEDIATOR RELEASE.**

14. Name the chemical mediators that are released from mast cells & eosinophils during an antigen-antibody reaction.

- A. **HISTAMINE**
- B. **PLATELET ACTIVATING FACTOR**
- C. **EOSINOPHIL CHEMOTACTIC FACTOR OF ANAPHYLAXIS (ECF-A)**
- D. **NEUTROPHIL CHEMOTACTIC FACTOR OF ANAPHYLAXIS (NCF-A)**
- E. **LEUKOTRIENES**
- F. **PROSTAGLANDINS**

15. Explain how the body regulates the production and secretion of steroids.
- LOW BLOOD LEVELS OF STEROIDS.**
  - HYPOTHALAMUS IS STIMULATED.**
  - SENDS IMPULSE TO ANTERIOR PITUITARY GLAND WHICH STIMULATES CORTICOTROPIN RELEASING FACTOR (CRF).**
  - THIS STIMULATES THE FORMATION OF ADRENOCORTICOTROPIN HORMONE (ACTH ).**
  - ACTH IN BLOODSTREAM STIMULATES ADRENAL CORTEX TO PRODUCE AND RELEASE CORTICOSTEROIDS.**
  - INCREASES BLOOD LEVELS OF CORTICOSTEROIDS.**

16. Draw a picture and explain how Anti-Leukotrienes work to stop inflammation.



17. Which of the following anti-inflammatory drugs are used in the treatment of acute asthma?

- Decongestants
- Anti-histamines
- Mast Cell Stabilizers
- Leukotriene Antagonists
- Steroids**

18. Which of the anti-inflammatory drugs are used as prophylactics to prevent an asthma attack?

- A. Mast Cell Stabilizers
- B. Leukotriene Antagonists
- C. Steroids
- D. All the above

19. Name the two categories of adrenocorticosteroids.

- A. **GLUCOCORTICOIDS**
- B. **MINERALOCORTICOIDS**

20. Which of the adrenocorticosteroids is used to regulate electrolyte and H<sub>2</sub>O balance in the body? **ALDOSTERONE**

21. Which of the adrenocorticosteroids regulates metabolism of carbohydrates, fats and protein? **CORTISOL**

22. How does phenylephrine work as a decongestant?  **$\alpha$ -ADRENERGIC AGENT THAT PROMOTES VASOCONSTRICTION**