

PHSR 8009 PHARMACOTHERAPEUTICS

Exam II

Cardiovascular Drugs

1. Which of the following diuretics inhibits both sodium reabsorption and the secretion of potassium and hydrogen ions in the collecting tubules of the kidneys?

Furosemide, HCTZ

Triamterene

2. All of the following adverse drug effects are attributable to treatment with a diuretic EXCEPT which one? *Xerostomia, Lichenoid Stomatitis*

→ caries, candidiasis, burning mouth etc

3. All of the following conditions are indications for treatment with a diuretic EXCEPT which one? *HYPertension, EDEMA (heart failure, hepatic failure, Renal failure).*

Thromboembolic episodes

CHF

4. All of the following conditions are appropriate indications for the administration of a competitive β_1 -adrenergic receptor blocking agent EXCEPT which one? *HYPERtension, ANGINA, TACHYARRHYTHMIA*

5. All of the following adverse drug effects are attributable to competitive β_1 -adrenergic receptor blocking agents EXCEPT which one? *Lichenoid Stomatitis*

TACHYPNEA

Xerostomia, Bradycardia, Mental impairment (e.g. Depressants)

6. Which of the following drugs may mask the adrenergic symptoms of hypoglycemia in diabetic patients?

β -Blockers

7. Which of the following drugs inhibits the conversion of angiotensin I to angiotensin II, produces vasodilatation, suppresses aldosterone synthesis, and potentiates the vasodilating effects of bradykinins and prostaglandins?

Benzapril

Fosinopril, Lisinopril, Quinopril, Ramipril

8. All of the following adverse drug effects are attributable to treatment with an ACE inhibitor EXCEPT which one? *Lichenoid Stomatitis, Angioedema, hypotension, dysgeusia.*

hypotension

Rabdomyolysis

→ HMG CoA Inhibitors.

9. All of the following pharmacological effects are attributable to calcium channel blocking agents EXCEPT which one? *Gingival Hyperplasia*

• Inhibit Ca^{++} from entering channels of vascular smooth muscle, Anti Angina, Slow HR, ↓BP

Increased conduction velocity

10. Adverse drug effects associated with calcium-channel blocking agents include all of the following EXCEPT which one? *Gingival Hyperplasia, Difficulty Breathing*

Recurrent hypoglycemia in susceptible pt's

Steel's Syndrome

11. Patients taking a calcium channel-blocking agent may have all of the following medical conditions EXCEPT which one? *Angina, HYPertension, Supraventricular Tachycardia.*

Congestive Heart Failure

12. Which of the following drugs is an α_2 -adrenergic receptor agonist, which reduces sympathetic outflow from the nervous system and decreases vascular tone and heart rate?

CLONIDINE

Not: Vasartan, Benzopril, Ambipril

13. Which of the following drugs is an HMG-CoA reductase inhibitor, a rate-limiting enzyme in the synthesis of VLDL and LDL, and increases the concentration of HDL?

*Atorvastatin (Lipitor)
Pravastatin (Pravachol)
Simvastatin (Zocor)
Fenofibrate (Tricor)
Gemfibrozil*

NOT: Gemfibrozil, Fenofibrate, Niacin

14. All of the following drugs may be effective in the treatment of cardiac arrhythmias EXCEPT which one? Isosorbide Mononitrate *Ca antagonist, B-Blockers, Anticoagulants, Class III antiarrhythmics, Cardiac Glycosides (digoxin).*

15. Which of the following drugs inhibits the sodium/potassium ATPase pump, increasing intracellular calcium ion concentrations and cardiac contractility (positive inotropic effect)? Digoxin (cardiac glycosides)

16. The daily administration of low doses of aspirin interferes with platelet aggregation by inhibiting the Thromboxane A₂ synthase or COX activity.

17. Which of the following agents inhibits platelet aggregation induced by adenosine diphosphate? Clopidogrel (Plavix)

18. After treatment with acetylsalicylic acid is stopped, cyclooxygenase activity recovers as a function of platelet turnover in about

Not: 4 h
48 h
24 h

19. The therapeutic level of warfarin (Coumadin®) is monitored using the International Normalized Ratio (INR), which requires a determination of the patient's Prothrombin Time. PT

20. Before invasive dental procedures, an assessment of the patient's level of anticoagulation is imperative to ensure values that may preclude problematic bleeding yet maintain therapeutic anticoagulation. These goals may be achieved if on the day of the procedure the patient's INR is 2-3 NOT: <2

between 3-4
> 4

Endocrine and Metabolic Agents

21. All of the following hormones are associated with a hyperglycemic effect EXCEPT which one? Insulin NOT: Estrogen, Prednisone, Progesterone

22. All of the following statements are true in regard to oral hypoglycemic agents EXCEPT which one? Some have no effect on HbA1c concentration *Stimulate Insulin Release from β-cells ✓
Decrease Insulin Resistance ✓
Improve Insulin effectiveness ✓
Taken by type II diabetics*

23. All of the following are valid therapeutic considerations in the dental management of patients with diabetes mellitus EXCEPT which one? EPI can raise blood glucose levels *Med. History, Functional Capacity, Vital Signs, Breakfast, Mid-Morning before drug gets Max effectiveness, length of appt.*

24. All of the following statements are true in relation to the physiological effects of glucocorticosteroids EXCEPT which one? Glucocorticosteroids decrease inflammation by suppressing PMN's *② reduce capillary permeability ③ suppress immune sys by ↓ the activity of lymphocytes.*

25. All of the following medical conditions may be treated with a glucocorticosteroid EXCEPT which one? Addison's (adrenocortical insufficiency) *Allergies, Inflammatory/Autoimmune dx's, Immunosuppression in organ transplant, Lymphocytic leukemia* Not Cushing's

26. All of the following statements are appropriate considerations in developing strategies for corticosteroid supplementation in association with dental care EXCEPT which one? Topical/inhaled corticosteroids can suppress the HPA axis & often cause clinical adrenal insufficiency. *Patchy brown pigmentation, Chronic mucocutaneous candidiasis, leave dose the same for all dental procedures*

• Supraphysiological doses cause myxedema

regulate BMR

• ~~avoid vasoconstrictive~~
hypothyroids are
hypo-reactive to CNS
depressants + may
require higher doses
of opioids

27. All of the following statements are true with regard to thyroid hormones EXCEPT which one? Thyroid hormones ~~Synergistic effect w/ EPI, ~~depressants~~, ~~depressants~~~~,
lack of = cretinism, myxedema too much = hyperthyroid - exophthalmos.
28. All of the following are valid therapeutic considerations in the dental management of patients with thyroid dysfunction EXCEPT which one? DON'T use ASPIRIN
• Can use EPI, EMERGENCY if Severe HypoThyroid / Thyrotoxicosis OR High or Low BP or mild/mod dysfunction.
29. All of the following statements are true with regard to estrogen EXCEPT which one? Estrogen Endometrial hyperplasia, low E during menopause, ~~low E~~ E pills give endometriosis + Breast cancer effective for treating Breast Cancer
30. Which of the following hormones competitively binds to estrogen receptors, prevents bone loss, and block some estrogen effects such as those that lead to breast and uterine cancer? RALOXIFEN ~~fact~~
31. Which of the following hormones, when taken by a man, may suggest the medical diagnosis of prostate carcinoma? ~~PREMARIN~~ PREMARIN (conjugated estrogens).
32. All of the following are valid therapeutic considerations in the dental management of patients taking contraceptives EXCEPT which one?
• The ADA advises dental practitioners to alert all women of childbearing age to avoid antibacterials.

Since only Rifampin ~~an antibiotic~~
is implicated in reducing efficacy of
contraceptives, there is no ethical
obligation to warn pt's about risk
when prescribing Antibacterials.