Pharmacology

First Exam

25/11/2010

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Q1) what is Pharmacognosy

(a) the science that deals with identification and preparation of drugs from their sources.

b- preparation, compounding, marketing and dispensing drugs. ✗

c- the mutual interaction between drugs and biological organs.

d- reference of registrated drugs in a country.

e- ...

✗. match the following

Q2) absorption

Q3) distribution.

Q4) affinity.

Q5) inteinsic activity.

Q6) excretion.

a) the tightnes that adrug bind to the receptor.

b) irrevesible transport from site of administration to the bloodstream.

c) drug leave the blood to peripheral tissue.

d) ability to generate effect.

e) proportional to the concentration of drug in plasma.

Q7) what is Pulverization

a) preparation of drug from crude dried plants.

b) distrillation of volatile plant oils.

c) expression of fixed plant oil.

d) ...

(Q8) what's the main perpose of prescribing drug with their appropriate name:

a-----
b-----
c-----
d-----
e-----
a-----

Q9). what is the proportion of nonionized form of a weak base. ($pK_a = 9.4$) when put in a media ($PH = 7.4$). (pK_a - 9.4)

a- 99 %
b- 1 %
c- 0.1 %
d- 50 %
e- ---

Q10) bioavailability is best described by.

a= area under serum drug conc. curve.
b---
c---
d---
e---

* match the following:-

Q 11) volume of distribution.

a/=total amount of drug in body.
=doesn't represent uniform body drug conc.

Q12): α-phase.

b) distribution phase.

Q13) β-phase.

c) elimination phase.

d).

Q14). clearance.

e). volume of plasma from which all drug appears to be removed in a given time.

Q15).

Q16) a doctor write in a prescribtion (take 1 capsule (3mg) every 6 hours) and you know that the $t_{1/2}$ of the drug = 3 hours then what's the maximal amount of the drug that would accumulate

Q17) which one of the following statement is correct

a- weak bases are absorbed efficiently across the epithelial cell of the stomach.

b- coadministration of atropine speeds the absorption of a second drug

c- drugs showing a large Vd can be efficiently removed by dialysis of the plasma.

d- stressful emotions can lead to a slowing of drug absorption.

e- if the Vd for a drug is small, most of the drug is in the extraplasmic space.

Q18) which one of the following is true for a drug whose elimination from plasma shows first-order kinetics:-

a- the $t_{\frac{1}{2}}$ of the drug is proportional to the drug concentration in plasma.

b- the amount eliminated per unit of time is constant.

c- the rate of elimination is proportional to the plasma concentration.

d- elimination involves a rate-limiting enzymic reaction operating at its maximal velocity (V_m).

e- a plot of drug concentration versus time is a straight line.

Q19) the addition of glucuronic acid to a drug.

a- ↓ its water solubility.

b- usually leads to inactivation of the drug.

c- is an example of phase I reaction.

d- occurs at the same rate in adults and newborns.

e- Involves cytochrome P450.

Q20) a patient is treated with drug A, which has a high affinity for albumin and is administered in amounts that do not exceed the binding capacity of albumin. a second drug B also has a high affinity for albumin but is adminstered in amounts that are 100 times the binding capacity of albumin. ~~is administered~~ what happens after administration of drug B.

a- ↑ tissue conc. of drug A.

b- ↓ " " " "

c- ↓ Vd of drug A.

d- ↓ $t_{1/2}$ " "

e- addition of more drug A significantly alters the serum conc. of unbound drug B.

Q21) drugs showing zero-order kinetics of elimination.

a- are more common than those showing first-order kinetics.

b- ↓ in conc. exponentially with time.

c- have a $t_{1/2}$ independent of dose.

d- show a plot of drug concentration versus time that is linear.

e- show a constant fraction of the drug eliminated per unit time.

Q22) a drug, given as a 100-mg single dose, result in C_{max} = 20 µg/ml. then Vd is

a- 0.5L c- 2L e- 10 L.

b- 1L d- 5 L

Q23) a drug, given as 200 -mg, we found Vd for it to be 20 L then it conc. in plasma is.

a- 10 mg/L. c- 5 mg/L. e- 6 mg/L.

b- 20 mg/L. d- 15 mg/L.

Q27) Variation in the sensitivity of a population of individuals to increasing doses of a drug is best determined by which of the following:

a- efficacy b- potency c- therapeutic index
d- graded dose-response curve.
e- Quantal dose-response curve.

Q28) which of the following statements most accurately describes a system having spare receptors.

a- the number of spare receptors determines the maximum effect.
b- spare receptors are sequestered in the cytosol.
c- a single drug-receptor interaction results in many cellular response elements being activated.
d- spare receptors are active even in the absence of agonist.
e- agonist affinity for spare receptors is less than their affinity for nonspare receptors.

Q29) which of the following show comparative cytology.

⇒ penicillin G

Q51)

Q24) a drug with $t_{1/2}$ = 12 hours administered I.V. continuous I.V infusion. how long will it take for the drug to reach 90% of its final steady state.

a) 18 h.
b) 24 h.
c) 90 h.
d) 40 h.
e) 90 h.

Q25) which of the following results in a doubling of the steady-state conc. of a drug.

a- doubling the rate of infusion.
b- maintaining the rate of infusion but doubling the loading dose.
c- doubling the rate of infusion and doubling the concentration of the infused drug.
d- tripling the rate of infusion.
e- Quadrupling the rate of infusion.

Q26) which of the following statements is correct:

a- if 10 mg of drug A produces the same response as 100 mg of drug B, drug A is more efficacious than drug B.
b- the greater the efficacy, the greater the potency of a drug.
c- In selecting a drug, potency is usually more important than efficacy.
d- a competitive antagonist increase the ED50.
E- Variations in response to a drug among different individuals is most likely to occur with a drug showing a large therapeutic index.

(30)

December كانون الأول 16

SUNDAY الأحد Pharmall

6 ذو الحجة 1428 H

(1) Definitions (Pharmacology, Pharmacy, Pharmacognosy) ...etc. all of the following are correct except ...

(2) Actio All of the following are advantages of using generic name except ...

(3) Intrinsic sympathomimetic activity all of the following are true except ...

(4) All of the following are Plant Sources except ... Hormones ...

(5) All of which of the following can affect the absorption rate of a drug.

(6) All of which of the following represents the ways of drug distribution ... all of the above. (Pinocytosis, diff. ...)

(7) The following represents disadvantages of rectal method ...

(8) Bioavailability is applied to oral drugs which is wrong

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WEEK 51

2007

24 November تشرين الثاني

SATURDAY Micro السبت

14 Dhu'l-qa'da 1428 H

(9) T. Capitis gall except ...

a. mostly in children

b. Endo/Exothrix

c. blastomyces

d. Trichophyton

e. rare in adults

answer (c)

(10) Aflatoxins all except ...

a. A. flavus

b. Peanuts, grains

c. liver toxicity

d. Histoplasma capsulatum

e. none of the above

answer (d)

Notes

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