Minor Tranquilizers -Multiple Choice Questions

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- Key: 1. a, b, c
 - 2. a, c
 - 3. b, d
 - 4. d
 - 5. a, b, c, d
- 1. Which of the following statements are true regarding benzodiazepine withdrawal seizures?
 - a) they are related to dose
 - b) they may be due to underlying seizure disorder
 - c) they are related to duration of treatment
 - d) they are more common when benzodiazepines are taken with multiple drugs
- 2. The following may be symptom(s) of anxiety¹:
 - a) dry mouth
 - b) syncope
 - c) chest pain
 - d) urinary frequency
- 3. anxiolytic sedatives....
 - a) decrease the convulsive threshold
 - b) do not produce physical or psychological tolerance and dependence
 - c) do not show cross-tolerance between one another
 - d) induce emotional disinhibition and euphoria in low doses
- 4. The following has (have) been important in elucidating the physiology and pharmacology of anxiety:
 - a) anxiety symptoms may be induced by various sympathomimetic drugs, including ephedrine, epinephrine, and amphetamine
 - b) propranolol controls the psychological symptoms of anxiety, but not the autonomic symptoms
 - c) Pitts and McClure reported inducing anxiety in patients with anxiety neurosis by the IV infusion of sodium lactate
 - d) the anxiety produced by LSD ingestion is not responsive to administration of diazepam

- 5. Long-term use of benzodiazepines is common in which of the following groups of patients:²
 - a) older patients with chronic medical and psychiatric illnesses
 - b) patients with chronic anxiety and dysphoric symptoms, sometimes associated with panic disorder
 - c) patients with panic disorder who are being treated with alprazolam
 - d) psychotic patients who receive benzodiazepines in addition to other drugs for treatment of anxiety, tardive dyskinesia, or extrapyramidal symptoms or to enhance the effect of antipsychotic medication
- 6. The following are characteristic of the "panic attack with agoraphobia" syndrome described by Klein³:
 - a) patients have not only a fear of leaving home but also a very strong fear of going to those public places (eg supermarkets, restaurants, elevators) where they usually experience the panic attacks
 - b) patients typically were fearful and dependent as children, showing a great deal of separation anxiety
 - c) panic attacks occur when the patient is separated from significant others
 - d) antidepressants effectively prevent panic attacks but not the anticipatory anxiety
- 7. The effectiveness of a hypnotic such as triazolam (Halcion) in inducing sleep is thought to be due to:
 - a) short duration of action (short half-life)
 - b) lack of significant quantities of active metabolites
 - c) a selective effect on receptors responsible for sleep induction
 - d) rapid absorption as well as moderate lipid solubility

- 8. Which of the following pharmacokinetic properties of benzodiazepines might lead the clinician to choose specific drugs for specific clinical conditions?
 - a) a long half-life (of the parent compound or of active metabolites) which minimizes withdrawal symptoms
 - b) rapid absorption may be responsible for good hypnotic effect
 - c) drugs which are slow to reach peak CNS levels may have less potential for abuse
 - d) if oral dosing is contraindicated, the intramuscular route provides rapid and consistent absorption for diazepam and chlordiazepoxide
- 9. Which of the following conditions may present initially with signs and symptoms of anxiety⁴?
 - a) pheochromocytoma
 - b) caffeinism
 - c) hyperthyroidism
 - d) akathisia
- 10. Which of the following statements apply to alcohol withdrawal seizures^{5,6}?
 - a) likely to occur 12 to 48 hours after the cessation of drinking
 - b) the interictal EEG typically shows abnormalities
 - c) status epilepticus is infrequent
 - d) phenothiazines are more useful than benzodiazepines in treating alcohol withdrawal
- 11. In using benzodiazepines to treat anxiety, which of these guidelines apply⁷?
 - a) even though many benzodiazepines have long halflives, bid or tid dosing is preferable to single doses to reduce daytime sedation
 - b) oxazepam and lorazepam are preferred for patients with liver disease
 - c) in the elderly, half-lives may be three to four times normal values, therefore small doses should be used
 - enzyme induction by benzodiazepines leads to cross tolerance with barbiturates
- 12. Which of the following sleep disorders are appropriately treated with benzodiazepines?
 - a) insomnia related to depression
 - b) nocturnal myoclonus
 - c) disorders of the sleep phase syndrome, such as delayed sleep phase
 - d) sleep apnea

- 13. In assessing the acceptability of a hypnotic agent, its effect the morning after can be determined by measuring "daytime sleep latency" (the length of time needed to fall asleep, under suitable conditions, during the day). This is because daytime sleep latency is⁸:
 - a) well correlated with laboratory measurements of motor-perceptual performance
 - b) decreased with decreasing amounts of nocturnal sleep
 - c) a good way to identify chronic insomniacs
 - d) significantly related to subjective ratings of sleepiness
- 14. Benzodiazepines have the following effects on sleep⁹:
 - a) increase in REM latency and decrease in REM sleep
 - b) a consistent decrease in stage 1 sleep
 - c) increase in stage 2 sleep
 - d) decrease in slow wave (stages 3 and 4) sleep, but an increase in night terrors

References:

¹ Rosenbaum JF. The drug treatment of anxiety. NEJM 1982 Feb 18; 306(7): 401-4

² Salzman C. Benzodiazepine dependence, toxicity, and abuse. Report of the American Psychiatric Association task force on benzodiazepine dependency, 1990 May; American Psychiatric Press, Washington DC.

³ Davis JM, Nasr S, Spira N, Vogel C. Anxiety: differential diagnosis and treatment from a biologic perspective. J Clin Psychiatry 1981 Nov; 42(11)sec. 2: 4-14

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- ⁵ Brown CG. The alcohol withdrawal syndrome. Ann Emerg Med 1982 May; 11: 276-80
- ⁶ Wilbur R, Kulik FA. Am J Hosp Pharm 1981; 38: 1138-43
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- ⁸ Dement W, Seidel W, Carskadon M. Daytime alertness, insomnia, and benzodiazepines. Sleep 1982; 5(suppl 1): S28-S45
- ⁹ Gilman AG, Goodman LS, Gilman A, eds. The pharmacological basis of therapeutics. MacMillan; New York, 1980: 342, 348