



Carlat Publishing

Medication Fact Book for Psychiatric Practice, Seventh Edition (2024)

CME Study Guide

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Learning Objectives

1. Describe the dosing, side effects, pharmacokinetics, and drug interactions of many of the most commonly prescribed ADHD medications.
2. Describe the dosing, side effects, pharmacokinetics, and drug interactions of many of the most commonly prescribed antidepressants.
3. Describe the dosing, side effects, pharmacokinetics, and drug interactions of many of the most commonly prescribed antipsychotics.
4. Describe the dosing, side effects, pharmacokinetics, and drug interactions of many of the most commonly prescribed anxiolytic and hypnotic medications.
5. Describe the dosing, side effects, pharmacokinetics, and drug interactions of many of the most commonly prescribed dementia medications.
6. Describe the dosing, side effects, pharmacokinetics, and drug interactions of many of the most commonly prescribed mood stabilizers and anticonvulsants.
7. Describe the dosing, side effects, pharmacokinetics, and drug interactions of many of the most commonly prescribed natural treatments.
8. Describe the dosing, side effects, pharmacokinetics, and drug interactions of many of the most commonly prescribed sexual dysfunction medications.
9. Describe the dosing, side effects, pharmacokinetics, and drug interactions of many of the most commonly prescribed medications used to treat the side effects of psychiatric drugs.
10. Describe the dosing, side effects, pharmacokinetics, and drug interactions of many of the most commonly prescribed sleep disorder medications.
11. Describe the role and use of many of the most commonly prescribed somatic treatments.
12. Describe the dosing, side effects, pharmacokinetics, and drug interactions of many of the most commonly prescribed substance use disorder medications.
13. Detail the use of common psychiatric medications in pregnancy and lactation.
14. Describe the differences between each of the five schedules of controlled substances.
15. Discuss some of the recommended laboratory tests used to monitor psychiatric medications.

16. Describe the role of urine drug testing for substance use screening.
17. Describe the role of pharmacogenetic testing for psychiatric medications.
18. Discuss some of the common anticholinergic agents used in psychiatric treatment.
19. Describe the dosing of psychotropic medications in patients with hepatic or renal impairment.

Questions

1. When converting from another amphetamine product to lisdexamfetamine (Vyvanse), the dose should be (LO #1):
 - a. The same as the original amphetamine product
 - b. At least 25% of the original amphetamine product
 - c. At least half than the original amphetamine product
 - d. At least double than the original amphetamine product

2. Dyanavel XR (amphetamine) is available as which of the following (LO #1)?
 - a. Oral capsules
 - b. Extended release orally disintegrating tablets
 - c. Extended release oral suspension
 - d. Transdermal patch

3. Methylin (methylphenidate) chewable tablets should be administered how (LO #1)?
 - a. On an empty stomach
 - b. With at least eight ounces of fluid
 - c. With a high fat meal
 - d. In the evening

4. Atomoxetine (Strattera) has a similar mechanism of action as which of the following (LO #1)?
 - a. Clonidine
 - b. Guanfacine
 - c. Methylphenidate
 - d. Viloxazine XR

5. Which of the following electrolyte disorders may occur in elderly patients taking serotonergic antidepressants (LO #2)?

- a. Hyperkalemia
- b. Hypomagnesemia
- c. Hyponatremia
- d. Hyperphosphatemia

6. Zuranolone (Zurzuvae) has an FDA indication for which of the following (LO #2)?

- a. Bipolar depression
- b. Generalized anxiety disorder
- b. Major depressive disorder
- d. Postpartum depression

7. Which of the following is a possible adverse effect of bupropion (LO #2)?

- a. Salivation
- b. Sedation
- c. Seizures
- d. Weight gain

8. Duloxetine is available as which dosage form (LO #2)?

- a. Delayed-release capsule
- b. Orally disintegrating tablet
- c. Immediate-release capsule
- d. Oral solution

9. Monoamine oxidase inhibitors (MAOIs) should be discontinued how many days before elective surgery (LO #2)?

- a. 1

- b. 5
- c. 10
- d. 21

10. Asenapine (Secuado) is available as which formulation (LO #3)?

- a. Extended release tablet
- b. Immediate release tablet
- c. Oral solution
- d. Transdermal patch

11. Brexpiprazole (Rexulti) is chemically and structurally related to which of the following (LO #3)?

- a. Aripiprazole
- b. Olanzapine
- c. Quetiapine
- d. Ziprasidone

12. In most patients, before initiating clozapine, absolute neutrophil count (ANC) must be greater than (LO #3):

- a. 500
- b. 1,500**
- c. 2,500
- d. 3,500

Feedback: ANC should be greater than 1,500 prior to initiating clozapine. For the benign ethnic neutropenia populations, two ANCs greater than 1,000 should be obtained before initiating clozapine.

For more information, see <https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=25c0c6d5-f7b0-48e4-e054-00144ff8d46c>.

13. Which of the following has an FDA indication for irritability symptoms of autism (LO #3)?

- a. Cariprazine
- b. Iloperidone

- c. Olanzapine
- d. Risperidone

14. If a patient wakes up in the middle of the night, which of the following is the most appropriate to induce sleep (LO #4)?

- a. Clonazepam
- b. Eszopiclone
- c. Temazepam
- d. Zaleplon

15. Dexmedetomidine's mechanism of action is which of the following (LO #4)?

- a. Alpha-1 agonist
- b. Alpha-2 agonist
- c. Alpha-1 antagonist
- d. Alpha-2 antagonist

16. Which of the following should be monitored in patients taking prazosin (LO #4)?

- a. Blood glucose
- b. Blood pressure
- c. Lipid panel
- d. White blood cell count

17. Suvorexant (Belsomra) is what type of controlled substance (LO #4)?

- a. Schedule II
- b. Schedule III
- c. Schedule IV
- d. Schedule V
- e. It is not a controlled substance.

18. Lecanemab (Leqembi) is FDA approved for which severity of Alzheimer's dementia (LO #5)?

- a. Mild
- b. Moderate
- c. Severe
- d. Lecanemab is indicated for all severities of Alzheimer's dementia

19. Donepezil may cause which serious adverse effect (LO #5)?

- a. Diabetic ketoacidosis
- b. Heart block**
- c. Ischemic stroke
- d. Severe bleeding

20. Which of the following is the mechanism of action(s) of rivastigmine (LO #5)?

- a. Acetylcholine esterase inhibitor only
- b. Butyrylcholinesterase inhibitor only
- c. Both acetylcholine esterase inhibitor and butyrylcholinesterase inhibitor
- b. Neither acetylcholine esterase inhibitor or butyrylcholinesterase inhibitor

21. Use of which of the following requires HLA-B*1502 monitoring in Asian patients (LO #6)?

- a. Gabapentin
- b. Lamotrigine
- c. Lithium
- d. Oxcarbazepine

22. Lithium usage may be associated with which of the following (LO #6)?

- a. Decrease in white blood cell count
- b. Thirst
- c. Hyperthyroidism
- d. Weight loss

23. Topiramate has an FDA indication for which of the following (LO #6)?

- a. Alcohol dependence
- b. Bipolar disorder
- c. Migraine prophylaxis
- d. Obesity

24. Valproic acid may cause which adverse effect (LO #6)?

- a. Hair growth
- b. Hyperammonemia
- c. Renal failure
- d. Thrombocytosis

25. Lavender essential oil may cause which adverse effect (LO #7)?

- a. Ataxia
- b. Burping
- c. Hair loss
- d. Insomnia

26. Melatonin is primarily metabolized through which enzyme (LO #7)?

- a. CYP1A2
- b. CYP2D6
- c. CYP3A4
- d. CYP2C19

27. St. John's Wort may decrease serum concentration levels of which of the following (LO #7)?

- a. Gabapentin
- b. Paliperidone
- c. Oral contraceptives
- d. Lithium

28. Curcumin is the active ingredient of which of the following (LO #7)?

- a. Chondroitin
- b. Folic acid
- c. St. John's Wort
- d. Turmeric

29. Which of the following is the mechanism of action of bremlanotide (Vyleesi) (LO #8)?

- a. Estrogen receptor agonist
- b. Melanocortin receptor agonist
- c. PDE-5 inhibitor
- d. Progestin receptor agonist

30. Which of the following has the longest half-life (LO #8)?

- a. Avanafil
- b. Sildenafil
- c. Tadalafil
- d. Vardenafil

31. Testosterone is what type of controlled substance (LO #8)?

- a. Schedule II
- b. Schedule III
- c. Schedule IV
- d. Schedule V

32. Women should not drink alcohol at least ____ hours before taking flibanserin (LO #8)?

- a. 1
- b. 2
- c. 3
- d. 4

33. Gocorvi is an extended-release once-daily version of which medication (LO #9)?

- a. Amantadine
- b. Benztropine
- c. Deutetrabenazine
- d. Tetrabenazine

34. Benztropine may be considered for off-label use for which indication (LO #9)?

- a. Constipation
- b. Dry mouth
- c. Hyperhidrosis**
- d. Urinary incontinence

Feedback: Benztropine is an anticholinergic medication that may be used off-label for sialorrhea (excessive salivation) and hyperhidrosis (excessive sweating).

For more information, see *Innov Clin Neurosci*. 2013;10(11-12):10–11.

35. Trihexyphenidyl has an FDA indication for what use (LO #9)?

- a. Bipolar depression
- b. Epilepsy
- c. Generalized anxiety disorder
- d. Parkinson's disease

36. Valbenazine's mechanism of action is which of the following (LO #9)?

- a. Irreversible inhibitor of acetylcholine esterase (AChE)
- b. Reversible inhibitor of acetylcholine esterase (AChE)
- c. Irreversible inhibitor of vesicular monoamine transporter 2 (VMAT2)
- d. Reversible inhibitor of vesicular monoamine transporter 2 (VMAT2)

37. Proposed mechanisms for the cause of akathisia include which of the following (LO #9)?

- a. D2 antagonism only

- b. Possible serotonin stimulation only
- c. Both D2 antagonism and possible serotonin stimulation
- d. Neither D2 antagonism or serotonin stimulation

38. A first-line medication for the treatment of bruxism includes which of the following (LO #9)?

- a. Buspirone
- b. Gabapentin
- c. Lorazepam
- d. Methylphenidate

39. Which of the following may be used for the treatment of orthostatic hypotension (LO #9)?

- a. Epinephrine
- b. Fludrocortisone
- c. Norepinephrine
- d. Terazosin

40. Which of the following has the least risk of hyperprolactinemia (LO #9)?

- a. Aripiprazole
- b. Lurasidone
- c. Olanzapine
- d. Ziprasidone

41. Which of the following medications may cause QT prolongation (LO #9)?

- a. Citalopram
- b. Methadone
- c. Thioridazine
- d. All of the above

42. Which of the following is FDA approved for restless leg syndrome (RLS) (LO #10)?

- a. Benztropine
- b. Carbidopa/levodopa
- c. Pramipexole
- d. Ziprasidone

43. Which of the following medications has a REMS program (LO #10)?

- a. Modafinil
- b. Pitolisant
- c. Sodium oxybate
- d. Solriamfetol

44. The mechanism of action of pitolisant is which of the following (LO #10)?

- a. Histamine-2 receptor antagonist/inverse agonist
- b. Histamine-2 receptor agonist/inverse antagonist
- c. Histamine-3 receptor antagonist/inverse agonist
- d. Histamine-3 receptor agonist/inverse antagonist

45. Armodafinil inhibits which of the following enzymes (LO #10)?

- a. CYP1A2
- b. CYP3A4
- c. CYP2C9
- d. CYP2C19

46. Which of the following is available as a transdermal patch (LO #10)?

- a. Carbidopa/levodopa
- b. Pramipexole
- c. Ropinirole
- d. Rotigotine

47. Vagus nerve stimulation (VNS) has an FDA indication for which of the following (LO #11)?

- a. Treatment-resistant anxiety
- b. Treatment-resistant depression
- c. Treatment-resistant fibromyalgia
- d. Treatment-resistant schizophrenia

48. Transcranial magnetic stimulation (TMS) is contraindicated in patients with (LO #11)?:

- a. Depression
- b. Glaucoma
- c. Hypertension
- d. Pacemakers

49. Bright light therapy may be considered in patients with (LO #11):

- a. Bipolar depression
- b. Generalized anxiety disorder
- c. Seasonal affective disorder
- d. Schizoaffective disorder

50. Electroconvulsive therapy (ECT) is FDA indicated for which of the following (LO #11)?

- a. Catatonia
- b. Severe unipolar depression
- c. Severe bipolar depression
- d. All of the above