

Study Guide for Antipsychotic Drugs
Pharm 210, 2009
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Drug List

Traditional (older) antipsychotics

Chlorpromazine (THORAZINE) – prototype of phenothiazines and other
“low potency” antipsychotics
Haloperidol — “high potency” antipsychotic

Atypical (newer) antipsychotics

Clozapine

Terms

“High potency” antipsychotic
“Low potency” antipsychotic
Akathisia
Bradykinesia
Dyskinesia
Dystonia
Extrapyramidal system/extrapyramidal side effects (EPS)
Neuroleptic (drug)
Neuroleptic malignant syndrome
Phenothiazine
Seizure threshold
Tardive dyskinesias

After studying the posted slides and reading the corresponding chapter in the text book, you should be able to do the following (based on your ability to identify the correct answer on the multiple-choice exam).

General Pathophysiology of Schizophrenia

1. State the brain neurotransmitter that seems to be present, or at least seems to be acting, in excess, as it probably contributes to signs and symptoms of schizophrenia/psychosis
2. Give a general description of what the brain’s extrapyramidal system is, and what it normally does.

Drug Therapy of Parkinson’s Disease

1. Be able to state what the “most likely use” of drugs classified as phenothiazines is. Note: You do NOT need to know the term “butyrophenone,” or that haloperidol is a member of that chemical class.

2. Common (but rather improper) terminology assigns the older (traditional) antipsychotics to one of two “classes” — the low potency drugs (e.g., chlorpromazine and most phenothiazines) and the high potency drugs (e.g., haloperidol). Be sure you understand the class to which the two drugs named above belong, and what is generally meant by the terms low potency and high potency. Be sure you understand that the class does NOT really refer to the dosages of drugs in each class.
3. Be able to state the receptors that are blocked by chlorpromazine — not only the ones in the brain that contribute to antipsychotic (and extrapyramidal) effects, but also those in the peripheral nervous system that contribute to some common and disturbing side effects.
4. State what the brain’s extrapyramidal system does, how it is affected by the traditional antipsychotic drugs (chlorpromazine, haloperidol), and what the main “extrapyramidal side effects” of antipsychotic drugs are.
5. State the general rationale for administering antiparkinson drugs to patients who experience certain side effects in response to traditional antipsychotic drugs. State whether they merely provide symptom relief or actually inhibit the development of tardive dyskinesias. Be sure you understand what the term tardive dyskinesia means.
6. State a general definition of the term “seizure threshold” and how it is affected by antipsychotic drugs.
7. Give a general description of neuroleptic malignant syndrome (NMS). Associate its development with the administration of antipsychotic (neuroleptic) drugs, particularly the traditional drugs. Be able to state when, during the course of antipsychotic drug therapy, it may occur; what the typical signs and symptoms of NMS are (i.e., how you might recognize it); and the basic interventions to treat NMS.
8. Recognize haloperidol as the main nonphenothiazine traditional (older) antipsychotic. Recognize that it is the most likely drug to use for acute psychoses. Compare and contrast haloperidol with chlorpromazine in terms of risk and onset of extrapyramidal side effects; autonomic side effects.
9. Recognize clozapine as the prototype atypical (newer) antipsychotic drugs. State its major advantages compared with the traditional antipsychotics, and why that is; be able to identify what clozaril’s “main and most serious adverse response” is.