

Understanding Antipsychotic Medications

Antipsychotic medications (also called *major tranquilizers* or *neuroleptics*) were first discovered in the 1950s. Many antipsychotic medications have been developed since then. Antipsychotic medications are effective in treating *psychotic symptoms*, such as hallucinations, delusions, and disorganized thinking. They can also be helpful in reducing *negative symptoms*, such as apathy and social withdrawal. In addition, antipsychotic medications are useful in controlling mood swings.

Antipsychotic medications are effective in reducing psychotic symptoms and other symptoms.

Antipsychotic medications are frequently used in the treatment of schizophrenia and schizoaffective disorder. They are also often used to treat bipolar disorder. Sometimes these medications are used to treat major depression and other disorders as well.

Antipsychotics are used to treat schizophrenia and other psychiatric disorders.

Antipsychotic medications work by affecting the neurotransmitter (brain chemical) *dopamine*. Some of the newer antipsychotic medications (called *second-generation*, *atypical*, or *novel antipsychotics*) also affect the neurotransmitter *serotonin*.

Antipsychotic medications work by altering chemicals in the brain called *neurotransmitters*.

FACTS ABOUT ANTIPSYCHOTIC MEDICATIONS

- Antipsychotic medications are usually taken by mouth, but some short-acting and long-acting injectable forms exist.
- They are not addictive.
- The medications may work in a few days, but they usually require several weeks to become completely effective.
- Taking antipsychotic medications has two main effects:
 - They reduce the severity of symptoms.
 - They lower the chances of symptom relapses in the future.
- If symptom relapses occur, a temporary increase in antipsychotic medication dosage may be helpful.

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NOVEL ANTIPSYCHOTIC MEDICATIONS

The novel antipsychotics, mentioned above, work differently than the conventional antipsychotics do. They appear to affect different neurotransmitters in the brain. The novel antipsychotics include Clozaril, Risperdal, Zyprexa, Seroquel, Geodon, and Abilify. More novel antipsychotics are currently being developed. Some of these medications may be effective when the conventional medications have only been partially effective. Novel antipsychotics may also be more effective in treating the negative and cognitive symptoms than the conventional medications.

COMMON ANTIPSYCHOTIC MEDICATIONS

A table of commonly used antipsychotic medications (both conventional and novel) follows.

Antipsychotic Medications	
Type of medication	Chemical name
<u>Conventional</u>	
Haldol**	Haloperidol
Loxitane	Loxapine
Mellaril	Thioridazine
Moban	Molindone
Navane	Thiothixene
Prolixin**	Fluphenazine
Serentil	Mesoridazine
Stelazine	Trifluoperazine
Thorazine	Chlorpromazine
Trilafon	Perphenazine
<u>Novel</u>	
Abilify	Aripiprazole
Clozaril	Clozapine
Geodon	Ziprasidone
Risperdal	Risperidone
Seroquel	Quetiapine
Zyprexa	Olanzapine

** Medications available in long-acting, injectable preparations.

There are both conventional and novel antipsychotics, with many new medications currently under development.

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SIDE EFFECTS OF CONVENTIONAL ANTIPSYCHOTIC MEDICATIONS

The conventional antipsychotic medications have a number of side effects, some mild and some serious. These include the following:

- Drowsiness
- Muscle stiffness
- Dizziness
- Dry mouth
- Mild tremors
- Restlessness
- Increased appetite, weight gain
- Blurred vision
- Sexual difficulties
- Heart rhythm abnormalities

Tardive dyskinesia is a serious side effect that occurs in 10–20% of people taking conventional antipsychotics. Higher rates of tardive dyskinesia may occur in people taking these medications over very long periods of time. This is a neurological syndrome that causes involuntary muscle movements, usually in the tongue, the mouth or lips, the trunk, or the extremities (such as hands, fingers, or toes). It is usually mild, but sometimes may be severe and disfiguring. It usually does not go away, but reducing the dose of the conventional antipsychotic or switching to a novel antipsychotic may improve it.

Antipsychotic medications cause several side effects.
Tardive dyskinesia is one of the serious side effects.

MEDICATIONS FOR SIDE EFFECTS

Two types of medications (called *anticholinergics* and *dopamine agonists*) are used to treat side effects like muscle stiffness, tremors, and increased salivation. These are called *extrapyramidal side effects*.

Medications for Extrapyramidal Side Effects of Antipsychotics

Type of drug	Brand name	Chemical name
Anticholinergic	Akineton	Biperiden
	Artane	Trihexyphenidyl
	Cogentin	Benztropine
	Kemadrin	Procyclidine
Dopamine agonist	Symmetrel	Amantadine

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HANDOUT B.8. Understanding Antipsychotic Medications (page 4 of 4)

Another side effect of antipsychotics is *akathisia*, which is restlessness, agitation, or trouble sitting still. Medications like *beta-blockers* (such as Inderal, Tenormin, or Corgard) or *benzodiazepines* (such as Ativan or Valium) may help with akathisia. Unfortunately, there are also side effects associated with these medications.

Possible Side Effects of Side Effect Medications

Drug class	Side effects
Anticholinergics	Dry mouth, constipation, blurry vision, drowsiness, urinary retention, memory loss
Dopamine agonists	Increase in psychotic symptoms
Beta-blockers	Fatigue, depression
Benzodiazepines	Drowsiness, psychological or physiological dependence, psychomotor impairment, memory loss

There are medications to treat side effects of conventional antipsychotics, but they have side effects of their own.

SIDE EFFECTS OF NOVEL ANTIPSYCHOTICS

Common side effects of Clozaril include drowsiness, increased salivation, dizziness, a slight increase in body temperature, changes in blood pressure, constipation, weight gain, *tachycardia* (rapid heart rate), *cataplexy* (sudden loss of muscle tone), and *seizures*. *Agranulocytosis* is a dangerous drop in a person's white blood cell count. This occurs less than 1% of the time with people taking Clozaril. To detect this problem, weekly blood tests are done so that the medication can be stopped if agranulocytosis occurs. Clozaril is also rarely associated with myocardia, or inflammation of the heart, which can be fatal.

Novel antipsychotic medications can cause some of the same side effects as the conventional antipsychotics, but usually they are much less severe and side effect medications are often not required to treat them. However, novel antipsychotics may cause some other side effects, which are listed below.

- Risperdal: Elevation of the hormone prolactin, sexual side effects, sedation, weight gain
- Zyprexa: Sedation, weight gain
- Seroquel: Dizziness, sedation, increased risk for cataracts
- Geodon: Possible heart rhythm abnormalities, sedation, nausea, constipation, dizziness
- Abilify: Headache, insomnia, nausea, vomiting, lightheadedness

Novel antipsychotics tend to cause different side effects from conventional antipsychotics.