

Antipsychotics Overview

Antipsychotic drugs are typically used to treat positive symptoms of schizophrenia, psychosis, Tourette's syndrome and acute episodes of mania. Typical antipsychotics work by blocking Dopamine D_2 receptors, increasing cAMP. These drugs are highly lipid soluble and are stored in body fat, and are removed very slowly from the body. There are two categories of typical antipsychotic drugs; high potency and low potency. Side effects of typical antipsychotics are common, and range from endocrine and muscarinic to motor. Galactorrhea is an endocrine side effect related to dopamine antagonism. Tardive dyskinesia is a stereotypic oral-facial movement, typically lip-smacking, which is often seen in patients taking antipsychotic medications. These drugs block cholinergic receptors, causing patients to display antimuscarinic effects, such as constipation and dry mouth. Antipsychotic drugs also block α_1 receptors, and can lead to hypotension. These drugs are also associated with neuroleptic malignant syndrome and extrapyramidal symptoms.



PLAY PICMONIC

Indications

Schizophrenia

Sketchy-fern

Antipsychotic drugs are primarily indicated for schizophrenia to treat its positive symptoms. Antipsychotics are also indicated for psychosis and mania.

Tourette's Syndrome

Torn-rat

Fluphenazine is used to treat Tourette's syndrome, an inherited neuropsychiatric disease characterized by motor tics and phonic tics.

Mechanism of Action

Lipid-Soluble

Lips

Antipsychotics are highly lipid-soluble and are stored in the body fat. They are very slowly removed from the body and are considered to have a long half-life.

Block Dopamine Receptors

Blocking Doberman Receptors

Antipsychotic drugs block dopamine D_2 receptors in the mesolimbic and mesocortical areas of the CNS. This leads to an increase of the intracellular concentration of the second messenger cyclic adenosine monophosphate (cAMP).

Side Effects

Galactorrhea

Lactating and Pumping Breast Milk

Galactorrhea is an endocrine side effect related to dopamine antagonism. Patients typically have spontaneous outflow of milk from the breasts due to hyperprolactinemia stemming from dopamine antagonism.

Tardive Dyskinesia

[Tar-dive Disc-kite](#)

Tardive dyskinesia is a common extrapyramidal side effect seen in patients with long-term treatment with antipsychotic drugs. Lip-smacking is a type of tardive dyskinesia seen in patients taking these drugs.

Anticholinergic

[Ant-tie-cola](#)

Antipsychotic drugs also block cholinergic receptors, leading to antimuscarinic effects. Patients can suffer from anticholinergic effects, such as dry mouth and constipation.

Alpha1 Antagonist

[Afro \(1\) Wand Ant-toga](#)

These drugs display alpha1 blockade effects, sometimes leading to hypotension.