

Atypical Antipsychotics

Atypical antipsychotics are a class of medications used to treat psychiatric conditions. Common indications for these drugs are the positive and negative symptoms of schizophrenia, mania, Tourette's syndrome, bipolar disorder, OCD, and depression. The mechanism of action for this drug class is not entirely understood, but it is known that there are varied effects on 5HT2, dopamine, ?, and H1 receptors. These drugs have fewer anticholinergic and extrapyramidal side effects than their typical counterparts but can still cause seizure, prolonged QT syndrome, agranulocytosis, and weight gain. Examples of atypical antipsychotic drugs are olanzapine, clozapine, quetiapine, risperidone, aripiprazole, and ziprasidone.



PLAY PICMONIC

Indications

Schizophrenia

Sketchy-fern

Atypical antipsychotics are used for schizophrenia (both positive and negative symptoms) and can also be indicated for bipolar disorder, OCD, anxiety, depression, Tourette's syndrome, and mania.

Mechanism of Action

Unknown Mechanism

Question-mark Mechanism

The pharmacology behind these drugs is unclear, and the mechanism of action behind each drug varies. However, they are believed to have varied antagonistic effects on 5HT/D2 receptors as well as D2 agonist effects.

Side Effects

Seizures

Caesar

Clozapine must be closely monitored, as it causes this side effect. 3-5% percent of patients on this drug experience seizures. Patients with a history of seizures should avoid this medication.

 try

Prolonged QT Interval

Stretched QT-heart

Several SGAs have been tied to the side effect of prolonged QT interval; however, the medication Ziprasidone has been associated with the highest risk.

Agranulocytosis

A-granny-side-toe

Clozapine is a commonly used atypical antipsychotic for treatment-resistant schizophrenia. Prescribers need to demonstrate their competence prior to being able to prescribe this medication, as it is important to routinely monitor this medication at specific intervals to avoid agranulocytosis. Patients require weekly WBC monitoring for the first 6 months, then regular monitoring thereafter.

Weight Gain

Up-arrow Scale

Olanzapine and Clozapine have been known to cause weight gain in patients.

Fewer Extrapyramidal Side Effects

Down-arrow Fx X-pyramid

Atypical antipsychotics have a more favorable side effect profile, with less extrapyramidal side effects when compared to typical antipsychotics.



Fewer Anticholinergic Side Effects

Down-arrow Fx Ant-tie-cola

In comparison to typical antipsychotics, these medications are better tolerated because they cause fewer anticholinergic effects.