
Tardive Dyskinesia

Characteristics: Involuntary movements, usually occurring after months or years of antipsychotic treatment. The most common symptoms are oro-buccal-lingual, such as chewing, lip smacking, and tongue protrusion. Occasionally causes movements of fingers or toes and rarely, in severe cases, may affect torso and gait.

Meds That Cause It: Antipsychotics, especially first-generation antipsychotics (3%–5% per year); the risk is smaller with second-generation antipsychotics. Among second-generation antipsychotics, risperidone confers the highest risk.

Mechanism: D2 blockade leading to dopamine receptor supersensitivity.

General Management:

- Monitor all patients taking antipsychotics regularly with a test such as the Abnormal Involuntary Movement Scale (AIMS).
- Switch to a different antipsychotic, preferably a second-generation antipsychotic with low dopamine occupancy, such as quetiapine or clozapine.

First-Line Medications:

- Valbenazine (Ingrezza) 40 mg/day; increase to 80 mg/day after a week. SE: Sedation, akathisia. FDA approved for TD.
- Deutetrabenazine (Austedo): Start 6 mg BID; ↑ weekly by 6 mg/day increments to maximum dose of 48 mg/day (divide doses >12 mg/day BID); use QD dosing with ER formulation.
- Tetrabenazine (Xenazine): Start 12.5 mg QD for one week, increase by 12.5 mg/day increments weekly to usual dose of 75–150 mg QD (divided doses >37.5 mg TID). SE: Sedation, akathisia, tremor. FDA approved for Huntington's disease.

Second-Line Medications:

- Amantadine (Symmetrel) 100–300 mg/day.
- Gingko biloba extract 240 mg/day.
- Vitamin E 400–600 IU/day.
- Benzodiazepines (eg, clonazepam [Klonopin] or lorazepam [Ativan] 0.5–1 mg daily or BID).

Clinical Pearls:

- Risk factors for TD include first-generation antipsychotics more so than second-generation antipsychotics, higher-potency agents, duration of exposure, higher dose, elderly age, and Black ethnicity.
- Increasing the dose of the antipsychotic will improve symptoms temporarily but probably make them worse in the long run.
- Decreasing or discontinuing antipsychotics may often worsen the symptoms temporarily (“withdrawal dyskinesia”) or even unmask TD symptoms that were not apparent.

Fun Fact:

Antipsychotics aren't the only medications that may cause TD. Prolonged use of medications for nausea and reflux like metoclopramide (Reglan) and prochlorperazine (Compazine), which also block dopamine, have also been associated with TD.

The AIMS is the best tool for assessing for and monitoring severity of TD. The test has 12 items to be rated and can be completed in about 10 minutes. The patient should not have anything in their mouth (dentures, gum) and should be seated in a firm, armless chair. See the following page for the full AIMS and instructions on how to use it.