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# Parkinsonism

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**Characteristics:** Also known as pseudoparkinsonism, these drug-induced symptoms mimic those of Parkinson's disease:

- Tremor (especially apparent in the hands as a resting, "pill rolling" tremor).
- Rigidity (cog-wheel rigidity).
- Bradykinesia (slow movement), decreased arm swing.
- Shuffling gait.
- Slurred speech.
- Mask-like facies, stooped posture, drooling.
- Psychological side effects, such as cognitive dulling (bradyphrenia), worse negative symptoms (neuroleptic-induced deficit syndrome), worse depression (neuroleptic dysphoria).

**Meds That Cause It:** Antipsychotics, especially first-generation agents, but second-generation antipsychotics may also cause it. Least likely to cause it are clozapine, olanzapine, quetiapine, and ziprasidone.

**Mechanism:** D2 blockade, disruption of the balance between dopaminergic and cholinergic neurons.

**General Management:**

Decrease dose or switch to a different antipsychotic.

**First-Line Medications:**

- Benztropine (Cogentin) 1–2 mg once or twice per day.
- Trihexyphenidyl (Artane) 2–5 mg once or twice per day.
- Diphenhydramine (Benadryl) 50 mg/day.

**Second-Line Medications:**

Amantadine (Symmetrel) 100–200 mg twice per day (enhances dopamine release).

**Clinical Pearls:**

- May occur at any time, but typically seen within one to two months after antipsychotic is initiated.
- Highest-risk patients: Female, older, those taking higher-potency agents or higher doses.
- In patients at high risk of parkinsonism, start benztropine (or one of the other first-line agents) at the same time as starting the antipsychotic.
- Try discontinuing the anticholinergic agent after several weeks; many patients will not need to remain on it long term.

**Fun Fact:**

Parkinson's disease is named after Dr. James Parkinson (1755–1824), the doctor who first identified the condition. It's caused by loss of neurons in the substantia nigra, where most dopamine is produced.