

Neuroleptic Malignant Syndrome

Risk Checklist and Recovery Diet Guide

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EMERGENCY: If fever and muscle stiffness occur together in a person taking an antipsychotic, call 911 or go to the nearest emergency department. This handout is educational and does not replace medical advice.

Risk factors to review before each dose change

- ☐ A new antipsychotic started, or a dose increased, within the past two weeks
- ☐ High-potency agent (haloperidol, fluphenazine) or an intramuscular loading dose
- ☐ Long-acting injectable antipsychotic given in the past four weeks
- ☐ Dopamine-blocking antiemetic in use (metoclopramide, prochlorperazine, promethazine)
- ☐ Parkinson's medication (levodopa, amantadine) recently stopped or reduced
- ☐ Dehydration, poor oral intake, or vomiting
- ☐ Agitation, physical restraint, or seclusion in the past 48 hours
- ☐ Hot environment, heat wave, or vigorous exertion
- ☐ Existing catatonia, prior episode of NMS, or a family history of NMS
- ☐ Iron deficiency, organic brain disease, or intellectual disability
- ☐ Two or more antipsychotics prescribed together

Warning signs that require urgent evaluation

- ☐ New muscle stiffness through the whole range of motion (lead-pipe rigidity)
- ☐ Temperature above 38 C, especially with sweating
- ☐ Confusion, reduced responsiveness, mutism, or staring
- ☐ Pulse over 100, unstable or swinging blood pressure, or rapid breathing
- ☐ Tremor, drooling, difficulty swallowing, or incontinence
- ☐ Dark or cola-colored urine (a sign of muscle breakdown)
- ☐ Appearing unusually slowed, quiet, or over-sedated after a dose increase

Monitoring during titration

- ☐ Temperature, pulse, blood pressure, and respiratory rate at every visit during titration
- ☐ Creatine kinase (CK) at baseline and whenever rigidity or fever appears
- ☐ Complete blood count, comprehensive metabolic panel, and renal function during any episode
- ☐ Daily weight and documented fluid intake in inpatient settings
- ☐ Rigidity examination at the elbows and wrists before each dose increase

Precautions when restarting an antipsychotic

- [] Wait a minimum of two weeks after complete resolution before restarting any antipsychotic
- [] Choose a lower-potency, lower-D2-affinity agent
- [] Start at the lowest available dose and increase slowly, no faster than weekly
- [] Avoid long-acting injectable formulations permanently
- [] Monitor temperature and pulse daily and CK weekly during titration
- [] Maintain hydration and avoid heat exposure, restraint, and intramuscular loading
- [] Carry a written record of the episode to every medical appointment

Recovery hydration and nutrition guide

There is no food that triggers neuroleptic malignant syndrome. What matters is fluid status, electrolytes, iron, and rebuilding muscle after an episode.

Fluids come first

- Steady fluid intake through the day; ask your physician for a target if you have heart or kidney disease.
- Include an electrolyte-containing drink daily during the first two weeks of recovery.
- Increase fluids in hot weather, with exercise, and during any illness with fever, vomiting, or diarrhea.
- Limit alcohol, which promotes dehydration and clouds assessment of confusion and unsteadiness.
- Keep caffeine moderate; large amounts raise heart rate and can mimic autonomic instability.

Protein and muscle recovery

- Include a protein source at each meal (eggs, fish, poultry, dairy, legumes, tofu).
- Spread protein across the day rather than concentrating it in one meal.
- Resume physical activity gradually and only after creatine kinase has normalized.

Iron and micronutrients

- Low serum iron is associated with NMS; ask whether iron studies should be checked and repleted.
- Iron-rich foods: lean red meat, liver, lentils, beans, tofu, spinach, fortified cereals; vitamin C aids absorption.
- Do not start iron supplements without laboratory confirmation of deficiency.
- Monitor sodium and potassium during recovery, as both are commonly disturbed.

Practical eating during recovery

- Use soft, moist foods and sit fully upright while eating until swallowing is normal.
- Small, frequent meals are easier than three large ones when appetite is poor.
- Constipation is common with antipsychotics; include fiber and fluids together.
- Tell your prescriber about grapefruit juice, herbal products, or supplements you use.

Educational material only. Review with your own prescriber. See modernbrains.com/legal-disclaimer.