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*Neurology Care 7 days a Week. Because Your Brain Matters.*

# Myoclonus

Patient education guide · Movement Disorders · Madison Neurology LLC

## What is it?

Myoclonus is a sudden, brief, shock-like jerk of a muscle or body part — a hiccup is a familiar benign form. Neurological myoclonus can be a normal phenomenon (sleep starts), a medication or metabolic side effect, a feature of epilepsy, or a sign of an underlying brain condition. Evaluation focuses on finding the source, because many causes are treatable.

## How does it happen?

Causes span a wide range: benign (hypnic jerks, hiccups), medications (opioids, certain antibiotics, antidepressants), metabolic problems (kidney or liver failure, electrolyte disturbances), oxygen-deprivation injury to the brain, epilepsies (myoclonic epilepsies), and neurodegenerative diseases (CJD, among others). Cortical myoclonus arises from the brain's surface; subcortical and spinal forms have their own patterns.

## Common symptoms

- Sudden, lightning-fast jerks of a limb, the face, or the trunk
- Jerks triggered by movement, touch, or sound (stimulus-sensitive myoclonus)
- Positive jerks (muscle contraction) or negative jerks (brief muscle-drop, as in asterixis)
- Functional impairment when severe — dropping objects, falls
- Associated features pointing to the cause (confusion in metabolic causes, seizures in epileptic forms)

## How is it diagnosed?

History and examination localize the type; EEG (sometimes with simultaneous muscle recording) determines whether jerks originate in the cortex; blood work screens metabolic and medication causes; MRI evaluates structural causes. Identifying the physiological type directs treatment.

## How is it treated?

Treat the cause first: adjust medications, correct metabolic problems, treat the underlying epilepsy or disease. For persistent myoclonus, anti-myoclonic medications — levetiracetam, valproate, clonazepam, piracetam (where available) — suppress jerks, sometimes in combination. Botox helps focal forms. Severe cortical myoclonus may respond to combinations; spinal myoclonus has its own options.

## What does the future hold?

Prognosis is entirely cause-dependent: medication- and metabolic-induced myoclonus resolves with correction; epileptic myoclonus is controlled with treatment; myoclonus from degenerative disease is managed symptomatically. Many patients achieve near-complete suppression.

## Questions patients commonly ask

### Q: Are my jerks seizures?

A: Some myoclonus is epileptic (cortical) and some isn't — EEG during the jerks answers this precisely and guides drug choice.

### Q: Why did the jerks start in the hospital?

A: Hospital medications (especially opioids and certain antibiotics) and metabolic changes are common, reversible triggers.

### Q: Will it spread?

A: Myoclonus itself doesn't 'spread'; the pattern depends on the underlying cause, which treatment addresses.

## National support groups & resources

- **American Academy of Neurology — Brain & Life patient resources** — brainandlife.org
- **National Organization for Rare Disorders** — rarediseases.org — 1-800-999-6673
- **Epilepsy Foundation (24/7 Helpline)** — epilepsy.com — 1-800-332-1000

(Organization contact details were current at the time of compilation; please verify online.)

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