

Hypnic Jerks

Why in news?

A recent study estimated that 80% or more people experience hypnic jerks at some point in life.

- **Hypnic Jerks** - They are **involuntary muscle twitches or spasms** that occur as a person transition from wakefulness to sleep.
- They are not a medical disorder but a normal physiological response.
- **Occurrence** - Most commonly during the first or second stage of sleep.
- The brain interprets the body's muscle relaxation as a sign of falling, triggering a sudden Contraction.

NREM Stage N1: Falling Asleep	NREM Stage N2: Light Sleep	NREM Stage N3: Slow Wave Sleep	REM Stage R:
<ul style="list-style-type: none"> • heartbeat and breathing slow down • muscles begin to relax • Lasts: A few min. 	<ul style="list-style-type: none"> • heartbeat and breathing slow down further • no eye movements • body temperature drops • brain produces "sleep spindles" • Lasts: About 25 min. 	<ul style="list-style-type: none"> • deepest sleep state • heartbeat and breathing are at their slowest rate • no eye movements • body is fully relaxed • delta brain waves are present • tissue repair and growth, and cell regeneration • immune system strengthens 	<ul style="list-style-type: none"> • primary dreaming stage • eye movements become rapid • breathing and heart rate increase • limb muscles become temporarily paralyzed • brain activity is markedly increased

- **Prevalence** - Their frequency and intensity can vary from person to person and more than 80% experience it.
- **Evolutionary origins** - Theories suggests that hypnic jerks are evolutionary leftovers.
- Which means our ancestors who slept on trees may have benefited from these spasms as a safety check against falling.
- **Body-Brain disconnect theory** - During sleep transition, the brain slows down while muscles relax.
- Sometimes, mixed signals from the brain lead to muscle twitching as a false alarm.
- **Common triggers** - Stress and anxiety are significant contributors.
- Caffeine, sleep deprivation, and intense physical activity close to bedtime

can also trigger jerks.

- **Typical sensation experienced** – Often feels like falling, tripping, or jerking awake suddenly.
- It can be accompanied by vivid dream-like imagery, like falling off a cliff or stumbling.
- **Implications** – No, hypnic jerks are harmless and normal.
- However, frequent or intense jerks might disrupt sleep quality or cause sleep anxiety in some individuals.
- **Management** – Stress management through meditation, yoga, deep breathing and avoid caffeine late in the day.
- **Sleep hygiene** – Maintain a regular sleep schedule and limit screen time before bed.

Reference

[The Hindu| Hypnic Jerks](#)

