

A TALE OF TWO TERRORS:

# Night Terrors in Children and Adults



*By Tamara Sellman, RPSGT, CCSH*

The parasomnia known as night terrors (also referred to as sleep terrors or *pavor nocturnus*) is generally discussed within the context of families. It's commonly presumed that only children experience these disruptive episodes, but the fact is, adults are just as likely to experience them.

However, night terrors can be identified by distinctive behaviors depending upon the age group where they occur. Let's get one thing clear: Night terrors aren't nightmares, even if they appear to be just as scary and disruptive. Distinctions between the two can be rendered using EEG and chin EMG data.

- Nightmares (and their calmer episodes, dreams) mostly occur during REM sleep and, as such, are considered REM-related parasomnias
- Night terrors occur during transitional sleep periods between or overlapping with deep Stage N3 sleep and lighter REM<sup>1</sup> or non-REM stages of sleep, making them disorders of arousal under the NREM parasomnia umbrella (AASM, 2014).

Consider this: During REM sleep, the body is more or less paralyzed from the neck down as part of the brain's effort to keep one from acting out the compelling—sometimes terrifying—content of dreams. Meanwhile, when muscle movements actively occur during REM, the more likely culprit, especially in adults, is REM sleep behavior disorder (RBD), another REM-related parasomnia.

This isn't to say that children cannot also experience RBD; In fact, children with neurodevelopmental disabilities or narcolepsy, or who use certain kinds of medications, may also be diagnosed with RBD.<sup>2</sup>

True to what we know about the foundations of sleep architecture, night terrors occur mostly during the first third of the night, when we're more likely to experience deep Stage N3 sleep. Meanwhile, nightmares happen in the second half of the night, during periods of REM sleep.

Another distinct feature of night terrors? The utter lack of memory following these episodes. Someone could be in the throes of a night terror that is so bad the witnesses who watch it happen may feel traumatized. Yet, in the morning, the person who underwent the horrifying experience may have zero memory of it.

Why? Stage N3 sleep allows for no imagery for the brain to process. If the same behavior occurred during a nightmare, there would be a visual memory of it for the person afterward, thanks to the visual images processed and stored as memories during REM sleep.

## Night Terrors in Children

Anyone who has witnessed a child in the middle of a night terror knows to put the emphasis on the word terror, as this is an extremely accurate representation of the phenomenon. It is as if they're staring down the jaws of the worst imaginable monster.

When it comes to children, it's important to know that night terrors are a product of development. One might even think of them as a kind of neurological "growing pain." Children's bodies and brains are still developing, and surges in growth hormones and other brain chemistry might be at work at this time.

This physical (not emotional) expression of fear, caused by a sudden release of stress hormones into the bloodstream during transitions in sleep, can panic the child, leading to a full-blown, dramatic episode of terror. Most pediatric night terrors are considered normal and aren't typically treated, thought of as a behavior they eventually "grow out of."

## Night Terrors in Adults

Generally, only about five percent of adults experience this unique parasomnia.<sup>3</sup> Cases of night terrors may follow some children into adulthood, though they're considered rare.

Other reasons why adults might experience night terrors include:

- Longstanding emotional and psychological effects from unaddressed early life abuse<sup>3</sup>
- Discontinuance of the SSRI paroxetine<sup>4</sup>, which has been shown to be an effective treatment for night terrors in adults
- Heredity<sup>5</sup>
- Unstable NREM cycling patterns<sup>1</sup>
- Posttraumatic stress disorder (PTSD) or other psychiatric<sup>6</sup> or mood disorders<sup>7</sup>
- Untreated OSA or RLS<sup>7</sup>
- Sleep deprivation or circadian disruption<sup>7</sup>
- Fever<sup>7</sup>
- Medication side effects
- Alcohol use or abuse<sup>8</sup>

What is especially noteworthy about adult night terrors—those experiencing night terrors may not seek medical help for them



until they hurt themselves or a roommate or bed partner.<sup>4</sup> Imagine the solo sleeper with such disrupted sleep that they seek medical help; for them, a sleep study “outing” their night terrors could be a revelation.

Adult night terrors may be treated by a variety of means, usually after identifying their root cause.

## When Terror Strikes

First, it’s a good idea to try to distinguish between a nightmare and a night terror in a patient exhibiting displays of fear while sleeping. Also, consider: Has your patient also been diagnosed with epilepsy or another seizure disorder? Is it suspected? Misdiagnoses are common; for instance, it can be challenging to differentiate epileptic disorders from night terrors.<sup>9</sup> Other mimic disorders may include nocturnal panic attack.<sup>6</sup>

### During a nightmare

If a patient of any age appears to be terrified in the night but doesn’t move about, and the episode occurs later during the study, it’s likely they’re having a nightmare. Note it in your notes and tag so the doctor can review the video footage.

It’s possible to console a patient who’s undergone an extremely bad nightmare if you find they’ve woken up showing signs of distress. If they manage to comfort themselves, you can always ask about it at the end of the test as you unhook the patient and record any shared information in your notes.

### During a night terror

However, if it’s a case of night terrors, it’s probably happening earlier in the night, with a great deal of physical activity attached to the episode. After all, patients of any age with legitimate night terrors may appear to suddenly be possessed.

They might suddenly bolt upright, shout and scream in defense and be utterly inconsolable regardless of any efforts to calm them. Their breathing may be rapid, their heart pounding out of their chest, and they may be sweating, thrashing around for several minutes until they finally calm down and return to sleep.

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As with patients with suspected or confirmed seizure disorders, sleepwalking disorders, or RBD, the safety of you and your patient during a suspected night terror remain of equal concern.

Research suggests that as many as 59% of patients with sleep terrors and sleepwalking exhibited harmful behavior in a laboratory setting;<sup>10</sup> research by Guilleminault estimates this may even be higher.<sup>11</sup> However, these numbers may be a conservative overestimation based on the fact that people with sleep-related violent behavior may be more likely than others to seek help from sleep clinics.<sup>12</sup>

Be prepared to spend some time with these patients, and know how to approach and manage them. Some night terror episodes can last up to 40 minutes.<sup>6</sup> Follow your clinic’s policies and procedures for guidance about approaching patients acting out a night terror or other potentially violent or harmful behavior. If they’re unclear to you, consult your laboratory manager for clarification.

Witnesses to others’ night terrors report feeling traumatized while observing their loved one during an episode. If you’re also disturbed by the behavior, remember that it’s not intentional or personal. Don’t be offended if they seem completely unaware you’re trying to calm them down.

Aside from the obvious safety concerns, people undergoing night terrors aren’t seeking to harm anyone (or the lab equipment), though they may harm themselves or anyone who approaches them, rip away hookups or damage other electrical components used in the study.

To confirm the behavior (for recording purposes in your tech notes), ask them about the episode during the unhooking period in the morning to check their recall, and document accordingly. ☾

## SOURCES

1. “Parasomnias: An Updated Review.” Howell MJ. *Neurotherapeutics*, 2012 October;9(4):753-775. Available at <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3480572/>; accessed on the Internet on August 2, 2020.
2. “Characteristics of REM sleep behavior disorder in childhood.” Lloyd R, Tippmann-Peikert M, Slocumb N & Kotagal S. *Journal of Clinical Sleep Medicine*, 2012;8(2):127-131. Available at <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3311408/>; accessed on the Internet on August 2, 2020.
3. “The sleepwalking/night terrors syndrome in adults.” Crisp AH. *Postgraduate Medical Journal*, 1996;72(852):599-604. Available at <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2398608/>; accessed on the Internet on August 2, 2020.
4. “Adult Night Terrors Since Childhood: A Case Report.” Weidner BA, Bergquist NA & Brown TL. *Journal of Neurology & Neurophysiology*, 2016;7(1). Available at <https://www.iomcworld.org/open-access/adult-night->

terrors-since-childhood-a-case-report-2155-9562-1000346.pdf, accessed on the Internet on August 2, 2020.

5. "Hereditary Factors in Sleepwalking and Night Terrors." Kales A, Soldatos CR, Bixler EO, et al. *British Journal of Psychiatry*, 1980;137:111-118, reprinted by Cambridge University Press, 2018 January 19. Available at <https://doi.org/10.1192/bjp.137.2.111>; accessed on the Internet on August 2, 2020.
6. "Nightmares and nightmare disorder in adults." Zak R & Karippot A. *UpToDate*, 2020 June 11. Available at <https://www.uptodate.com/contents/nightmares-and-nightmare-disorder-in-adults>; accessed on the Internet on August 2, 2020.
7. "Sleep terrors (night terrors)." *Mayo Clinic*, 2018 March 9. Available at <https://www.mayoclinic.org/diseases-conditions/sleep-terrors/symptoms-causes/syc-20353524>; accessed on the Internet on August 2, 2020.
8. "Alcohol as a Trigger Affecting Symptom Severity and Frequency of Slow Wave Sleep Disorders." Maschauer EL, Gabryelska A, Morrison I, et al. *Journal of Clinical Sleep Medicine*, 2017 September 15;13(9):1111. Available at <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5566469/>; accessed on the Internet on August 2, 2020.
9. "Differentiating confusional parasomnias from nocturnal frontal lobe epilepsy." Tung L & Carter G. *SLEEP*, 2019 April;41(supplement): A425-426. Available at [https://academic.oup.com/sleep/article-abstract/42/Supplement\\_1/A425/5451874](https://academic.oup.com/sleep/article-abstract/42/Supplement_1/A425/5451874); accessed on the Internet on August 2, 2020.
10. "Sleep-related violence." Moldofsky H, Gilbert R, Lue FA & MacLean AW. *SLEEP*, 1995 November;18(9):731-9. Available at <https://pubmed.ncbi.nlm.nih.gov/8638065/>; accessed on the Internet on August 2, 2020.
11. "Forensic sleep medicine: nocturnal wandering and violence." Guillemainault C, Mosscoitch A & Leger D. *SLEEP*, 1995 November;18(9):740-8. Available at <https://pubmed.ncbi.nlm.nih.gov/8638066/>; accessed on the Internet on August 2, 2020.

12. "Violence in sleep." Siclari F, Khatami R, Urbaniok F, et al. *BRAIN*, 2010 November 30;133(12):3494-3509. Available at <https://academic.oup.com/brain/article/133/12/3494/308009>; accessed on the Internet on August 2, 2020.

13. "Disorders of Arousal From Sleep and Violent Behavior: The Role of Physical Contact and Proximity." Pressman MR. *SLEEP*, 2007;30(8):1039-1047. Available at <https://academic.oup.com/sleep/article/30/8/1039/2696792>; accessed on the Internet on August 2, 2020.



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