

Nightmares and sleep terrors

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Abstract

Nightmares are common in childhood and concern regarding underlying psychological or physical causes should only be investigated when nightmares become frequent, are present for a prolonged period of time or are associated with day-time behavioural or performance dysfunction. Sleep terrors may be provoked by a number of factors, such as: fever, sleep deprivation, urinary bladder distension, a noisy environment and central nervous system depressants. This article discusses the differences between nightmares and sleep terrors and provides a management approach for the family practitioner.

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Introduction

Nightmares and sleep terrors are classified under the parasomnias according to the International Classification of Sleep Disorders.¹ The parasomnias are defined as unpleasant or undesirable behavioural or experiential phenomena that occur predominantly or exclusively during the sleep period.² The term "sleep terrors" is preferred to "night terrors" in order to simplify the distinction between nightmares and sleep terrors.¹ Parasomnias in childhood are further classified as:

1. Parasomnias associated with non-REM (rapid-eye-movement) slow-wave sleep (SWS)
2. Parasomnias typically associated with REM sleep
3. Parasomnias typically associated with wake-to-sleep transition
4. Other parasomnias¹

The classification is based on observable behaviour.¹

The cause of parasomnias is mostly unknown, but a maturational aspect is believed to underlie most of the parasomnias.¹

Table 1 summarises the clinically important differences between sleep terrors and nightmares.^{1,2,3}

Prevalence

Sleep terrors have an estimated prevalence of 1-3% in children. Boys are more likely to experience sleep terrors than girls and there is often a family history of sleep terrors.^{1,2} Nightmares commonly occur in childhood with the incidence increasing up to the age of six years and decreasing after the age

Table 1: Clinical differences between sleep terrors and nightmares

	Sleep terrors	Nightmares
Classification	Non-REM slow-wave sleep	REM sleep
Age of onset and termination	Usually occurs between 2 and 4 years. Rare after 10 years of age	Onset parallels the development of dreams
Clinical picture	Occurs in first third to half of sleep period	Occurs in last half to third of sleep period
	Abrupt, partial arousal	Full awakening with a clear sensorium
	May occur during any sleep period in 24 hr cycle	Vivid, action packed dream about threats to safety, survival or self-esteem
	Often an initial bloodcurdling scream	
	May manifest only as inconsolable crying	
	Intense autonomic discharge	Mild autonomic signs
	Intense behavioural manifestations of fear	Children often report some anxiety
	Lasts 3 to 5 minutes; child cannot be comforted	Child is easily comforted
	Child falls asleep promptly after an episode	Usually a prolonged period of wakefulness
	Child has no recollection of episode	Child recalls the dream

of ten years.⁴ Boys and girls are equally affected and no specific familial pattern has been established.^{1,2}

Psychopathology is rare in children who experience sleep terrors.¹ Adolescents who still experience sleep terrors do, however, have an increased incidence of sleep-walking as well as anxiety disorders, suicide ideation, and substance use than their peers who do

not experience sleep terrors.³ Sleep terrors may be provoked by a number of factors, such as: fever, sleep deprivation, urinary bladder distension, a noisy environment and central nervous system depressants.³

Nightmares are common in childhood. Therefore concern regarding underlying psychological or physical causes should only be investigated

when nightmares become frequent, are present for a prolonged period of time or are associated with day-time behavioural or performance dysfunction.^{1,4,5} High levels of trait anxiety are often reported in children who experience repeated nightmares.⁴ Adolescents suffering from nightmares are also more likely to have experienced stressful life events than adolescents who do not suffer from nightmares.⁶

Clinical presentation

The evaluation of a child suffering from sleep terrors or nightmares should begin with a thorough history and a physical examination.^{1,2} Special attention should be given to all aspects pertaining to the child's sleep pattern. These should include, but not be limited to the following aspects:¹

- Usual time that the episode occurs
- Description of behaviour, movement, or symptoms
- Whether intervention improves or exacerbates symptoms
- Establishing whether the child leaves the bed
- Recall or failure to recall the events
- Occurrence of symptoms during day-time naps
- Presence or absence of symptoms during wakefulness
- Presence of stereotype movements or rhythmic behaviour during an episode

Obstructive sleep apnoea in childhood may be the cause of parasomnias.⁵ Parents are often unaware that the child experiences breathing problems resulting in frequent waking. It is therefore very important to interview the child as well as the parents and to ask the child about his/her sleep experience.⁵

Special investigations

Special investigations are seldom needed to confirm the diagnosis.¹ An EEG (electroencephalogram) may be helpful if an epileptic disorder is suspected.¹ A home video recording of the event or polysomnograph may be used.¹

Differential diagnosis

The most important differential diagnoses for sleep terrors are sleep-related epilepsy with automatisms.¹ Sleep terrors are often also associated with sleep-walking.³ It should be kept in mind that the two conditions can co-occur.¹ Re-experiencing phenomena associated with PTSD (Post-traumatic stress

disorder) must be considered in the differential diagnosis of nightmares.^{1,2} It should also be borne in mind that patients often suffer from more than one parasomnia.¹

Management

The management of uncomplicated, mild sleep terrors and nightmares is usually straightforward. The parents should be reassured that the symptoms will most likely disappear as the child matures.¹ The parents should also be reassured that there are no other psychological, neurological or physical problems.¹

Sleep hygiene constitutes an important part of the management of all parasomnias.¹ Short day-time naps may be helpful.¹ Bedtime should be preceded by a period of quiet activity or relaxation.¹ Fluids after the evening meal should be restricted and the child should be encouraged to empty his/her bladder before bedtime.¹ Fever should be adequately treated and all medication the child is taking must be reviewed.¹ Any underlying medical or psychiatric disorder needs to be adequately addressed.¹

Very little has been published on behavioural interventions for sleep terrors or nightmares.⁷

Scheduled awakenings (waking the child 15 to 30 minutes prior to the expected episode) have been studied and fall in the "promising" category of interventions.^{7,8} How scheduled awakening decreases sleep terrors is unclear.⁷


There is a dearth of publications on the treatment of nightmares.⁷ The largest published study (25 subjects) compared positive thoughts with dream-relevant coping tasks during the day.⁷ The only other large published study (19 subjects) used imagery rehearsal therapy.⁷ In both studies nightmares ceased after a period of two to five months.⁷ Thus, with limited evidence available, the only conclusion that can be reached is that exposure-based therapies may benefit children suffering from chronic nightmares.^{7,8}

When episodes occur almost every night, when there are multiple episodes in a single night, when injury or harm has occurred or if there is impairment of day-time functioning, pharmacological intervention should be considered.¹ Treating any sleep disorder in childhood pharmacologically is problematic since there is no evidence on which to base a choice of medication as no studies have been done in paediatric populations.⁹

Pharmacological treatment should always be given in conjunction with behavioural therapy and then only for a short period of time.¹ Short acting benzodiazepines such as clonazepam can be used.^{1,9} Diphenhydramine or chloral hydrate can be used as alternatives in toddlers.⁹ Antihistamines should be avoided in children with sleep problems as they can lead to rebound sleep fragmentation after withdrawal.⁹

The gold standard in the management of sleep terrors and nightmares, thus, requires a good clinical history and physical examination and behavioural methods to address the problem where reassurance has proved inadequate. 🧡

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