BEDWETTING

Your advice during the day can help your patients during the night



WHY SHOULD I CARE ABOUT BEDWETTING?

Bedwetting is a common childhood condition.1

Left untreated, it can persist into adulthood.2

Bedwetting can have a serious impact on different areas of a child and their family's life: it impacts a child's self-esteem³, emotional wellbeing and behaviour, affecting both school and social performance,⁴ and has a financial cost for both the family and society.⁵

HOW COMMON IS BEDWETTING?



WHAT IS BEDWETTING EXACTLY?

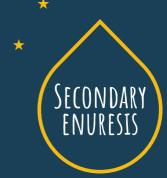
Bedwetting, also known as nocturnal enuresis or urinary incontinence, is an uncontrollable leakage of urine in discrete amounts while asleep.9

There are **two kinds of enuresis: primary and secondary:**10



The patient has wet the bed since birth.





A condition that develops following a dry period of at least 6 months of dryness.

CLINICALLY, ENURESIS CAN BE DIVIDED INTO: 10

MONOSYMPTOMATIC:

Nocturnal bedwetting in the absence of urinary leakage during the daytime, any other lower urinary tract (LUT) symptoms or history of bladder dysfunction.

NON-MONOSYMPTOMATIC:

Bedwetting concomitant with any of the following daytime LUT symptoms:

- Daytime urinary incontinence
- Urgency (sudden, unexpected, and imperative urge to void)
- Voiding difficulties: poor stream, hesitancy, need to strain to void
- Abnormally low or high daytime voiding frequency (voiding <4 or >7 times per day)

MYTH

82% of parents believe that deep sleep or laziness to wake up are the major causes of their child's bedwetting.¹¹

 NOT TRUE! There are many different causes of bedwetting. 12



CAUSES AND PATHOPHYSIOLOGY OF BEDWETTING



Bedwetting is a complex disorder.¹²

Children wet their beds for different reasons, and require different approaches to become dry. ^{12,13} There is often a **strong family history** of bedwetting, with nearly 2/3 of children who wet the bed having 1 or 2 parents with a history of the same condition. ^{12,14}

Bedwetting can be considered as a medical condition resulting from a combination of 3 different predisposing factors.¹²



Sleep arousal difficulties:

a reduced ability to wake to bladder contractions



Nocturnal polyuria:

the production of an abnormally large volume of urine during sleep



Bladder dysfunction:

e.g. having a small bladder capacity or overactive bladder

NOCTURNAL POLYURIA

Nocturia

Enuresis

Enuresis (monosymptomatic)

Enuresis

(usually nonmonosymptomatic)

Enuresis (usually nonmomosymptomatic)

OVERACTIVITY

Daytime incontinence

Urgency

"Deep", uninterrupted sleep
HIGH AROUSAL
THRESHOLDS

The three system model of enuresis pathogenesis.12



Many parents believe that their child will eventually outgrow the bedwetting problem.

NOT TRUE!

Betwetting is estimated to only have a 15% spontaneous cure rate. ¹⁵ But because of this myth almost half of parents do not seek help. ¹¹





THE CAUSES OF ENURESIS CAN INVOLVE A VARIETY OF DIFFERENT MECHANISMS:

This table lists the known potential mechanisms of bedwetting, with their importance and the quality of the scientific evidence. ¹²

Potential mechanisms of enuresis

Potential mechanisms	Importance	Scientific evidence
Renal mechanisms		
Vasopressin deficiency (water diuresis)	Major	Established
Non-free water polyuria (solute diuresis)	Minor	Established
Hypercalciuria	Unknown	Poor
Urodynamic mechanisms		
Detrusor overactivity	Major	Established
Constipation	Minor?	Decent
Sleep and arousal		
Low arousability	Major	Decent
Sleep disruption	Major?	Decent
Airway obstruction	Minor	Decent
CNS disturbance		
Primary pontine lesion	Unknown	Hypothetical
Autonomic imbalance	Unknown	Hypothetical
Anatomy		
Urethral obstruction	Unknown	Hypothetical
Psychology/psychiatry		
Stress or trauma	Minor	Decent





Parents of children who wet the bed should consult their doctor as early as possible to discuss possible causes and treatment, to reduce the impact of bedwetting.^{7,16}

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