Nocturnal enuresis (bed wetting)

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Background

Nocturnal enuresis = involuntary wetting during sleep. Normal in < five year olds, but also occurs in 1 in 4 five year olds, 1 in 20 ten year olds, and 1 in 100 fifteen year olds.

Can be:

- **Primary bedwetting** (never achieved night time continence) ***with or without*** daytime lower urinary tract symptoms
- **Secondary bedwetting** (previously dry at night for > 6 months)

Daytime symptoms = urgency, frequency, daytime wetting, abdominal straining or poor stream, pain passing urine or infrequent urination

Primary bedwetting *without* daytime symptoms is often caused by ≥ 1 of:

- Nocturnal polyuria
- Failure to wake in response to a full bladder
- Overactive bladder or small bladder capacity

Primary bedwetting with daytime symptoms may be caused by

- Overactive bladder
- Structural or neurological problems e.g. ectopic ureter / neurogenic bladder
- UTI or chronic constipation

Secondary wetting often has underlying cause e.g. diabetes, UTI, constipation, social or psychological problems.

Assessment

History and examination to:

- ✓ Determine the type of bedwetting
  - Daytime symptoms?
  - Primary or secondary
- ✓ Assess for possibility of underlying medical conditions, especially if secondary enuresis.
- ✓ Consider other reasons for referral e.g. child abuse, learning disability, behavioural issues etc.

Key questions:

- Number of nights/week, and times/night
- Quantity of urine
- Times of night
- Wakes up after?
- Fluid intake through day?
- Fluid restriction?
- Type of fluid e.g. fizzy drink / tea / coffee
- Access to toilet at night
- Bedroom sharing?
- Coping / stressors
- If daytime symptoms
  - do symptoms occur only in some situations?
  - is there toilet avoidance at school or elsewhere?
  - do they PU more or less frequently than peers?

Consider the possibility of abuse if

- a child is reported to be deliberately bedwetting
- Carers are seen or reported to punish a child for bedwetting despite professional advice that the symptom is involuntary
- A child has daytime wetting or secondary bedwetting that persists despite adequate assessment and management unless there is a medical explanation (e.g. UTI) or clearly identified stressful situation that is not part of maltreatment (e.g. bereavement, parental separation)

Investigations

- **Urine dip** if: daytime symptoms, bedwetting started in last few days or weeks, signs of ill health, suspected UTI or diabetes

Management in CED

1. Explanation and reassurance, and rewards

- **Bedwetting is not the child's fault**. Volume of urine produced at night exceeds capacity of the bladder to hold it, and the sensation of a full bladder does not wake them
- **Bedwetting resolves as the child gets older**
- Positive rewards for e.g. dry nights (ignore wet nights), drinking and toileting behaviour, engaging in management e.g. helping to change sheets. No punitive measures.

2. Advice on diet and fluid intake

- Eat a healthy diet and ensure an adequate daily fluid intake (see table below)
- Avoid drinking caffeine-based drinks (colas, energy drinks, tea/coffee) before sleep

3. Toileting and "lifting" and waking advice

- Empty bladder regularly during day and before sleep (4-7 x a day)
- Easy access to toilet or potty at night
- Lifting and waking discouraged. If wakes in night encourage toileting.
- Can use waterproof mattress and duvet / quilted sheet / bed pad
- Suggest a trial without nappies or pull-ups for a child with bedwetting who is toilet trained by day and is wearing nappies or pull-ups at night

Recommended fluid intake:

Age	Sex	Total drinks per day
4 – 8 years	Female	1000 – 1400ml
	Male	1000 – 1400ml
9 – 13 years	Female	1200 – 2100 ml
	Male	1400 – 2300 ml
14 – 18 years	Female	1400 – 2500 ml
	Male	2100 – 3200 ml

Follow up

For children with **primary** bedwetting **with or without daytime symptoms**

- Refer back to GP for onward referral to local community enuresis service for further investigations and assessment
- Please state clearly that the referral needs to go the COMMUNITY service.

For children with **secondary** bedwetting

- Initiate treatment in CED if appropriate e.g. UTI, constipation
- Refer back to GP for ongoing treatment or onward referral to appropriate outpatient service

If bladder dysfunction is present, consider referral to Paediatric Surgery out-patients +/- oxybutynin (see BNFc for doses).

Management in clinic

See management in CED for explanation and advice. In addition:

- Discuss with parents/carers whether they need support, particularly if they are having difficulty coping with the burden of bedwetting, or if they are expressing anger, negativity or blame towards the child or young person
- Consider involving a professional with psychological expertise for children with bedwetting and emotional or behavioural problems

- Advise parents/carers to try a reward system alone for the initial treatment of bedwetting in young children who have some dry nights

Offer treatment to children and young people whose bedwetting has not responded to advice on fluids, toileting, or an appropriate reward system

See management pathway on page 4

Management pathway for child > 5 years with nocturnal enuresis and no response to advice on fluids, toileting or rewards

Offer a **bedwetting alarm** as first line treatment

Alarm is undesirable or is considered inappropriate e.g. if:

- Bedwetting infrequent < 1-2 per week
- Parents or carers having difficulty coping
- Parents or carers expressing anger, negativity or blame towards the child

Yes

Rapid-onset and/or short-term improvement in bedwetting the priority of treatment rather than long term solution?

Desmopressin

Do not use in under 5s
Initial Dose:
200micrograms Desmotabs (tablets) or
120micrograms for DesmoMelt (sublingual)

- Provide counselling on desmopressin
- Follow-up 1-2 weeks:
- If not completely dry after 1-2 weeks of the initial dose, consider increasing the dose (to 400 micrograms for Desmotabs or 240 micrograms for DesmoMelt).
- Or consider changing formulation or bringing forward evening dose to 1-2h before bedtime
- Follow up at 4 weeks: Assess for signs of response
- Smaller wet patches, fewer wetting episodes per night and fewer wet nights

Response
Continue treatment for 3 months

Partial response
Consider continuing treatment as bedwetting may improve for up to 6 months after starting treatment

No response
Consider stopping treatment

No

Bedwetting Alarm

- Will need to be bought privately
- Provide counselling on using an alarm
- Follow up for early signs of response after 4 weeks. Signs include:
- smaller wet patches, waking to the alarm, the alarm going off later and fewer times per night and fewer wet nights

No response

- combination treatment with an alarm and desmopressin OR
- desmopressin alone if continued use of an alarm is no longer acceptable

Response
Continue alarm treatment in children and young people with enuresis who are showing signs of response until a minimum of 2 weeks' uninterrupted dry nights has been achieved

References

1. National Institute for Health and Care Excellence (2010). Bedwetting in under 19's. Clinical guideline [CG111].
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3. Vande Walle, J., Rittig, S., Bauer, S., Eggert, P., Marschall-Kehrel, D., Tekgul, S., & American Academy of Pediatrics. (2012). European Society for Paediatric Urology; European Society for Paediatric Nephrology; International Children's Continence Society. Practical consensus guidelines for the management of enuresis. Eur J Pediatr, 171(6), 971-983.