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Bedwetting can prevent children actively participating in social and school activities. Nurses can support and advise families as well as referring them for specialist help

Supporting children with nocturnal enuresis

In this article...

- Possible causes of primary nocturnal enuresis
- How to make an accurate assessment
- Advantages and disadvantages of different treatment options

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Bedwetting – also known as nocturnal enuresis – can have a profound effect on children's self esteem and confidence, and a great impact on their families. Professionals should offer information, support, advice and referral for further treatment when needed. There are few other medical conditions that prevent children taking part in social activities, such as sleepovers, residential school trips and camping with their friends.

Primary nocturnal enuresis is defined as "involuntary wetting during sleep" (National Institute for Health and Clinical Excellence, 2010). It is a common condition in children – occasional wet beds occur in 21% of children aged 4.5 years and 8% of nine-year-olds. Frequent bedwetting is defined as more than three wet nights a week; it affects 8% of children aged 4.5 years, 1.5% of whom will still have the problem aged 9.5 years (Butler et al, 2008).

Bedwetting is associated with a positive family history, and boys are affected more than girls. Although there is a natural improvement with age, there are a small number of cases in which primary nocturnal enuresis persists into adulthood. This has been reported to affect up to 2-3% of adults (Yeung et al, 2004). As the condition runs in families, parents of children who wet the bed may remember their own experiences or may occasionally still have this problem.

Causes of bedwetting

There is no one clear cause for primary nocturnal enuresis but a number of explanations have been proposed:

- Many children have been found to have difficulty arousing from sleep to empty their bladder (Nevus et al, 1999);
- Some children produce large amounts of urine at night and this is linked to insufficient production of the pituitary hormone, vasopressin. Usually the natural night-time adjustment of this hormone reduces the amount of urine produced during sleep; this may be less effective in children who wet the bed. This causes incontinence of large amounts of urine, often early in the night (Rittig et al, 2008);
- Some children with bedwetting may have an overactive bladder, which may be associated with daytime urgency and frequency, and sometimes daytime wetting. These children may experience more than one wetting episode at night;
- There may also be a combination of the above causes.

Initial assessment

The NICE (2010) guidelines emphasise the importance of assessing the pattern of bedwetting and also the background family situation. It is important to ask about the frequency of bedwetting, including if there are any dry nights, and about the amounts of urine passed. It is useful to find out about the child's sleep pattern and if they rouse when wet.

A history of bedwetting, following dryness for six months or more, is defined as secondary enuresis. There may be triggers for a recurrence of bedwetting including illness, bereavement or starting school.

5 key points

1. **Children, young people and families should be informed that bedwetting is not the young person's fault, and punitive measures should not be taken**
2. **Information, support, assessment, treatment and referral should be offered if needed**
3. **The needs and circumstances of the child and family must be considered in assessment and intervention**
4. **Younger children aged under seven years should not be excluded from treatment**
5. **Advice should be given that will encourage an adequate fluid intake and regular emptying of the bladder**

Bedwetting affects boys more than girls

Alamy

TABLE 1. **POINTS TO FOLLOW UP AFTER INITIAL ASSESSMENT**

Identified issue	Action
Child protection concerns	Refer immediately and liaison with other professionals involved with the family
Constipation and/or soiling	Arrange further examination and treatment
Evidence of urinary tract infections	Refer to the general practitioner and arrange urine test
Daytime bladder control problems	Evaluate symptoms and arrange further specialist evaluation
Diabetes mellitus	Arrange immediate referral to paediatric diabetes team
Behavioural and emotional difficulties and family stress	Assess with family and other professionals including education, school nursing, and primary care, and arrange further help if needed
Developmental and or learning difficulties	Discuss with other professionals including teachers and education services, and arrange further assessment if needed

Source: NICE (2010)

BOX 1. **ADVICE TO PARENTS AND FAMILIES**

- Give information about the condition
- Encourage good fluid intake (7 drinks of clear fluid a day)
- Encourage bladder emptying at bedtime
- Give information about waterproof bed protection and night-time nappies
- Encourage confidence building and positive thinking
- Give contact details about support and information
- Suggest interesting, but not big rewards for achievable targets
- Arrange further referral if needed – younger children under seven should not be excluded

Source: NICE (2010)

Rarely, secondary enuresis may be a presenting symptom of diabetes mellitus and requires immediate referral to the paediatric diabetes care team.

Difficulties with daytime bladder control should be identified, including frequency of passing urine, urgency, discomfort and daytime wetting (Vande Walle et al, 2012). It is important to ask about fluid intake, including restriction of fluids, either by carers or the child. Children often avoid drinks to avoid having to use school toilets.

The impact of the bedwetting on the child and family should be discussed, together with their wishes and needs with regard to intervention and treatment. It is important to understand the attitudes of the family and their expectations of treatment for nocturnal enuresis.

Further assessment

If there are concerns about child protection, referral should be made for further assessment following local policies. Enuresis may be associated with family stress and can be a symptom of anxiety. Bed wetting often causes parental stress, especially for busy working parents, and may also be associated with financial and emotional pressures. Parental intolerance has been identified in many families who have to deal with wet beds (Butler et al, 2002), and it can affect parents' quality of life (Meydan et al, 2012).

Further evaluation and treatment should be arranged if there is evidence of urinary problems, such as delays in achieving daytime bladder control or evidence of urinary tract infection. Infection may cause pain or burning on passing urine, offensive urine and haematuria.

Some children who wet their bed have emotional difficulties (Joinson et al, 2007), and many are lacking in confidence. They may be at risk of bullying at school or, sometimes, within the family. An evaluation of emotional problems may be needed and all children benefit from support and encouragement.

Constipation with or without soiling is common in young children. It may be associated with, or aggravate, nocturnal enuresis and requires assessment and treatment (NICE, 2010).

Becoming dry at night is a developmental skill; delay may sometimes be associated with other developmental problems. While problems of this nature may have been identified before the child presents for help with nocturnal enuresis, subtle difficulties such as problems with coordination, attention, learning or social skills may be linked with bedwetting (Vande Walle et al, 2012). Key points to bear in mind when considering further assessment are summarised in Table 1.

Advice

Initial discussion about the problem should explore the needs of the child and family as this will inform the type of advice and interventions required.

Families need information about the incidence of bedwetting and that it often resolves without treatment. It is important to explain that wetting occurs during sleep, without awareness and it should be emphasised that it is not the child's fault and that punitive measures should not be taken. Advice for families is summarised in Box 1.

Fluids

Parents often restrict fluids but there is little evidence that this helps children to become dry at night. However, it is logical to discourage large amounts of fluids before going to bed and to avoid drinks containing caffeine such as tea and coffee as well as fizzy drinks.

It is helpful to encourage a good daytime fluid intake of seven drinks a day but many children do not achieve this because they are busy and drinks may not be encouraged at school. However, children who are well hydrated during the day need fewer evening drinks so it is important that they drink consistently throughout the day, including while at school.

Lifting

Many parents have tried lifting their children and taking them to the toilet after they have gone to sleep but there is no evidence that lifting helps to achieve night-time dryness. If lifting increases the number of dry nights, this can build confidence but it should only be used as a short-term strategy (NICE, 2010). Rousing children in the night may affect daytime alertness and can be stressful. It is helpful to discuss the advantages and disadvantages of lifting with parents.

Night-time nappies/pull-ups

The NICE (2010) guidelines suggest that if a child has been toilet trained by day for six months, a trial without night-time nappies should be considered. There is no

"Every interaction can have an impact on the patient's recovery"

Adam Morris › p30

BOX 2. REASONS FOR SPECIALIST REFERRAL

- Families who want treatment and advice
- Children concerned about staying away from home, school trips and participating in activities with their friends
- Older children (aged seven years and over) who are still bedwetting
- Children with bedwetting and daytime symptoms, wetting, urgency or frequency

doubt that using nappies may relieve stress on families and reduce the amount of washing but use of night-time protection may also reduce the motivation to get dry. Using a nappy at the same time as encouraging night-time dryness may give a mixed message to the child.

Some children like to try without night-time nappies but this should be at a time when the family is relaxed, for example when there are no visitors at home and the child is settled at school. It is important that discontinuing nappies does not cause more stress. This needs to be discussed with children and families, and advice about waterproof bed protection, waterproof quilt covers and bed pads should be given.

Rewards

Many children like to have rewards, but these should always be for negotiated positive behaviour and achievable targets (NICE, 2010). This may include emptying their bladder before going to bed, helping to change the sheets or drinking regularly during the day.

An emphasis on praise and rewards for dry nights can create disappointment and a sense of failure if children are wet. If they are getting dry nights, they may enjoy trying to beat their record.

Referral and treatment

Most community child health services provide resources and clinics to help children and families with bedwetting problems. Referral should be considered for the following:

- Families wishing to have further treatment and advice;
- Children who are not developing night-time continence as they grow older – usually aged approximately seven years upwards;
- Children and families for whom stress is linked to wet beds;
- Children who are concerned about staying away from home, going on school trips and participating in activities with their friends;
- Children who experience bedwetting with daytime wetting accidents and bladder urgency.

Do not exclude younger children under the age of seven on the basis of age alone (NICE, 2010) as they may benefit from advice and treatment, and families need support.

Treatment should always be tailored to the child and their family's needs and wishes. Initial treatment guidelines recommend the use of enuresis alarms (NICE, 2010), which many continence services loan free of charge. These have a good success rate but families need to persist with using them. They are not suitable for families under stress as they can cause night disturbance, and children using them usually need adult support for some time before achieving dryness.

QUICK FACT

21%
Proportion of children aged 4.5 years who occasionally wet the bed

Treatment with desmopressin sublingual melts or tablets can be helpful in improving bedwetting by reducing the amount of night-time urine production. This is generally well tolerated and may be useful for school trips, sleepovers and holidays. Longer-term use is safe and can help to boost confidence, especially for older children (Evans et al, 2011). Anticholinergic preparations can help some children; a combination of medication with an alarm may be used. Tricyclic antidepressants (such as imipramine) are less commonly used as there is a higher incidence of side-effects.

The reasons for referral for specialist support are summarised in Box 2.

Teenagers

Teenagers with nocturnal enuresis may be reluctant to discuss their problem. It may impact greatly on their self-esteem and participation in activities, as well as plans for further education and relationships. They need support and advice about fluids, including alcohol, and about treatment options and referral. Self-waking with a mobile phone or alarm clock may be helpful for some older children and can build their confidence. The charity Education and Resources for Improving Childhood Continence (ERIC, www.eric.org.uk) has a section for teenagers on its website.

Holidays and school trips

Children are usually keen to participate in these activities, which can be a motivator to address bedwetting and encourage children to persist with treatment. Those who continue to wet their bed need a sensitive plan to enable them to participate in activities if they wish. This may include using night-time protection and arrangements to dispose of this discreetly, as well as help from a sympathetic adult if needed. Sometimes when children are on trips, the excitement, together with later nights, may help them to be dry. Medication with desmopressin melts or tablets can be used just for being away from home if needed. ERIC's downloadable leaflet *Nights Away* may be helpful.

Conclusion

All nurses who work with children and families are ideally placed to give support to those with bedwetting problems. They should offer accurate information and arrange further referral where indicated. ERIC provides information and leaflets, and families can purchase alarms, bed protection and obtain information about local enuresis services from the charity. **NT**

References

Butler RJ et al (2008) The prevalence of infrequent bedwetting and nocturnal enuresis in childhood. *Scandinavian Journal of Urology and Nephrology;* 42: 257-264.

Butler RJ et al (2002) Overcoming parental intolerance in childhood nocturnal enuresis. *British Journal of Urology International;* 89: 3, 295-297.

Evans J et al (2011) Randomized comparison of long term desmopressin and alarm treatment for bedwetting. *Journal of Pediatric Urology;* 7: 21-29.

Joinson C et al (2007) Psychological problems in children with bedwetting and combined (day and night) wetting. *Journal of Pediatric Psychology;* 32: 5, 605-616.

Meydan EA et al (2012) The quality of life of mothers of children with monosymptomatic enuresis nocturia. *International Urology Nephrology;* 44: 3, 655-659.

National Institute for Health and Clinical Excellence (2010) *Nocturnal Enuresis: The Management of Bedwetting in Children and Young People.* London: NICE. www.nice.org.uk/guidance/CG111

Nevus T et al (1999) Depth of sleep and sleep habits among enuretic and incontinent children. *Acta Paediatrica;* 88: 7, 748-752.

Rittig S et al (2008) The circadian defect in plasma vasopressin and urine output is related to desmopressin response and enuresis status in children with nocturnal enuresis. *Journal of Urology;* 179: 6, 2389-2395.

Vande Walle J et al (2012) Practical consensus guidelines for the management of enuresis. *European Journal Paediatrics;* 171: 971-983.

Yeung CK et al (2004) Characteristics of primary nocturnal enuresis in adults: an epidemiological study. *British Journal of Urology International;* 93: 3, 341-345.