BRIEF INTERVENTIONS: ENURESIS

BI-PED PROJECT (BRIEF INTERVENTIONS: PEDIATRICS)
Emotional Health Committee Maryland Chapter American Academy of Pediatrics

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Overview: Primary enuresis is a developmental problem diagnosed in youngsters over the age of six years who have never been dry at night. About 15-20% of 5 year olds will continue to have significant nighttime wetting. About 15% of this group, each year, will develop the ability to stay dry at night. There is a strong genetic predisposition to enuresis, such that if both parents have a history of bedwetting, 2/3 of their children will usually wet the bed. Enuresis is more common in males than females.

Secondary enuresis is diagnosed in children who have had a period of dryness for at least six months before the onset of bed wetting. Secondary enuresis may also be a developmental problem, or it may represent a reaction to new stressors such as a recent move or a new sibling. Consideration should be given to possible medical causes when secondary nighttime wetting occurs. Anything that increases urinary output, (e.g. glycosuria, diuretics); irritates the bladder (e.g. infection); or decreases bladder capacity by compressing the bladder (e.g. external mass or constipation) may cause nighttime wetting. Additionally, neurologic problems that cause bladder spasm or increased tone may also lead to either primary or secondary enuresis.

In addition to a medical history looking for the factors discussed above, a history of toilet training and of voiding patterns can be helpful in tailoring an appropriate program for the patient. The role of sleep patterns in the development of enuresis remains unclear. Parents often note that their child is a "deep sleeper" as the causative reason for their child wetting the bed. There is no evidence that sleep patterns or sleep depth differ between enuretic and non-enuretic children.

There are several components to intervention once the practitioner has ruled out pathologic conditions.

<u>Education/ Demystification/ Normalization/ Reframing</u>:

- **During the history taking process efforts should be made to *normalize* the problem for the child. Statements such as the following can be helpful :**

Script: "You are in the 3rd grade. My guess is that 2 or 3 other children in your class wet the bed. Kids always ask, "Who is it?" I don't know because it is embarrassing and kids don't usually want to talk about it, but in most 3rd grade classes there are several kids who continue to wet the bed". **OR**

Script: "So, I hear that your dad and Uncle Jack wet the bed, as well as 2 of your cousins. This is pretty usual because bedwetting tends to run in families. "

Such normalizing statements will lessen the emotional impact of bedwetting on the patient.

- **Parents should be educated and made to understand that in most cases, bedwetting is *<u>not</u> intentional or a result of laziness*. Parents should be advised to remain supportive and empathetic and not approach bedwetting in a punitive manner**

- **Parents can be advised that some children have a small or reactive bladder that starts to contract as it fills with urine causing the child to wet the bed. Some of the interventions outlined below help to increase the child's sensitivity to their filling bladder while they are asleep so that they arouse and use the bathroom before wetting the bed**

- **Reframing the problem as one that *only occurs for a few seconds* out of a very long 24 hour day may make bedwetting seem less overwhelming to parents and children**

<u>Assess Motivation:</u>

- **A key component to intervention is assessing how *motivated* the child is to tackle the problem. Young school age children may not be concerned about their bed wetting. Successful intervention will need to involve the child's cooperation in the plan. If parents are overly concerned but the**

child is not, the plan is less likely to meet with success. Older children may more readily buy into a treatment plan.

Ask the child "*Is bedwetting a problem or concern for you*?" Children who respond in a "no" or "maybe" fashion may not be ready to fully engage in intervention. Children who respond with "yes" may be more receptive to the interventions discussed below.

<u>Treatment</u>: Several different treatment strategies have been successful in resolving enuresis, including behavioral therapies, pharmacotherapy, and hypnotherapy.

<u>BEHAVIORAL THERAPIES:</u>

<u>Bedwetting alarms</u> have up to an 85% success rate with a 15% recidivism rate when the treatment is stopped. Alarm systems are a good alternative for motivated children age 6-7 years old and older.

- **Introducing behavioral/alarm treatment:**

Script: "I'd like to wake you up right before you begin urinating but I don't have a good way of doing that, so we do the next best thing, which is to wake you up right as you start urinating. This will help you to learn to awaken and go to the bathroom. Remember what you are trying to do is wake up in a warm dry bed."

The suggestion of "waking up in a warm dry bed" is repeated several times during the interview and it is then suggested that as part of the training process the child put this thought into his head when getting ready for bed. Before using a bedwetting alarm system, parents may wish to set an alarm clock for several nights and observe if the child can easily arouse. Children who are extremely difficult to arouse may not be good candidates for the bedwetting alarm.

Patients are given a protocol to follow when using a bedwetting alarm system. It is important for the program to be implemented consistently in order for it to be effective. Especially in the younger children, (6-9 year olds), parental involvement with the program is essential. Parents should help the child awaken, accompany them to the bathroom, and change pajamas and bedding. Very motivated older children may want to take on these responsibilities themselves. The bedwetting alarm protocol can take 3-4 months to be fully

effective and the child can use a calendar (see below) to track their progress. The alarm intervention should be stopped if the child is making absolutely no progress after 4-6 weeks or if the child is clearly not interested in participating. Once the child has achieved 21 consecutive dry nights the alarm may be discontinued. If the child begins wetting the bed again, the alarm should be reinstituted for another 21 consecutive dry nights. Children who achieve 21 dry nights can be offered a larger reward to celebrate their success.

<u>Bedwetting Plan for John Jones:</u>

1. **Reasonable fluids after dinner. Avoid caffeinated products**
2. **Go to the bathroom before going to bed. Sometimes having the child practice going to the bathroom several times while lying in bed before falling asleep helps condition the child to more automatically use the bathroom during the night**
3. **THINK: "*How nice it is to wake up in a warm dry bed*"**
4. **Use the bedwetting alarm**
   a. **When the alarm goes off awaken and go to the bathroom (even if child has already wet the bed)**
   b. **Put dry sheets on the bed and put on dry underwear and pajamas. Parents can use washable or disposable bed pads (e.g. Chux) placed under the child to reduce the workload of having to change sheets frequently. (Another option is to make the bed at night with 2 sheets and 2 bed pads. If the child wets the bed, upon returning from the bathroom, the top sheet and overlay is removed and the child can return to sleep without having to remake the bed)**
   c. **Wipe the alarm sensor and reset the alarm**
   d. **Practice going to the bathroom 2 more times**
   e. **Track progress on a calendar (one approach is to mark D-dry, SW-small wet, LW-large wet and add a check mark if the child woke up to the alarm)**

GOOD LUCK!!

- **<u>Motivational Systems/ Behavior Modification</u>: Some children will respond to a simple *charting system* with reinforcers administered each night that they remain dry. This system is appropriate for children from 5-7 years of age. A star or sticker is placed on the chart for every dry night achieved. When the child receives a set number of stars or**

stickers, they can receive a reward. In some cases, this can be tried before going on to a more elaborate bedwetting alarm system

If a bedwetting alarm is being used, the program can be coupled with a behavior modification reward system to enhance success. (see Behavior Modification module) For example, when the child achieves 3 dry nights, they can receive a mutually agreed upon award (see below). As the child progresses, the reward can be issued after 5 dry nights and then eventually after 8 nights, etc. Children who achieve 21 dry nights can be offered a larger reward to celebrate their success.

Sticker chart

	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.	Sun.
Week 1							
Week 2	D			D			
Week 3						D (Treat)	
Week 4							

Treat (child gets a treat/reward after 3 dry nights/ child gets larger reward after 21 consecutive dry nights)

PHARMACOTHERAPY:

- **Pharmacotherapy also has an 85% success rate but about 50% of the patients will start wetting again when the medication is discontinued. DDAVP is a good option when a family wishes to use this approach. For children age 6 years and older, start with DDAVP (0.2 mg tab) one tablet orally 1/2 hour before bed and increase up to 3 tablets (0.6mg) if indicated. Some families may opt to use DDaVP only during special occasions such as family vacations or visits to relatives, child sleepovers and sleep away camp**

OTHER OPTIONS:

- **Reduce fluids 1-2 hours prior to bedtime and avoid caffeine. Have the child void prior to settling down to sleep**

- **Waking the child: Another simple strategy is to have the parents waken the child and take them to the bathroom to empty their bladders before they wet the bed. Parents often do this before they themselves go to bed so that it is minimally disruptive to the household's routine. If this is successful in keeping the child from wetting the bed it can be very positive for the child and the family. This system does not increase the child's ability to be dry at night**

- **Follow up:**
  The practitioner can arrange for follow up every 2 weeks at the beginning of the program and then monthly in order to help the patient troubleshoot and fine tune problems that arise as well as help to maintain enthusiasm for the process. Consider urologic consultation for enuresis particularly if associated with daytime incontinence that is refractory to intervention

References:

Apostol Guzman J, Palmer L. Nocturnal Enuresis;
***Pediatr Rev* (2024) 45 (8): 479–481.**
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Bedwetting in Children & Teens: Nocturnal Enuresis.
HealthyChildren.org.