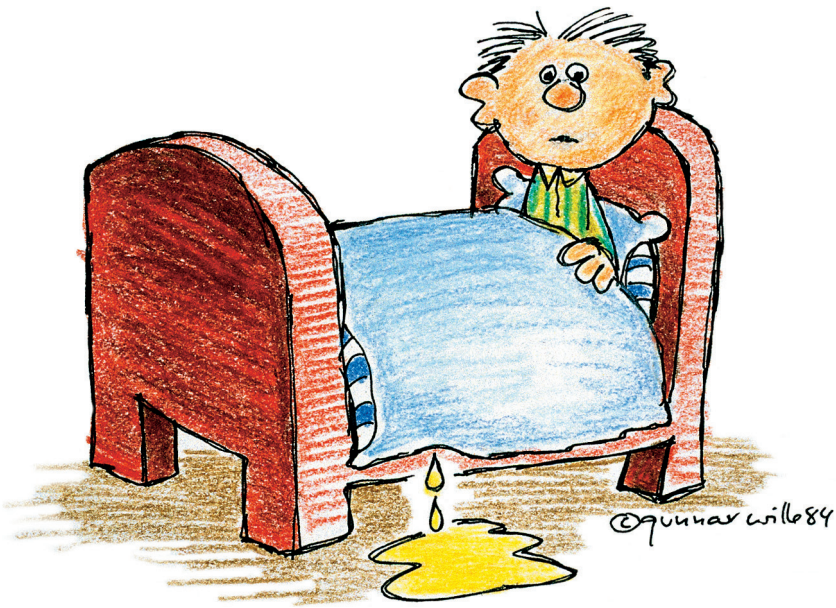
Bedwetter's Guide



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Bedwetting is a common symptom

Wetting is one of the most common problems with children and present in all races and cultures. In Finland, the average age of learning to be dry is 2-4 years, but many children learn to control their urination only much later. Every tenth child of 4-5 years of age still wets fairly regularly at night. 6-8 % of first graders and even about 0.5% of adolescents are wetters. The total of bedwetting children and adolescents in need of therapy is estimated to be 30 000 persons in Finland

Bedwetting is a difficult problem. It often results in feelings of shame and social limitations in the children concerned. For the parents, it means work and extra trouble. This is why it is important to get therapy for bedwetting.

Why does the child wet?

There are many beliefs about bedwetting. Researchers have been able to identify reasons for it only in the past two decades. Learning to be dry is a complex development process that is quicker in some families, slower in others. However, both families are equally healthy. Bedwetting is not an illness, but a hereditary family trait. The kidneys, bladders or urinary tracts of bedwetters show no more physiological problems than those of other children.

Bedwetters are sound sleepers and it is difficult for them to wake up in the night. As the child develops, his or her sleep becomes lighter as the bladder fills up and finally the need to urinate wakes the child.

School-age children often stay dry because they have learned to wake up as the bladder fills. Often the wetting ceases when travelling, as presumably the child's sleep is not as sound and undisturbed as at home.

The quantities of night-time urine are large with bed-wetters and exceed the maximum volume of the bladder. This is due to the fact that not enough of vasopressin, the hormone reducing the output of urine, is released at night. As the child develops, the

quantities of hormone released at night also grow. This results in less urine. At the same time the functional capaciy of the bladder expands. The child is dry when all night-time urine fits into the bladder.

Many bedwetters also experience frequent need to urinate and day-time wetting. Usually they need to rush to the toilet and a few drops of urine pass into the clothes on the way. Most often this is caused by a hyperactive, immature bladder that triggers an acute and strong need to urinate even with small quantities of urine. These children may also soil themselves occasionally. Both symptoms disappear as the child grows.

Bedwetting is not a psychological symptom although this was the common belief for a long time. Bedwetters do equally well in psychological tests as other children of their age. However, continuing bedwetting may result in a weaker self-esteem and social problems that disappear with therapy for the wetting.

Necessary examinations

The diagnosis of children's bedwetting is based on a detailed history and medical examination of the child. The child's family, growth, development and possible illnesses are recorded. It is important to document the nature and frequency of the wetting, whether the child is also constipated and whether he/she has had urinary tract infections. Bedwetting that runs in the family is most often so typical as to the symptoms that a doctor can reach a diagnosis based on the history and clinical examination of the child.

- A urine sample should be taken in order to exclude urinary tract infections that can cause wetting. Sometimes also early-stage diabetes may cause wetting.
- Other examinations are rarely needed. At the doctor's discretion, renal or urinary tract ultrasonography or other supplementary examinations are conducted.

Enquiry about wetting in child care clinics

Wetting should be included in the child care clinic check-ups of each 4-5-year-old child. It is important for the child to realise that there is nothing wrong with him/her, but that tendency to wet has been inherited from his/her parents. Wetting is a common problem that can be treated. Less liquid in the evening or waking the child up to go to the toilet at night do not teach the child to be dry. It is a good idea to use a diaper.

It reduces the extra work for the rest of the family and does not slow the process of learning to be dry. The child does not wet him/herself on purpose and should never be punished for doing it.

A wetting diary should also be started at this age. Actual therapy is usually started at the age of five.

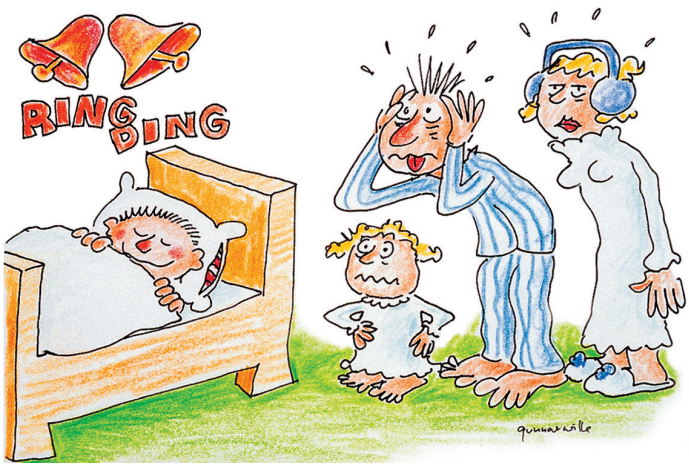
Drug therapy for bedwetting

Desmopressin is the synthetic counterpart of vasopressin, the natural hormone that reduces urine output. It has been used for treatment of bedwetting in children for more than twenty years. The drug reduces the quantity of urine output at night and also lightens the child's sleep in order to make it easier for him/her to wake up to go to the toilet in the night. The drug reduces the number of wet nights and is the more efficient the more developed the child's own hormone production is.

Desmopressin is well tolerated. Drinking in the night should be avoided during the therapy in order not to store extra liquid in the body. If the child becomes ill and needs to drink in the night, the drug should not be taken in the evening.

Desmopressin is a prescription drug and should be used according to the doctor's directions. Desmopressin is available in the form of 60 and 120 microgram freeze-dried tablets. The average starting dose is 120 micrograms.

The therapy is continued until the child is entirely dry at the prescribed dosage. After this, the dosage is lowered until the child remains dry without the medication. Depending on the degree of maturity, the therapy may take several years. The effect of the therapy is monitored by the doctor from the wetting diary.



Alarm device in the therapy for bedwetting

It is also possible to treat children's bedwetting with an alarm device.

- The most common type of alarm consists of a mattress the size of a pillow case and the alarm that is connected to it by thin wires.
- There are also alarms that attach to the underwear. When the mattress gets wet, it sounds the alarm.
- With many children the frequent sound of the alarm and the interruption in the urination lead to the child learning how to be dry in a few weeks' time even without the sound of the alarm.
- The device is effective even if the child does not wake to the sound of the alarm. The alarm must be used every night for a period of 2-3 months. Longer periods of treatment have not been found to be of use.
- If the child does not learn to be dry within this period, the therapy can be repeated in about one year.
- The downside of the alarm is that often the rest of the family wakes up to the sound of it, but not the child that wets. Sometimes the child may be afraid to fall asleep because of the alarm. The alarm also sounds when the child sweats, giving a false signal in these cases. If the child is so immature that he/she still wets several times per night, it is advisable to use other forms of therapy and begin alarm therapy only when the wetting has come down to one time per night.

Combination therapy

Best results in the treatment for children's bedwetting are obtained by simultaneous use of desmopressin and an alarm device.

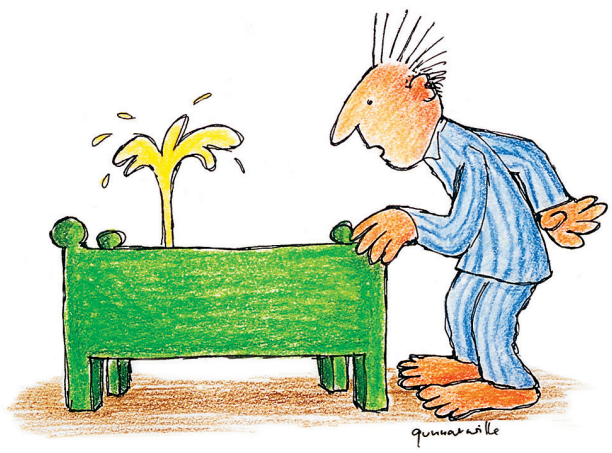
The therapy is usually started with desmopressin. If this is not enough for keeping the child dry, the alarm device is included in the therapy.If the child does not learn to be dry within 2-3 months, the therapy is continued with desmopressin alone. The combination therapy can be repeated in about one year if necessary.

If the child does not have dry nights during the therapy, a shift to diapers is made and the therapy is retried in about one year. For bedwetters with frequent need to urinate and day-time wetting the therapy may be complemented by tolterodine or oxybutynin drug therapy. These increase the volume of the bladder, reduce the frequency of urination and delay the need to urinate.

They are not very effective against actual bedwetting when used alone, but as an element in combination therapy some children benefit from them.

Monitoring of the therapy

The child should have a wetting diary in order to monitor how he/she is learning to be dry and how effective the therapy is. An entry into the diary is made each morning stating whether the night was dry or wet and each evening stating whether there was day-time wetting or soiling on that day. All therapy is also entered into the diary. Medical control visits are scheduled regularly until the child is dry. Optimum forms of therapy and drug dosages are evaluated during the medical control visit, the effect of the therapy is monitored through the wetting diary entries and issues related to wetting are rediscussed



Child care allowance

The family of a 5-year-old child that wets is entitled to child care allowance.
The requirement for the allowance is that the child has been treated by a doctor for wetting for at least six months, the wetting is entered into a diary and that the child is still wetting several times per week in spite of therapy. If the therapy has proven inefficient and the family has started diaper therapy as advised by a doctor, the family is still entitled to child care allowance. Therapy is resumed after half a year or one year. A C-certificate from a doctor is required for the allowance.

Remember this

Bedwetting is a difficult symptom for the child. The older the child becomes, the more difficult this symptom feels and the more the child suffers from the wetting. Bedwetting should be treated in order to avoid the psychological and social problems caused by it.

Further information available at:
www.yokastelu.net
www.parempiuni.fi

Subscriptions for guides:
erna.maksimow@ferring.fi

Wetting Diary

Name_____ Date of birth _____

☽ = night ☼= day

W = wet D = dry S = soiling

T/Do = therapy/dosage D = desmopressin A = alarm

	_____ mo/200 __				_____ mo/200 __				_____ mo/ 200__				_____ mo/200 __			
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Other therapy: _____

Wetting Diary

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W = wet D = dry S = soiling

T/Do = therapy/dosage D = desmopressin A = alarm

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