The medical treatment with the active substance desmopressine (Minirin or Nocutil) is administrated in form of tablet(s). This is an antidiuretic hormone (ADH) which can diminish efficiently the urine production during the sleep (with  $60-70\,\%$  of the children). This medicine can thus be useful when a rapid solution is wished: holidays at a friend's place, ski camp, school journey, etc.

After having taken this medicine the child must avoid drinking because of the risk of water retention.

In principle this hormone is produced naturally in the human body. In this case it is named vasopressine.

#### **Effectiveness**

Doctors nowadays tend to propose a method based on a learning process rather than to use medicine.

The French research (ANAES) evaluated in 2003 the effectiveness, the security and the economic consequences of the use of alarm-systems for the treatment of the nocturnal enuresis in comparison with the treatment with the antidiuretic hormone (desmopressine).

These research findings show that the substance desmopressine has a certain effect during the treatment, but that these effects diminish rapidly after having stopped the medicine and that, on the long term, the alarm-system proves to be more effective (50% of the patients treated with desmopressine had a relapse against only 5% of the children treated with the alarm-system).

Many paediatricians confirm that the alarm-system is by far the most effective method with a success rate ranging from 70 to 90% depending on the device and the methodology used.

## Security

The **alarm-system** does not generate secondary effects.

With the **antidiuretic hormone** secondary effects have been observed with about 7% children: especially headache, sickness, abdominal pains, skin rashes, etc. Very rarely a water intoxication was established.

The antiduretic hormones as a nasal spray, already removed in many european countries, are not anymore proposed in Switzerland for the treatment of the enuresis because of their significant secondary effects.

## **Economic consequences**

In Switzerland a 3-month treatment (based on an average daily dose in case of the antidiuretic hormone), is significantly more expensive than the use of the alarm-system pipi-stop.

For more information about the alarm-system, please visit the website:

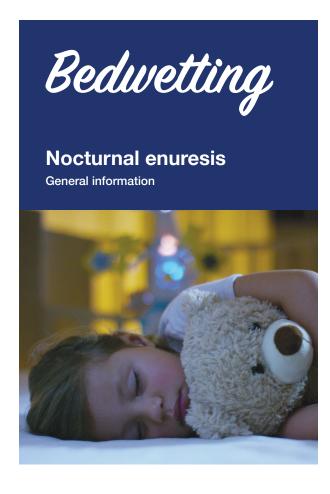
www.pipi-stop.ch

or contact

+41 32 751 27 95

#### Melebi SA

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Since the age of 5, the involuntary and unconscious loss of urine during the sleep is considered an illness designated, in medical terms, the nocturnal enuresis.

Despite this problem being much more frequent than we imagine, the subject is taboo!

More than one of 10 children aged 6 is affected by nocturnal enuresis. The child who wets his bed suffers, as well as the whole family who gets under pressure.

Nocturnal enuresis - incidence		
Age	% of children	
5 years	15 – 20%	
6 years	10 – 15%	
10 years	about 6%	
teenagers	1 – 2%	

According to different recent studies this illness can be hereditary and boys are more often concerned than girls.

Nocturnal enuresis – family incidence	
	% of children
No case in the family	15%
1 parent concerned	45 %
2 parents concerned	77 %

## It is possible to heal from this illness

It is advisable not to dramatize, because your child can heal and regain self-confidence. It is possible to help a child in his efforts to stay dry at night. First it is important to encourage him and avoid making him feel guilty.

#### The causes

If the child has always wetted his bed and was never dry more than six months, we speak of **primary nocturnal enuresis**. In these cases, the enuresis is **generally linked with the deep sleep**. The "isolated" nocturnal enuresis (monosymptomatic nocturnal enuresis), as it is called, is not associated with any other disorder. It shows an **immaturity of the micturition control** (micturition = urination). This is the most often case.

We speak of **secondary nocturnal enuresis** when a child wets again his bed after being dry during more than six months. An important change or some stress in the life of your child, for example the birth of a baby, the separation of the parents, the beginning of school, a move, a mourning time or any other unusual situation **(psychological causes)** can induce a mostly temporary regression.

A visit to the psychologist is not necessary, unless there are associated disorders linked to the enuresis.

Other more unusual reasons do also exist, such as a small bladder or a dysfunction of the sphincters. A visit to your doctor may be necessary in order to rule out the possibility of an eventually anatomical default or of a urinary infection.

## Should bedwetting be treated?

Even if most of the time bedwetting is not caused by upbringing or psychological disorders, it can in the long term upset the child.

When the child feels different than others, when he/she cannot take part in certain activities (go to a camp with the school, sleep at a friend's place, etc.), this can cause your child a loss of self-confidence.

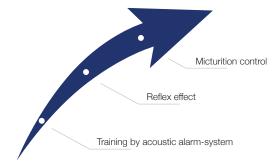
The risk is that your child's demotivation develops a chain effect affecting other areas of his life. Therefore, when bedwetting is not cured, it can lead to psychological problems.

If your child still wets regularly his bed after 5 years of age, it is recommended to seek advice from your doctor. He will detect the reasons of the enuresis of your child and will indicate the appropriate treatment.

# At the moment, two therapies are used for the treatment of bedwetting

The behavioural treatment with an alarm-system (pipistop) represents a natural training method of the continence system. The child develops the reflex to retain his urine, the capacity of the bladder becomes bigger and the urine is more concentrated.

The pipi-stop is used in order to wake up the child as soon as the first urine drops come, so that the urination finishes in the toilet. At the beginning of the treatment the child wakes up in the middle or even at the end of his urination, but after several weeks he develops the reflex to retain his urine (anticipation) and, if the quantity of urine is abundant, the child will be woken up quickly enough because of the pressure in the bladder.



Method based on a learning process

This therapy requires motivation and participation of the child and his parents. With this treatment the child is in a natural environment. Especially he/she can drink as much as he/she wants (no restriction).

It is useful to discuss this with your GP / paediatrician who can give you a prescription for the pipi-stop. All the basic insurances reimburse a part of the treatment costs, as far as the alarm-system is rented and the child is aged 5 or more.