

#### NOCTURNAL POLYURIA (PASSING TOO MUCH URINE AT NIGHT) Information from The British Association of Urological Surgeons (BAUS) about getting up at night to pass urine

You have been given this leaflet because you pass a lot of urine at night. The aim of the leaflet is to provide you with information about why this happens and what you can do about it.

We have consulted specialist surgeons during its preparation, so that it represents best practice in UK urology. You should use it in addition to any advice already given to you.



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### **KEY POINTS**

- Nocturnal polyuria is when you produce too much urine overnight
- It is defined as passing more than one third of your 24-hour urine output at night
- It can be associated with other medical problems such as sleep apnoea, swollen ankles, heart failure & certain medicines
- Simple self-help measures such as fluid restriction will often improve the polyuria
- If simple measures fail, you should seek further advice from your GP
- Some patients may need to take diuretics (water tablets) or vasopressin (ADH)

## Why do I pass a lot of urine at night?

There are many reasons why you may need to get up at night to pass urine; these include:

- poor sleep patterns;
- drinking too much fluid before bed-time;
- problems with your bladder or prostate;

- producing too much urine at night (**nocturnal polyuria**); or
- any combination of the above.

Your pituitary gland, at the base of your brain, produces a chemical which tells your kidneys to reduce urine production whilst you are asleep. This chemical is called **antidiuretic hormone** (ADH). When you are young, less than a fifth of your total 24-hour urine output is at night. As you get older, less than a third of your daily urine output should be at night. When you produce too much urine overnight (i.e. more than a third of the daily total), this is defined as **nocturnal polyuria**. There are a number of causes:

- you may not be producing enough ADH (this can be part of ageing)
- you may be drinking too much in the evening
- you may be eating foods which contain a lot of water (fruit, vegetables, salads, pasta & rice)
- your body may be retaining fluid during the day and trying to get rid of the excess during the night (see below)

Many people develop swelling or puffiness of the ankles in the evening, but notice that it improves by morning. This is because, when you lie down, the water which causes the puffiness goes back into your bloodstream and is turned into urine by the kidneys. This may fill your bladder during the night causing you to wake up needing to pass urine.

Occasionally, nocturnal polyuria is linked to heart or breathing problems (e.g. obstructive sleep apnoea). Your doctor will arrange further tests if it is felt that they could be part of the problem.

## What will my doctor ask me to do?

To work out if you are producing abnormally large volumes of urine at night, your doctor may ask you to complete an <u>input/output chart</u> (frequency-volume chart or bladder diary).

Use the chart to record how much fluid you drink, the amount of urine you pass and when you pass it. It is important to measure the volumes accurately using a measuring jug.

## What can I do about it myself?

You doctor will ask about your eating and drinking habits in the evening, about any other relevant symptoms, and will examine you to see of there is any ankle swelling. However, there are some things you can do yourself:

- adjust your drinking and eating to take in less fluid in the evening
- eat most of your water-containing food earlier in the day
- if your ankles are swollen, put your feet up as often as possible during the day, especially in the evening
- increase your exercise levels (especially walking) which helps to push excess fluid back into the circulation where it belongs

### What if these measures don't help?

If these measures have not helped, and other possible causes have been treated or excluded, your doctor may try to help you by:

- **prescribing a diuretic (water tablet)** this makes your kidneys produce more urine. If taken around six hours before bedtime, it encourages your kidneys to get rid of excess water in the evening instead of at night
- **prescribing synthetic ADH** taken either as a tablet or as a nasal spray just before bedtime. ADH should be used with caution. It can cause water retention and put strain on your heart if you already have heart problems or high blood pressure. Occasionally, it can cause dangerously low levels of sodium (salt) in your blood. It is, however, much less likely to cause problems in patients under 65 years old.

## What if I have other concerns?

If you have any concerns or worries about any other aspect of this problem, you should discuss them with your GP, specialist nurse or urologist.

# What should I do with this information?

Thank you for taking the trouble to read this information. Please let your urologist (or specialist nurse) know if you would like to have a copy for your own records. If you wish, the medical or nursing staff can also arrange to file a copy in your hospital notes.

## What sources have we used to prepare this leaflet?

This leaflet uses information from consensus panels and other evidencebased sources including:

- the <u>Department of Health (England);</u>
- the <u>Cochrane Collaboration;</u>
- the <u>National Institute for Health and Care Excellence (NICE</u>); and

• the European Association of Urology.

It also follows style guidelines from:

- the Royal National Institute for Blind People (RNIB);
- the Information Standard;
- the Patient Information Forum; and
- the <u>Plain English Campaign</u>.

#### DISCLAIMER

Whilst we have made every effort to give accurate information, there may still be errors or omissions in this leaflet. BAUS cannot accept responsibility for any loss from action taken (or not taken) as a result of this information.

**PLEASE NOTE:** the staff at BAUS are not medically trained, and are unable to answer questions about the information provided in this leaflet. If you have any questions, you should contact your Urologist, Specialist Nurse or GP in the first instance.