Nocturnal penile tumescence (NPT) testing

This leaflet explains more about the NPT test, including the benefits, risks and any alternatives. It also provides information on what you can expect when you come to hospital. If you have any further questions, please speak to a doctor or nurse caring for you.

What is NPT testing?
Nocturnal penile tumescence (NPT) refers to erections that occur during sleep. These erections are normal and happen nightly through a man’s life. But they are not caused by sexual stimulation. Typically, men have three to five erections during eight hours of sleep. A single erection may last for 30 minutes or longer. Nocturnal erections follow a man’s sleep cycles.

The most accurate method to record NPT is a special electronic device with two rings connected to it. One ring is placed at the tip of the penis; the other is placed at the base. While you sleep, the device monitors your nocturnal erections, including how many occur, how long they last, and how rigid they are. The traces are then analysed by the machine and the results interpreted by trained clinicians and practitioners in order to determine erectile function.

Why should I have NPT testing?
NPT testing is helpful when we are trying to determine a cause for erectile dysfunction, especially in young men. NPT testing is also used in research for men with prolonged erections (priapism) and other conditions potentially affecting erectile function.

What are the risks?
The NPT test is a safe, non-invasive procedure.

Are there any alternatives?
In some cases, an invasive test involving injecting an erection-inducing drug directly into the penis along with imaging assessment can be used. However this has risks and will only be recommended if necessary by your clinician.

How can I prepare for NPT testing?
You do not have to prepare especially for NPT testing. However if your clinician has asked you to stop certain medication before the test, please do so.

Giving my consent (permission)
We want to involve you in decisions about your care and treatment. If you decide to go ahead, you will be asked to sign a consent form. This states that you agree to have the investigation and you understand what it involves. If you would like more information about our consent process, please speak to a member of staff caring for you.
What happens during the NPT test?
You will first meet our nurse practitioner and a quick questionnaire about your erections will need to be filled. You will then be shown how to apply the recording rings of the NPT machine at the tip and base of the penis. This should be placed before you go to sleep. Please make note of the time you go to sleep and time you wake up. A sleep questionnaire is sometimes given to you, depending on the reason why you are having the test. After you wake up, you can remove the rings of the device. Please then bring the NPT machine in the morning to your named nurse practitioner at the urology centre (1st floor, Southwark Wing, Guy’s Hospital).

If you wake up needing to use the toilet, you can remove and replace the rings once you are done. Please make a note of the time when/if this happens so we can relate this to your NPT recording.

Will I feel any pain?
There should be no pain during the NPT test.

What happens after the NPT test?
After the test is complete, you will need to come back into hospital to return the NPT device to the nurse practitioner. We can then start to analyse the recording. There is nothing else needed after you return the NPT device to us.

Will I have a follow-up appointment?
You will be sent a follow-up appointment with your referring urologist after the NPT test.

Useful sources of information
General information on erectile dysfunction can be found on the British Association of Urological Surgeons website, w: www.baus.org.uk/patients/conditions/3/erectile_dysfunction_impotence
Contact us
If you have any questions or concerns about NPT testing please contact the urology nurse practitioner, Karen Briggs, by email, e: karen.briggs@gstt.nhs.uk, or mobile, t: 07717346821, Monday to Friday, 9am-5pm. Out of hours, you will be asked to leave a message. Please give your name and telephone number and you will be contacted as soon as possible.

For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit w: www.guysandstthomas.nhs.uk/leaflets

Pharmacy Medicines Helpline
If you have any questions or concerns about your medicines, please speak to the staff caring for you or call our helpline.
t: 020 7188 8748, Monday to Friday, 9am-5pm

Your comments and concerns
For advice, support or to raise a concern, contact our Patient Advice and Liaison Service (PALS). To make a complaint, contact the complaints department.
t: 020 7188 8801 (PALS)  e: pals@gstt.nhs.uk
t: 020 7188 3514 (complaints)  e: complaints2@gstt.nhs.uk

Language and accessible support services
If you need an interpreter or information about your care in a different language or format, please get in touch.
t: 020 7188 8815  e: languagesupport@gstt.nhs.uk

NHS 111
Offers medical help and advice from fully trained advisers supported by experienced nurses and paramedics. Available over the phone 24 hours a day.
t: 111  w: 111.nhs.uk

NHS website
Online information and guidance on all aspects of health and healthcare, to help you take control of your health and wellbeing.
w: www.nhs.uk

Get involved and have your say: become a member of the Trust
Members of Guy’s and St Thomas’ NHS Foundation Trust contribute to the organisation on a voluntary basis. We count on them for feedback, local knowledge and support. Membership is free and it is up to you how much you get involved. To find out more, please get in touch.
t: 0800 731 0319  e: members@gstt.nhs.uk  w: www.guysandstthomas.nhs.uk/membership

Was this leaflet useful?
We want to make sure the information you receive is helpful to you. If you have any comments about this leaflet, we would be happy to hear from you, fill in our simple online form, w: www.guysandstthomas.nhs.uk/leaflets, or e: patientinformationteam@gstt.nhs.uk

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