Posterior urethral valves (PUV)

This information sheet explains more about posterior urethral valves (PUV). If you have any questions after reading this leaflet, please feel free to ask your nurse, who will be happy to help you.

What is posterior urethral valves (PUV)?

Posterior urethral valves (PUV) is a condition that affects only boys and men. It may be diagnosed before or shortly after the birth, and is usually treated in childhood. It affects the urethra, the tube which connects the bladder to the outside of the body.

In boys with PUV, the urethra has a blockage in it near the bladder. This makes it difficult to pass urine, and can cause pressure which may damage the kidneys and the bladder. Even when the blockage has been removed, the kidneys and bladder may continue to be affected. Therefore, follow-up care is required to make sure that the damage to the kidneys and bladder does not become worse.

The diagram below indicates the presence of the posterior urethral valves (marked with X).

Image used with permission from the National Kidney Federation
What causes PUV?
The exact cause is unknown. It is not recognised as hereditary (passed on from parent to child) and it seems to develop in early stages of pregnancy when the organs, muscle and other tissue start to form. Even though there are no known risk factors, the condition is occasionally seen in twins or brothers. PUV does not develop in adulthood.

What are the signs and symptoms?
Men who have had PUV can be affected in very different ways but it is possible that the bladder and kidney have not been damaged. If this is the case, there will be no symptoms.

If the bladder or kidneys have been severely affected, you will need to have regular checks to monitor your condition. Kidney damage will not result in any symptoms until the kidneys start to fail. If your bladder is damaged, you may have no symptoms at all or you may notice some or all of the following:

- passing urine very frequently
- needing to pass urine urgently
- urine infections
- urinary incontinence (unable to get to the toilet in time)
- taking time to start urination
- poor urinary stream
- the sensation of incomplete bladder emptying
- inability to empty the bladder
- large bladder capacity.

Are there any tests to confirm the diagnosis?
PUV can be diagnosed by a routine ultrasound scan of a foetus during pregnancy and may be indicated by swollen bladder, ureters or kidney. It can also be diagnosed in a newborn baby if the bladder is swollen and urine dribbles constantly. If the blockage was not severe before or just after the birth, the condition can remain undetected until the symptoms develop in the early years.

What treatments are available?
If your PUV was diagnosed before or just after the birth, or in your early years, it would have been treated in childhood by surgery to cut the valves. Any further treatment required depends on whether your kidney and/or bladder are affected. In this instance, there are several treatment options, depending on the severity of the condition.

What is the outlook for men with PUV?
The outlook depends on how much damage has already occurred in the kidneys. Your doctor will be able to give you more information specific to you. You will need to continue attending follow-up appointments on a long-term basis to check that no further damage is being done to the kidneys or bladder.

Is there anything I can do to help myself?
Please follow these simple steps:

- pass urine every three to four hours
- drink 1.5 – 2 litres of fluid a day
- attend urology follow-up appointments.
Contact us
If you have any questions or concerns about PUV, please contact Winnie Nugent, clinical nurse specialist (CNS) on 020 7188 0136 (Monday, Tuesday, Thursday and Friday 8am – 5.30pm).

You can also bleep the CNS by calling the hospital switchboard on 020 7188 7188 and asking for the bleep desk. Ask for bleep 0856 and wait for a response. This will connect you to Winnie Nugent directly.

Out of hours, please call Aston Key Ward on 020 7188 8860 or Florence Ward on 020 7188 8818. You can also contact your GP.

For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit 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 9am to 5pm, Monday to Friday

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

NHS Choices
Provides online information and guidance on all aspects of health and healthcare, to help you make choices about your health.
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, and to become a member:
t: 0800 731 0319 e: members@gstt.nhs.uk w: www.guysandstthomas.nhs.uk/membership