

Posterior urethral valves

Information for patients



Leeds
Maternity Care

This leaflet is aimed at pregnant women with suspected finding of a posterior urethral valves on ultrasound examination.

The leaflet should only be supplied in supplement to a consultation with a senior obstetrician / fetal medicine specialist.

What is a posterior urethral valve?

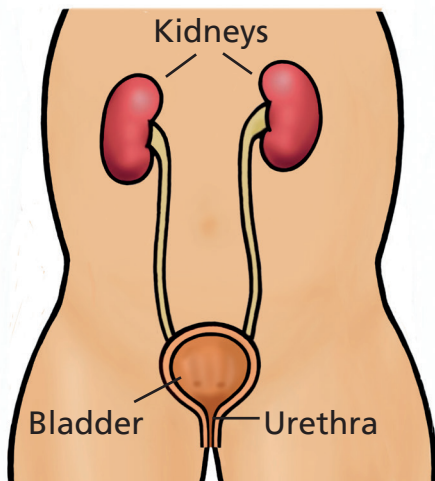
Posterior urethral valves (PUV) is a condition found only in boys that affects the urethra (the tube which runs from the bladder to the outside).

Urine flows from the kidneys down through the ureters to the bladder. During urination it passes through the urethra to the outside.

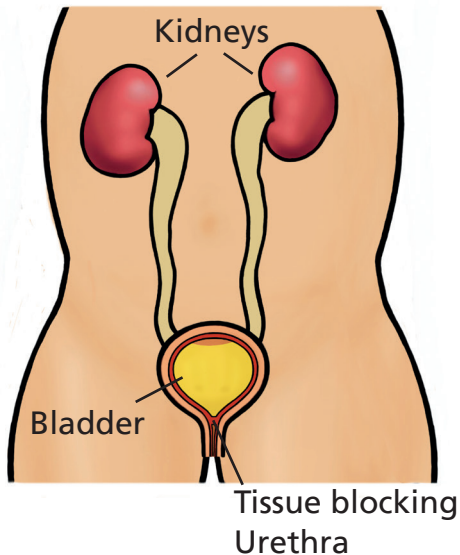
In cases with PUV, the urethra has a blockage close to the bladder, making it difficult to pass urine. This blockage causes back pressure which may result in urine being pushed back from the bladder into the ureters and kidneys. This can cause the kidneys and bladder to swell and may lead to kidney damage.

About one in every 8,000 male babies has PUV.

Normal Urinary System



Posterior Urethral Valve



How is it diagnosed?

This condition is often diagnosed during pregnancy however it is difficult to be more certain of the diagnosis until after the baby is born and has more tests.

There are a number of features on your baby's ultrasound scan that might suggest the diagnosis. These include an enlargement of the baby's bladder, a thickened bladder wall and a reduced amount of liquor (amniotic fluid) around the baby.

These features are present because of the blockage in the baby's urethra. The baby's ureters (the tubes that join the kidneys to the bladder) may also be more visible and the kidneys may appear swollen on the ultrasound scan.

What causes it?

This is a problem that occurs very early in the development of a baby. It is not been caused by anything you have done during your pregnancy and there is nothing you could have done to prevent it.

In a small number of cases (about 10%) this may have occurred because the baby has an underlying chromosomal abnormality. Your fetal medicine doctor will discuss this with you and offer you a test to check the baby's chromosomes.

Why does it mean for your baby?

This depends on the severity of the problem and the appearance of the baby on your ultrasound scan. Your doctor will discuss this with you in detail. In some cases your doctor will describe the problem as a "partial obstruction", this means some urine is still being passed out of the baby's bladder and some amniotic fluid is present round the baby. These babies will need a review by a neonatal doctor and may require an operation after delivery to release the blockage. Some babies will also develop problems with their kidneys because of unavoidable damage caused during the pregnancy. This can be very difficult to predict and may not be clear until after the baby is born.

Unfortunately, some blockages are much more serious. If the problem appears to be a complete blockage, this means that no urine is being passed from the baby's bladder and very little or no amniotic fluid will be present round the baby from about 17 weeks gestation and onwards. This is a serious problem as the amniotic fluid is needed to help with healthy development of the baby's lungs.

If very little or no amniotic fluid is present round the baby for most of the pregnancy then unfortunately many babies will not be able to breathe by themselves after birth and will not survive.

How is it treated?

The most effective treatment for this problem happens after birth. The baby will be reviewed by doctors after delivery. The treatment will depend on how significant the blockage has been during the pregnancy. The neonatal doctors will assess the baby's breathing and insert a thin plastic tube called a catheter into his bladder.

The urology (surgical) doctors will then assess if the baby requires an operation to remove the blockage. The baby may also receive antibiotics and further tests to assess the function of the kidneys. Unfortunately, if the blockage has been significant then often the baby will not be well enough to have further treatment and may not survive long after birth.

There are no treatments during pregnancy that have been proven to cure the problem or to improve the baby's long term outlook. Some teams of doctors have researched a treatment called vesicoamniotic shunting, which is a procedure that can be performed during pregnancy. Because we cannot be certain how effective this treatment is, it should only be considered after an in depth discussion with a fetal medicine specialist and in most cases it will not be appropriate for the baby to undergo this procedure.

What happens next?

Your local hospital will discuss your case and may refer you to the Fetal Medicine Unit at Leeds Teaching Hospitals for a specialist scan and discussion.

The doctors in the fetal medicine department will explain the outlook for your baby and offer more tests that may help you make decisions during the pregnancy.

Will it happen again?

If the posterior urethral valve is an isolated problem and the baby's chromosomes are normal then it is very unlikely that the problem will happen again in a future pregnancy.

You will be offered some additional scans for reassurance in the Fetal Medicine Department or with your local obstetric doctor.

Who else can I contact for support?

Be sure to ask questions to the doctor supplying you with this leaflet and make a note of any questions you would like to ask at your Fetal Medicine Unit appointment.

Your local hospital will also have a specialist midwife who you will be able to contact for further discussion.

Another helpful charitable resource is Antenatal Results and Choices:

Antenatal Results and Choices

- www.arc-uk.org

Questions / Notes



What did you think of your care?

Scan the QR code or visit bit.ly/nhsleedsfft

Your views matter



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