

Understanding NICE guidance

Information for people who use NHS services

Urinary tract infection (UTI) in children

NICE 'clinical guidelines' advise the NHS on caring for people with specific conditions or diseases and the treatments they should receive.

This booklet is about the care and treatment in the NHS in England and Wales of babies, children and young people who are younger than 16 years with a urinary tract infection (UTI). It explains guidance (advice) from NICE (the National Institute for Health and Clinical Excellence). Since UTIs commonly affect babies and young children, this booklet has been written for their parents, families and carers. It may also be useful for older children or young people with a UTI, or anyone with an interest in the condition.

The booklet aims to help you understand the care and treatment options that should be available to your child in the NHS. It does not describe UTI or the tests or treatments for it in detail. Your healthcare professional should discuss these with you and your child. There are examples of questions you could ask throughout this booklet to help you with this. Some sources of further information and support are on page 10.



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The advice in the NICE guideline covers the investigations and treatment that should be given to children younger than 16 years who have a UTI, and the information that should be offered to their families.

It does not look at:

- children who have already been diagnosed with any other kidney, bladder or urinary problems
- children whose immune system is not working properly
- children in intensive care units
- long-term management of repeated UTIs in sexually active girls.

Your child's care

Treatment and care should take into account children's needs and preferences, as well as those of their parents or carers, and you have the right to be fully informed and to make decisions in partnership with your child's healthcare team. Sometimes, children can give consent for themselves, depending on their age and how well they understand. Sometimes you will be asked to give consent for them as their parent. If you need more information on consent you could look at the following booklets available from the the Department of Health (www.dh.gov.uk):

- Consent: a guide for children and young people
- Consent – what you have the right to expect: a guide for parents.

All healthcare professionals should treat you and your child with respect, sensitivity and understanding, and explain UTI and its management simply and clearly.

The information you get from your child's healthcare team should include details of the possible benefits and risks of particular treatments. You and your child can ask any questions you want to and you can always change your mind as your child's treatment progresses or your child's condition or your own circumstances change.

Your child's treatment and care, and the information you are given about it, should take account of any religious, ethnic or cultural needs your family may have. It should also take into account any additional factors, such as physical or learning disabilities, sight or hearing problems, or difficulties with reading or speaking English. Your child's healthcare team should be able to arrange an interpreter or an advocate (someone who supports you in putting across your views) if needed.

In an emergency, if the person with parental responsibility for your child can't be contacted, healthcare professionals may decide to provide treatment that is immediately necessary in the best interests of your child.

If you think that your child's care does not match what is described in this booklet, please talk to a member of their healthcare team.

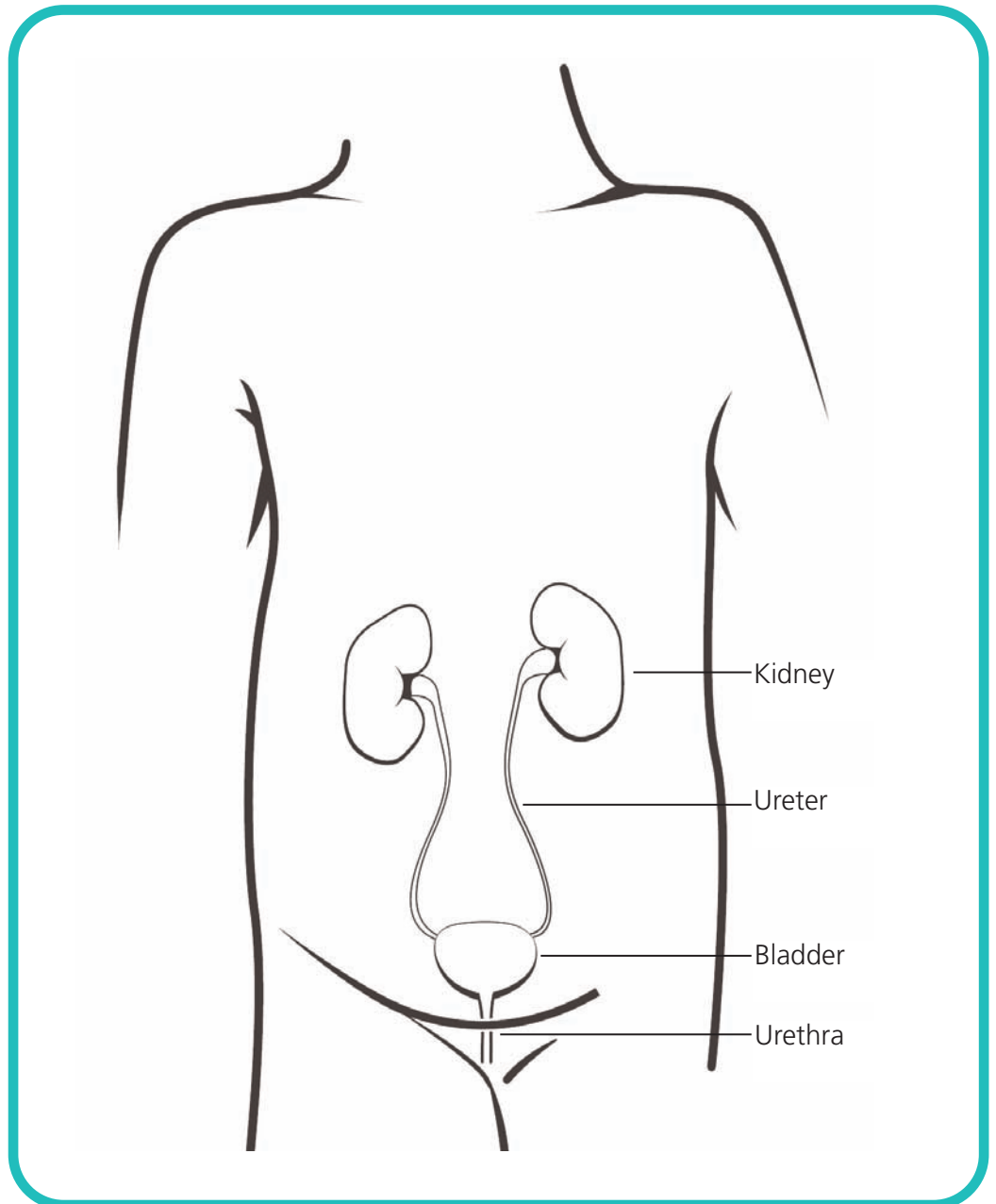
Urinary tract infection (UTI) in children

The urinary tract is made up of the kidneys, the bladder, the tubes that link them, and the tube that carries urine out of the body.

A UTI is a bacterial infection of the urinary tract.

It is important to diagnose and treat a UTI quickly. Occasionally, a UTI which affects the kidneys (doctors call this an upper urinary tract infection) may lead to permanent kidney damage if it is not treated.

NICE has made some recommendations for healthcare teams to use when diagnosing and treating UTI in children younger than 16 years. This booklet describes what NICE has said.



Finding out whether a child has a UTI

It can sometimes be difficult for healthcare professionals, parents and carers to know whether a child has a UTI, especially in babies and young children. This is because a child with a UTI may be generally unwell. There may not be any symptoms or signs that suggest the illness is due to a UTI.

How do I know if my child might have a UTI?

These are all possible symptoms or signs of a UTI.

General signs that your child is unwell

- Fever
- Vomiting
- Tiredness
- Irritability
- Not feeding well
- Not gaining weight properly
- Jaundice (infants only)

Specific signs of a UTI

- Pain when passing urine
- Needing to pass urine frequently
- Wetting
- Tummy pain
- Pain in the side
- Unpleasant smelling urine
- Blood in the urine

If the healthcare professional suspects your child may have a UTI, they will ask to test a sample of your child's urine to confirm whether or not there is an infection. You may be asked to collect the urine sample, or the healthcare professional may help with this.

Collecting a urine sample

Collecting a urine sample from a child can sometimes be difficult, especially from young children and babies. If you are not sure what to do or need some help in collecting the urine sample, ask your healthcare professional for advice.

Young children

- The urine should be collected in a sterile urine specimen bottle that you can get from your GP's surgery.
- Catch the urine by holding the bottle in the stream of urine while your child is urinating.
- Make sure you don't touch the open rim of the bottle because this could affect the quality of the sample.

Babies and children who are not toilet trained

- If you are unable to catch a clean sample, you can collect the urine in a special absorbent pad which you put in the baby's nappy. The urine sample is then sucked out of the pad using a syringe.
- This may be done by your healthcare professional or they may show you what to do so you can do it at home.

Your child may need to go to hospital for the urine sample to be collected if it is very difficult to do it at home or in the GP's surgery.

Once the urine sample has been collected, it can be tested to see whether your child has a UTI. The testing can be done in two ways, either by dipping a dipstick into the sample or by sending the sample to the laboratory to be looked at under a microscope. The most appropriate method will depend on your child's age and symptoms.

Treating UTIs in children

UTIs are treated with antibiotics. If the urine test shows that your child has a UTI, your healthcare professional may ask some more detailed questions about symptoms and any family history of bladder or kidney problems, and examine your child's tummy. This is a good time to tell your healthcare professional about any urinary tract problems that may have showed up on ultrasound before your baby was born. Your healthcare professional will also check for serious illness or infection by asking questions and doing an examination which might include checking your child's pulse and breathing rate.

If your child is younger than 3 months, or if they are at risk of becoming seriously ill, they will be referred immediately to a paediatric specialist (a hospital doctor who cares for children). The paediatric specialist will choose the best antibiotic treatment for your child, and this will probably include intravenous (IV) antibiotic treatment. IV antibiotic treatment is when liquid antibiotics are given directly into a vein through a needle.

For babies and children who are 3 months or older with an infection that does not involve the kidneys, your healthcare professional should prescribe oral antibiotics for 3 days. If your child is still unwell after 24–48 hours, you should return for further assessment and a review of treatment.

For babies and children who are 3 months or older with a kidney infection, your healthcare professional should prescribe antibiotics for 7–10 days. Your child may have to stay in hospital for a few days.

Questions you might want to ask your healthcare professional

- What can I do to help my child feel comfortable?
- When and how should I seek further help for my child?

Most UTIs clear up within 1–2 days from the start of antibiotic treatment. If your child does not seem to be any better after 24–48 hours, you should return to see your healthcare professional.

It is very important that your child finishes the course of medicine.

Tests and investigations

Babies and children who are 6 months or older, who respond well to treatment and do not have any other unusual features, do not need any further tests unless they have further UTIs.

Ultrasound scans

For some children, the healthcare professional may recommend an ultrasound scan. The scan is painless, and lets them see an image of the child's kidneys and bladder to make sure everything is working properly. This may be done within a few days or up to 6 weeks after the original infection.

Further tests

Following the ultrasound scan, your healthcare professional may also recommend further tests to see if there are any problems with your child's bladder or kidneys. If your child needs any further tests, you will be given more information about the tests and what they involve.

Questions about investigations and tests

- Please give me more details about the tests my child needs.
- What do these tests involve?
- How long will I have to wait until my child has these tests?
- How long will it take to get the results of these tests?
- Where will these be done? Will my child need to have them in hospital?
- Will my child be admitted to hospital for these tests, or can they be done at an outpatient appointment?
- Can I stay with my child at the hospital?

What might the investigations show?

If your child has a scan, a healthcare professional should explain what the likely results will be. If the results are normal, you should be sent the results in a letter and there may be no need to return to the hospital.

If problems were found during the scan, or your child gets a lot of UTIs, your healthcare professional should refer your child to a paediatric specialist.

What happens next?

If your child is referred to a paediatric specialist, they should check your child's height, weight and blood pressure. They should also check your child's urine to see if any protein is present.

If your child's kidneys are not working properly, or if your child has raised blood pressure or protein in the urine, they should be referred to a children's kidney specialist.

Information and advice

Your healthcare professional should give you (and your child where appropriate) advice and information about the treatment at every stage, the importance of finishing the course of medicine and how to help prevent another UTI.

They should give you advice and information about:

- recognising the symptoms of UTI quickly
- collecting and testing urine samples
- treatment
- preventing future UTIs
- any tests and investigations
- what is likely to happen in the long term.

You and your child should be aware that UTIs can happen again. To help prevent another UTI, any problems such as constipation should be treated.

It is helpful to encourage your child to drink enough fluids.

They should also be encouraged to use the toilet as soon as they feel the need to, rather than being expected to wait.

Further UTIs are common and parents, carers (and children and young people where appropriate) should be aware of the importance of seeking medical advice straightaway if you think your child has another UTI.

More information

NHS Direct online (www.nhsdirect.nhs.uk) has general health information. Your local Patient Advice and Liaison Service (PALS) may also be able to give you further information and support.

About NICE

NICE produces advice (guidance) for the NHS about preventing, diagnosing and treating different medical conditions. The guidance is written by independent experts including healthcare professionals and people representing patients and carers. They consider the best available evidence on the condition and treatments, the views of patients and carers and the experiences of doctors, nurses and other healthcare professionals working in the field. Staff working in the NHS are expected to follow this guidance.

To find out more about NICE, its work and how it reaches decisions, see www.nice.org.uk/aboutguidance

This booklet and other versions of this guideline aimed at healthcare professionals are available at www.nice.org.uk/CG054

You can order printed copies of this booklet from the NHS Response Line (phone 0870 1555 455 and quote reference N1305)