

Urinary tract infections in children

What is a urinary tract infection (UTI)?

A UTI is an infection in the urinary tract which includes your kidneys, bladder, the tubes connecting them (ureters) and the passage out from the bladder (urethra). It is quite common particularly in young children and may affect the bladder and sometimes the kidneys.

Causes of a UTI

UTI's have many causes. They can be caused by a growth of germs in the bladder and sometimes the kidneys. An infection may make a child only mildly unwell or very sick.

Signs and symptoms of a UTI

As infants are unable to communicate their discomfort or frequency of passing urine, it is often difficult to tell what is wrong with them. They may have fever, irritability, poor feeding or vomiting.

Older children may complain of abdominal pain, passing urine frequently, a burning sensation when passing urine and/or smelly urine.

Diagnosis of a UTI

Testing your child's urine is the only way to know for sure if they have a UTI. Collecting a clean urine sample in babies and younger children and a midstream urine sample from older children is very important. Urine bag samples are often contaminated and are not reliable to test urine for a UTI. For this reason, a suprapubic aspirate or in-out catheter urine specimen may be required – your doctor will discuss and explain these options with you.

A screen of the urine specimen is first done in the emergency department. This can provide clues to the presence or absence of a UTI, but a final diagnosis can only be made by sending the urine to the laboratory for culture. Culture results take 24 to 48 hours. Sometimes the first test can suggest a UTI, so treatment may be started. The medication may be changed once the culture results are available from the laboratory.



Treatment

Antibiotics are the main treatment and are usually taken by mouth. Children who are more unwell with a UTI may be admitted to hospital for antibiotics directly into a vein by intravenous therapy. Symptomatic treatment may be used as well for pain and fever. Always ensure adequate fluid intake.

Other tests

These may be carried out when a child has been diagnosed with a UTI to look for a problem within the urinary tract. They are usually performed once the infection has been treated successfully.

- Ultrasound scan – This is a simple and painless test much like the scans women have during pregnancy.
- Micturating cysto-urethrogram (MCUG) – This test involves passing a catheter into the bladder through which dye is injected and x-ray pictures are taken.
- DMSA scan – This is a nuclear medicine test to look for scarring of the kidneys.

Discharge information

- It is very important that your child finishes the course of antibiotic treatment that has been prescribed and that the medication is stored according to the directions on the container.
- The doctor may recommend that your child stay on a low dose of antibiotics for a long period of time to prevent a further urine infection.
- Encourage your child to drink plenty of fluids.
- Attend all follow up tests and appointments. This includes a check of the urine by your GP after the treatment of antibiotics has finished.
- Your child may return to normal activities when well.

If you have any other concerns take your child to the doctor or emergency department.



Government of **Western Australia**
Child and Adolescent Health Service

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Child and Adolescent Health Service
15 Hospital Avenue, Nedlands, WA, 6009
Telephone: (08) 6456 2222
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