



**Urology Service** 

## **Bladder Instillation of Gentamicin**

## Information for parents

## Introduction

Your child has been diagnosed as having recurrent urinary tract infections (UTI's). This means your child has frequent infections in their urine (wee) that make them feel unwell and require antibiotics by mouth or intravenously (through a drip). The frequency of these infections has required your child to seek medical assistance on repeated occasions.

Your child's doctor has advised administering Gentamicin (an antibiotic) into your child's bladder (intravesically). This is a new treatment and should only be given when other treatments have failed. Your child can only have this treatment if they are intermittently catheterised or have an indwelling catheter.

## What is a urinary tract infection?

The urinary tract is made up of the kidneys, bladder, ureters (tube that link the kidneys to the bladder and urethra (tube that carries urine out of the body). A UTI is a bacterial infection of the urinary tract.

Your child may have any of the following symptoms:

- Fever
- Vomiting
- Tiredness
- Irritability
- Loss of appetite
- Pain when passing urine
- Needing to pass urine frequently
- Wetting
- Tummy pain
- Pain in the side
- Unpleasant smelling urine
- Blood in the urine

## How will I know my child needs treatment?

As soon as you think your child may have a UTI you should contact the urology nurses at Alder Hey on the number listed at the end of this information leaflet. The nurse will ask you what symptoms your child has.



Before starting intravesical Gentamicin, a urine sample will need to be collected to confirm that your child has a UTI. A sample should be collected via your child's normal catheter. If you are not sure how to do this, please ask the urology nurse for help. The sample does not need to be sent to Alder Hey, it can be taken to your GP. The sample must be sent to the laboratory to be looked at under the microscope.

Gentamicin can only be started once the laboratory has confirmed a UTI. The urology nurses will contact the laboratory for the results and inform you when treatment can begin.

#### Are there any side effects to intravesical Gentamicin?

Most medications can cause unwanted side effects but not everyone will experience them.

Gentamicin may irritate the bladder lining. If your child has any blood in their urine you should contact the urology nurses immediately.

Gentamicin does not normally enter the body from the bladder, but blood tests will be done to check for this. If your child complains of any dizziness or ringing in the ears (tinnitus), please seek urgent medical attention, as it may mean Gentamicin is accumulating in your child's blood stream.

# IF YOUR CHILD HAS ANY SIDE EFFECTS PLEASE REPORT TO YOUR CHILD'S DOCTOR OR NURSE AS SOON AS POSSIBLE.

Gentamicin should not be given to your child if they have an allergy to Gentamicin or any of the ingredients added to the solution. If you have any concerns, please discuss them with your child's doctor or nurse.

If your child has had surgery to their bladder, you should inform your child's doctor or nurse, as they may not be able to receive this medication. If your child has 'vesicoureteric reflux' they cannot have this treatment.

#### What are the benefits of giving intravesical Gentamicin?

Giving Gentamicin directly into the bladder (intravesically) means that the antibiotic is administered directly to the site of infection. It also helps to prevent side effects, such as nausea and diarrhoea (loose stools), that can happen when antibiotics are given by mouth. It may prevent your child being admitted to hospital for intravenous antibiotics. It may also help reduce the frequency and symptoms of UTI.

#### Will it hurt?

The Gentamicin is diluted with saline (salt water) and given via a catheter. Your child may feel a cold sensation in their bladder as the fluid is inserted. It will not hurt.

#### Are there any alternatives to this procedure?

This treatment is used as an alternative when oral antibiotics and other conventional methods, such as prophylactic antibiotics, have failed or been ineffective over time. The only alternative to this treatment is intravenous antibiotics.

#### What will happen if I decide I do not want my child to have this treatment?

We will continue to support you and provide appropriate treatment and advice.

#### How is the Gentamicin given?

The treatment is given once a day, at the same time, for five days. A urology nurse will give the first treatment at Alder Hey. They will explain the procedure to you and your child. This appointment will last approximately one hour. Your child will then need to wait for 2 hours to have a blood test. After the blood test, your child can go home. Your child will not need to stay overnight. At this appointment you will be given all the equipment required so that you can administer the next four treatments at home.

You will need to collect a sharps box from your child's GP. Your child's urology nurse will request this for you.

2 hours after Gentamicin is given on days 1 and 3, your child will need to have a blood test to ensure the Gentamicin is not present in their blood stream. On day 1 this will be done before they are discharged home. You will be given a date and time to attend for bloods at Alder Hey hospital on day 3.

Your child's urology nurse will contact you with the blood test results.



## Instructions for giving Gentamicin

- 1. Wash your hands using liquid soap and dry thoroughly on paper towel / kitchen roll.
- 2. Apply alcohol hand rub.
- 3. Open all sterile packages onto a clean tray.
- 4. Connect red filter needle to 2ml luer lock syringe and draw up the required volume of Gentamicin from the vial.
- 5. Remove red needle from syringe and put the needle and vial in the sharps box.
- 6. Remove cap from Uro-Tainer® M Sodium Chloride 0.9%.
- 7. Attach green needle to syringe of Gentamicin and inject into the tip of the Uro-Tainer® M Sodium Chloride 0.9%.
- 8. Put the green needle and syringe in the sharps box.
- 9. Clamp the Uro-Tainer® M Sodium Chloride 0.9% and mix the solution by gently shaking the bag.
- 10. If your child does not have an indwelling catheter, insert catheter via normal route (urethra or Mitrofanoff).
- 11. If your child has an indwelling catheter, ensure flip-flow valve is attached to catheter and use alcohol wipe to clean valve.
- 12. Drain the bladder of urine until empty.
- 13. Attach Uro-Tainer® M Sodium Chloride 0.9% into the end of the catheter.
- 14. Unclamp the Uro-Tainer® M Sodium Chloride 0.9% and gently squeeze the Uro-Tainer® M Sodium Chloride 0.9% solution into bladder.
- 15. If using an indwelling catheter, clamp the catheter using the flip-flow valve.
- 16. Clamp Uro-Tainer® M Sodium Chloride 0.9% and remove from indwelling catheter.
- 17. If using an intermittent catheter, clamp Uro-Tainer® M Sodium Chloride 0.9% and remove catheter.
- 18. After a period of 2 hours (maximum of 4 hours) empty the bladder using clean intermittent catheterisation.
- 19. If using an indwelling catheter, unclamp flip-flow valve and empty the bladder into drainage bag or toilet.

#### **Storage information**

Gentamicin should be stored at room temperature in a locked cupboard away from children.

#### **Going home**

Your child will be allowed home or back to school as soon as the appointment ends. If they are well enough they can continue to attend school during the 5 days the Gentamicin is given.

#### **Prescription of intravesical Gentamicin**

Intravesical Gentamicin can only be prescribed by your child's Urology Consultant. Therefore, you must collect the Gentamicin, and equipment required for administration, from the urology nurses at Alder Hey.

#### For further information

Please contact the Urology Nurses on 0151 252 5852.

This leaflet only gives general information. You must always discuss the individual treatment of your child with the appropriate member of staff. Do not rely on this leaflet alone for information about your child's treatment.

This information can be made available in other languages and formats if requested.

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