Vesicostomy

What is it?
A vesicostomy is a direct channel from the bladder to the abdominal wall. A small opening is made, low down on the tummy wall, just above the pubic bone. It is created to allow urine (wee) to drain continuously from the bladder into a nappy.

Who?
A vesicostomy may be needed for children who cannot empty their bladder completely. This sometimes occurs if the nerves to the bladder are abnormal, if there is brain or spine abnormality that causes a problem with bladder function, or if there is a blockage to bladder emptying.

Why?
A vesicostomy prevents urine being trapped inside the bladder. Poor emptying of the bladder can lead to urine infection and back-pressure on the kidneys which can cause kidney damage.

What are the alternatives?
Some problems with bladder emptying can be improved with physiotherapy and bladder training exercises.
Most children with emptying problems who can’t be managed with physiotherapy will be considered for intermittent catheterisation.
Vesicostomy is considered for those patients for whom intermittent catheterisation is not appropriate or not successful.

How?
Creating a vesicostomy involves a small operation performed under general anaesthesia. It may be performed as day surgery or overnight stay. A dose of antibiotics is often given during the procedure, to reduce the chance of urinary tract infection after surgery.
Sometimes, a tube is left through the vesicostomy channel to help it heal.

What happens after surgery?
The child will usually wake quickly after surgery and may eat and drink as normal.
If a tube has been left, this will need to be removed by the Urology team or the GP. Specific instructions as to timing will be given before you go home. Once the tube has been removed, no dressing is required and the urine will drain directly into the nappy. Some Vaseline to the stoma site may help with skin irritation while it is healing.
Pain relief with paracetamol or nurofen may be needed for 2 to 3 days after the procedure.
There may be some blood in the urine for several days after the procedure. This is temporary. There may also be a small amount of bleeding from the skin, which will settle after a couple of days.
There will be sutures visible at the stoma site. These are dissolvable and will fall out after few weeks.
Your child can have a quick bath or shower from 2 days after the surgery. They can swim after two weeks.
What are the complications?

As with any operation, bleeding and infection are the most common complications, but these occur uncommonly. If concern of these occurs, please seek medical attention for advice and treatment.

Bleeding is usually mild and self-limiting and presents with some blood in the urine or around the wound site.

Urinary tract or stoma site infection may occur. Symptoms include fever, abdominal pain or smelly urine.

**Complications specific to vesicostomy**

It is common for the skin around the vesicostomy to become red and irritated, especially early on. This is because the skin is not used to constant contact with urine. It will improve, but changing nappies more frequently and applying barrier creams around the stoma can help protect the skin. A rash with red spots is likely to be fungal, and should be treated with cream such as ‘Canestan’.

Sometimes, the lining of the bladder bulges through the opening – this is called ‘prolapse’. This isn’t usually uncomfortable, but will make the stoma look different to normal and may reduce the drainage. If this occurs, you should see your GP or Emergency Department.

Rarely, the channel narrows and drains less urine or no urine at all. If the nappies are noticeably drier overtime, you should seek medical attention. If the nappies are dry over several hours, you should attend a children’s Emergency Department. The stoma may need to be stretched (dilated), to ensure it drains well enough.

Very rarely, urine can leak into the tissue around the stoma. This may present with pain, redness or swelling around the vesicostomy site.

What is the follow-up?

Follow-up is individualised, depending on the reason for the procedure.

Usually, a follow-up appointment is made 4-6 weeks after the procedure. An ultrasound would be requested prior to the appointment, to check on the kidneys and make sure the vesicostomy is draining well.

What happens in the future?

A vesicostomy is often a temporary bladder drainage solution. It is used until either the underlying problem is solved, or until intermittent catheterisation can be taught successfully.

If the vesicostomy is still needed when the child is older, a urine collection bag may be used to contain the urine and keep the child’s clothing dry.