Spina Bifida and Types of Urology Surgeries

Spina bifida may cause problems in the urinary system that require surgery or a medical procedure. This handout describes procedures your child might need.

Catheterizable urinary stoma (also referred to as “Mitrofanoff,” “MIC,” or “continent vesicostomy”)

In this surgery, the doctor creates a stoma (an opening) from the belly into the bladder (see illustration below). The surgeon puts a catheter (small tube) in the stoma to empty urine from the bladder. The stoma is usually located in the belly button or the belly. After surgery, your child will have the catheter left in the stoma until it heals.

Once the stoma heals, the catheter is removed to allow clean intermittent catheterization (CIC) through the stoma. Your child will have a short hospital stay and a brief recovery. (Note: If a bladder augmentation is done at the same time, the recovery will take longer).

Injections to the bladder-ureter junction (“Deflux”)

This surgery is used when urine flows back into the kidneys from the bladder (called urinary reflux). The doctor makes the opening between the bladder and the ureter smaller by putting medicine (called Deflux) into the ureter. The smaller opening prevents urinary reflux. This is usually an outpatient procedure. The child does not have to be admitted to the hospital and the recovery time is brief. Your child may need more than one dose of medicine to get a good result. Over time, the procedure may have to be done again if reflux occurs.
**Vesicostomy**

In some children, the urine stays in the bladder and cannot be released even with CIC and medicine. To solve this problem, the surgeon makes a vesicostomy [VEH-siH-KOS-toh-mee] (small opening) through the lower belly into the bladder (see illustration below). This allows urine to leak out onto the diaper. The leaking keeps the urine levels in the bladder low. Your child will stay in the hospital briefly and have a short recovery time. Your doctor will usually close the vesicostomy before your child begins school.

**Reimplantation of ureters**

With some children, urine flows back into the kidneys (reflux) and is not fixed with CIC or medicine. Your child may also have more urinary tract infections (UTIs). To help these problems, the surgeon performs a reimplantation of the ureters. This procedure involves taking the ureters away from the bladder and reattaching them at a different angle (see illustration below). This surgery usually works very well. Your child will need to stay in the hospital for several days. It may take your child several weeks to recover.
Bladder augmentation

Bladder augmentation is a surgery that makes the bladder larger so it can hold more urine. To make the bladder larger, the surgeon makes a patch for it from the stomach or bowel (see illustration below). Your child will need to stay in the hospital for 5 to 7 days and will recover for several weeks. Your child will go home with a catheter in place until the bladder heals.

About 6 weeks after surgery, your child’s doctor will test the bladder before taking out the catheter. Often, the urine has mucous strands. To manage the mucous, the bladder must be irrigated (flushed out) daily, or more often as needed. To do this, a tube is placed through your child’s stoma to the bladder. You and your child will be taught how to do this procedure.

Your child will need doctor checkups throughout their life. These checkups will include bladder testing and looking at their urinary system. Ten years after this surgery, your child will need to have a cystoscopy test. After that, your child will need to have this test every year.

Surgeries to the bladder neck

This surgery helps your child control frequent urges to urinate (pee). It also controls urine leaking. The surgeon wraps muscle tissue around the bladder neck and tightens the bladder outlet. The bladder neck is the part of the bladder that leads to the opening outside the body. The tightening slows urine flow. Your child will stay in the hospital for several days and recover for 2 to 3 weeks.

What if I have more questions?

This handout briefly explains these surgeries. For more information about the surgeries, talk to your child’s doctor.