Bladder Augmentation

What is bladder augmentation?
Bladder augmentation is a surgical procedure to enlarge the bladder so that it can hold a greater volume of urine. The surgeon usually uses a portion of the bowel or stomach for this procedure. Intermittent (repeated) catheterization will usually be necessary after discharge and throughout.

Before surgery
• The day before admission to the hospital your child needs a special diet and bowel prep at home. See the attached sheets.
• The child is usually admitted the day before surgery to clean out the bowel. Usually, a nasogastric (NG) tube (a small tube that goes from the nose to the stomach) is placed and a special salt solution is given through the tube. Occasionally, the child will be able to drink the salt solution.
• This salt solution will be given for about six hours. The time varies depending on the amount of the stool in the bowel.
• When the salt solution is finished, antibiotics are given by mouth at various intervals to destroy bacteria in the bowel.
• Blood tests will be done on the day of admission.

• An IV may be started to help your child get enough fluids. One or more catheters may be placed to keep the bladder empty of urine and to allow it to heal. Antibiotics may be given as well.
• Your child may drink clear liquids the day before surgery.

After surgery
One or more catheters may be placed to keep the bladder empty of urine and allow it to heal. The color of the urine will be red or pink with a few blood clots and mucous shreds.

Foley catheter: a tube that is inserted through the urethra (the place where your child normally urinates) into the opening of the bottom of the bladder.

Suprapubic catheter: a tube inserted into the top of the bladder through the lower abdomen.

NG tube: this tube is used to keep the stomach empty after the surgery until bowel activity returns. The length of time the tube stays in varies. An average is 3-5 days, but it can stay in more than a week in some cases.

Comfort
Your nurse will explain the medicine that will be used to keep your child comfortable. Please feel free to ask your nurse any questions you may have.

Two machines, a cardiac monitor and a pulse oximeter, may be used to help the nurse observe your child's heart rate and breathing patterns while they are receiving narcotics.
Fluids

Your child will have an IV to provide fluids and as a way to give IV medications (pain medications and antibiotics). The doctor will decide when this is no longer needed.

Diet

After surgery your child will not be able to eat or drink anything by mouth. Within a few days when bowel activity returns, the NG tube will be pulled and the diet advanced slowly (clear liquids, full liquids, soft diet). This varies from 3 days to over a week in some cases. It is important for your child to drink plenty of fluids. A nutritious diet will promote healing.

Activity

Quiet activity such as sitting in a chair or walking is encouraged the first few days after surgery. Your doctor will give you more specific instructions regarding activity at home.

Incision care

Ask your doctor for more specific instructions regarding the incision.

Discharge

Your child will be discharged when they are tolerating a regular diet, using oral pain medications, has no fever, and has resumed some of their normal activities.

Your child will be going home with one, possibly two catheters in place. One of them may be clamped, the other will drain into a bag.

Follow-up

Approximately two weeks after discharge your child will have a test called a cystogram. Contrast fluid will be infused into the catheter and the bladder allowed to fill. If all of the contrast fluid stays in the bladder and there are no "leaks" then one catheter is removed and clean intermittent catheterization is started. If there are no problems with intermittent catheterization then the other catheter is removed.

When to call the doctor

- Your child has a decrease in urine output which doesn't increase after irrigation
- You have difficulty irrigating the catheter
- Urine has a foul smell
- The incision (cut) looks red or swollen, or is draining
- There is an increase in pain
- Your child's temperature is over 101.5°

Additional Parent Education Available

- Urinary Catheter Irrigation
- Urinary Catheterization Care at Home
- Intermittent Catheterization Parent's Guide (Girls/Boys)

If you have any questions or concerns, please call your child's doctor at Pediatric Surgical Associates at (612) 813-8000 or 1-800-992-6983.