Boari Continent Stoma

Why do I need this surgery?
A Boari continent stoma is a surgical procedure that is done for people who are not able to urinate, have a large capacity bladder, and cannot perform clean intermittent catheterization through the penis or urethra. This surgery will allow you to empty your bladder by inserting a catheter through a convenient opening that is surgically created opening on your abdomen that is called a stoma.

What is done during the surgery?
A Boari continent stoma is performed in the operating room under general anesthesia. The procedure can take 2 to 3 hours, depending on the complexity.

During this procedure, the small part of the bladder is rolled into a tube. The end of this tube is brought out onto the abdominal wall. The continent stoma will have a biologic valve in it to prevent urine from leaking. In general, intestines are not used in this procedure.
During the surgery, an additional catheter called a suprapubic tube (SP tube) is placed through the top of the bladder. This tube will come out next to your incision and will also drain urine. This tube provides extra protection by decompressing the bladder. The SP tube will be removed in approximately 3 weeks.

Generally these procedures are performed as an open procedure, through an incision. However, some patients may be candidates for a robotic assisted procedure in which the surgery is performed by inserting a camera and instruments into the abdomen through 5 separate small “keyhole” incisions. The surgeon performs the same procedure, with the exception of the larger incision in the abdomen.

**What happens during the hospital stay?**

Your hospital stay usually lasts 2-3. We will give you fluids through your veins (IV) until your bowels begin to function. We will then advance your diet starting with clear liquids. If your bowels take longer than 7 days to begin to work (called an ileus), your nutrition will be supplemented through your IV.

You may have some post-operative pain after the procedure. While in the hospital, this is treated with a Patient Controlled Analgesic device (PCA). With this device, the patient can immediately receive a safe dose of pain medications, up to a certain dose, every few minutes. Nurses may also give additional pain medications as needed.

During the hospital stay, you will meet many people who are involved in your care. University of Michigan is a teaching hospital, meaning that the Department of Urology is dedicated to training resident physicians. Residents are MD’s at various stages in their training. Residents round on patients, address immediate needs, and carry out the plan on the attending physician.
(your surgeon). We strongly believe in a team approach to medicine and the nurses, residents, and other medical professionals all work together to carry out the attending physician's plan and insure safe, quality post-operative care.

**Will I be able to urinate after the surgery?**
No, you will not urinate as you normally did prior to the surgery. Eventually, you will be taught how to drain your bladder by inserting a catheter into the Boari continent stoma.

**What Happens when I go home?**
Generally you will be discharged to home when your vital signs are stable, your pain is controlled, and you can feed yourself. Usually you are discharged with at least 1 catheter to manage. At home, you should be active – sitting in chairs, moving around, but try to avoid any prolonged activity that involves strongly tensing your abdominal muscles. This includes exercise, lifting heavy objects greater than 10 lb., playing sports such as golf. You may drive when you no longer need pain medication and your activity is not limited by pain. You may shower, as long as you do not submerge your incision, stoma, or catheters under water. It is safe to get the incision, stoma, or catheter wet, as long as you pat it dry afterwards.

You will have your staples in the incision removed at home by a visiting nurse, or at a return visit to your surgeon’s clinic.

**What do I do about Urinary Incontinence after the bladder augmentation?**
During the initial recovery phase (first 30 days), some patients experience urinary incontinence from his/her urethra. This usually represents the bladder
healing from surgery, but it also may be due to a urinary tract infection. If the urine is cloudy or foul smelling, please call the contact numbers noted below. You may need to provide a urine sample so we can test it for infection and treat with an antibiotic if necessary. If the urine is clear, we usually treat the incontinence with a bladder anti-spasmodic medication.

**What are the risks of this procedure?**

All surgery carries some risk and it is not possible to fully define the risk for each patient prior to surgery. We **work with your internist and neurologist to optimize your health and minimize your risk prior to surgery.** If you have any underlying heart or lung problems that are currently being treated please inform your surgeon and request that your primary physician is involved in the pre-operative planning.

General anesthesia, though rarely, can cause pneumonia, heat problems, damage to the mouth and airways. Your anesthesiologist will talk with you prior to the surgery to go over the risks of anesthesia prior to admission to the hospital.

Complications that can occur during Boari continent stoma include, but are not limited to: wound infections, bleeding, injury to the bowels/bladder, large blood vessels, or other organs. Bowel obstruction can also occur after abdominal surgery. This may require extended bowel rest with an NG tube or surgery to correct the obstruction. Even though rare, blood clots in your legs, in your lungs, or in your brain can also occur either during the surgery or afterwards. Occasionally a progressive neurologic disease such as MS can worsen after a complicated urinary diversion surgery. Nerve injuries also rarely occur during surgery.
Over time, the stoma may also develop some scaring which keeps you from comfortably inserting a catheter into the opening. If this occurs, more surgery, is needed to correct this and can be done as an outpatient. If you gain or lose weight, your stoma may also require some revision.

**How am I followed over time?**

You will return for a post-operative visit 3 to 4 weeks after surgery. The next visit is 3 months after surgery at which we will obtain a renal ultrasound and urodynamics, if needed. Afterwards, we follow on a 6 month schedule for 1 year then yearly afterwards.

**Contact Information**

If you have any questions, please contact the University of Michigan, Department Of Urology at 734-936-7030 during working hours (8:00 am – 5:00 pm). If there are any concerns that need to be addressed after business hours or on weekends, please call 734-936-6267 and ask to speak with the Urology Resident on Call. If you need to be evaluated by a physician on an emergent basis, please go to the nearest ER and have the ER physician contact the University of Michigan urology resident on call for assistance.

Disclaimer: This document is for informational purposes only and is not intended to take the place of the care and attention of your personal physician or other professional medical services. Talk with your doctor if you have Questions about individual health concerns or specific treatment options.

©2011 The Regents of the University of Michigan
Last Revised February 2012