The Orthotopic Neobladder

What is an Orthotopic Neobladder?
An orthotopic neobladder is a reservoir created during surgery that replaces your urinary bladder. In this procedure the surgeon removes your bladder (cystectomy) and then makes a new bladder (neobladder) from a segment of small intestines. The surgeon connects your ureters (bring urine from the kidneys) and your bladder for voiding urine) to individuals to void more for an external device to collect urine.

Post-Operative Management of a Neobladder

Initial Post-op Phase: continuous drainage catheter(s) in the neobladder.
For two or three weeks after surgery, a catheter will protrude from the urethra or your neobladder. The catheter assures that the urinary system, especially the newly created neobladder, drains properly and remains without distension until the suture lines heal. During the time that these catheters are in place, you will need to wear an external urinary bag connected to the catheter in order to collect your urine. The catheter and drainage bag anchor to your body in order to prevent pulling on the catheter or kinks that might stop the flow of urine. During your hospitalization, your nurses will involve you in needed care as soon as you are ready so you can be comfortable handling the procedures and supplies when you go home. Your home responsibilities will include irrigations of the catheters, care of the supplies required for your neobladder, doing Kegel exercises and “scheduled urination”.

The catheter in your new bladder has three parts.
1) Coming out of your body is the “draining catheter”. It travels to the large collection bag (Foley bag).
2) The “balloon port” is the portion with a cuff at the tip.
3) The “irrigation port” is the third section of your catheter.

The nursing staff will help you identify these three parts.
Instructions for Irrigating a 3-Way Indwelling Urinary Catheter

Equipment Needed:
- Normal Saline (NS)
- 60cc Irrigating Syringe (cath tip)
- Measuring Container
- Absorbent Towel or Tissue
- Clean Pitcher for NS
- Catheter

Procedure:
1. Wash hands before and after this procedure!
2. Pour some normal saline at room temperature into clean pitcher.
3. With the catheter syringe, draw up 30 to 60 cc of normal saline. Place the syringe on a clean towel within reach.
4. With one hand clamp the area above the irrigation port and remove the catheter plug. Place the plug on a clean towel within reach.
5. Fit the filled catheter syringe into the mouth of the irrigation port. THEN release your hand clamping the catheter.
6. Clamp with that same hand the area below the irrigation port and gently instill the saline into your bladder.
7. Withdraw gently on the syringe to remove mucous particles.
8. Note the amount withdrawn and discard it into the measuring container.
9. If necessary, clamp the irrigation port with the catheter plug and repeat this procedure. Use another 30 to 60cc normal saline exactly the same way until the urine returning is fairly clear of mucous and drains freely from the catheter.

You will need to irrigate your catheter__________times a day for _________weeks and then _________times a day.

During the day, you will need to empty your urinary bag whenever the urine fills it 1/2 full or every 4 to 8 hours.
- Do not touch the end of the drainage spout and ALWAYS wash your hands before and after touching the catheter or drainage bag.
- Wash the skin around the catheter with soap and water every day and after moving your bowels.

How to Make Your Own Normal Saline
Instead of buying already prepared normal saline, you may want to make it. Here are two different ways to make your own normal saline.
First way:
1. Boil two quarts of water for 10 minutes.
2. Add four teaspoons of table salt to the boiled water.
3. Let the saline cool and then pour it into a clean plastic or glass bottle.
Second way:
1. Buy a gallon of distilled water at the grocery store.
2. Add eight teaspoons of table salt directly into the bottle.
3. Shake it until the salt has dissolved before using it.

Studies show that this saline remains free of bacteria for 4 weeks if you keep this solution in the refrigerator. Date the saline, keep it in the refrigerator, and only pour into a clean covered pitcher the amount you need for irrigation over a 24 hour period. You can keep the saline at room temperature for 24 hours before being discarded.

After Your Urinary Catheters have been Removed
After the neobladder has had adequate time to heal, your doctor may do some different tests to see if the pouch is healed and working properly. An x-ray of your new urinary tract may be done. These tests are not painful or time consuming. After checking the results of these tests, your doctor may remove the continuous drainage catheter. You will be shown a schedule for voiding.

You must now learn how to train your bladder to regain control over urination. This is because your new bladder does not have the same sensations of fullness or the automatic control of your original bladder. You may experience some incontinence (involuntary flow of urine) for up to a year after your surgery. However, long-term studies show that the neobladder outcomes are generally good over years. The first step in retraining your bladder is to strengthen the muscles at your bladder outlet. These are exercises you can easily perform called Kegel exercises.

Kegel or Pelvic Muscle Exercises
Studies show that pelvic muscle exercises, also called Kegel exercises, improve mild to moderate incontinence. When performed correctly, these exercises help to strengthen the pelvic muscles. This improves support for the neobladder. With regular exercise, you can build strength and endurance to help regain, improve, and maintain bladder and bowel control.

- How to Find and Recognize the Muscles:
  Imagine you need to hold back gas. Squeeze and lift the rectal area (for women, this includes the vaginal area) without tightening your buttocks or abdomen. Keep your thighs, buttocks, abdomen, and any other muscles relaxed as you do the squeezing. At first, check yourself frequently by placing your hands on your abdomen and buttocks to insure that you do not feel your belly, thighs, or buttocks move. Continue to experiment until you have isolated the correct muscles of the pelvic floor.

- Suggested Exercises:
  There are two types of exercises to do. Doing both types is the best way to improve your bladder control.
  The first exercise works on your ability to hold the muscles tight (contracted) and relaxed. It is important to relax the muscles for the same amount of time you tighten them. This builds a strong dam to hold back urine. Slowly tighten, lift, and draw up the pelvic muscles and hold them while you count of five. Then relax the muscles for a count of five. This may be difficult at first. If you feel the contraction letting go, just retighten the muscle.
The second exercise is a quick contraction. This works the muscles that quickly shut off the flow of urine (like a faucet) and helps prevent accidents. Tighten the muscles quickly, lifting up, and then let go.

- **Schedule for Kegel Exercises:**
  - Do both types of exercise in the morning and evening. You may exercise in various positions.
    - **Standing up:** Lightly hold onto a solid surface for balance and squeeze with your knees slightly bent and feet shoulder-width apart.
    - **Sitting:** Sit in a straight-backed chair.
    - **Lying down:** Squeeze with your knees bent and head on a pillow.

At first, find the position that is the most comfortable for you. Gradually progress until you can do your exercises in all three positions. You should try to do a total of 40 exercises of each type every day.

If you have urine loss in one specific position, such as when you stand, then increase the number of exercises for that position. Try always to tighten your muscles on your way to the bathroom. Also try to do both the short and long holds during your activities of daily living. These are activities such as standing at the sink washing dishes or brushing your teeth, putting on your makeup, sitting in the car at a stoplight, sitting down to dinner, reading a book in bed, going for a walk or talking on the phone. Remember, the more exercises you do:
- The stronger your pelvic muscles will get.
- The faster they will get stronger.
- The easier it will be to maintain muscle strength.

**Scheduled Urination**
The second step is to retrain your bladder to begin to urinate at times you desire. You need to “train” your bladder regardless of whether it feels like you need to go or not. The goal is to empty your bladder every 6 hours. At first you will need to urinate at shorter intervals. Both men and women will need to sit to urinate. When urinating, you must relax and bear down to release the flow of urine. It is important to carefully follow the schedule below and to do the Kegel exercises faithfully. Your schedule may be different depending on your surgeon’s preference, the size of your neobladder, and the amount of fluid you drink. You may have leakage at night in the beginning. You can set an alarm clock at night to get up to urinate. You also may need to wear disposable absorbent products for a while during this training period.

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Helpful Hints
You will want to wear a Medic Alert band with the following inscription:

“I have a neobladder that needs to be emptied every 4 to 6 hours.”
You can get a Medic Alert band from the Medic Alert Foundation by calling 1-800-ID-ALERT.

Think of your new neobladder in the same way you would think of your bladder. Regardless of your schedule, empty your neobladder before such activities as going out, traveling, having sex, playing sports, etc. This could save you both time and aggravation by avoiding the need to empty when it is less convenient.

After your period of recuperation, get back into your social life and favorite activities!!! You can still enjoy all the things you did before your surgery including attending meetings, sporting events, social gatherings, and religious or community functions.

Life with Your Neobladder

Dietary Needs
There are no dietary restrictions because of your neobladder. It is essential, however to drink enough fluids. In order to keep the kidneys freely working and to help thin the mucus in the reservoir, you should drink eight to ten glasses (8 oz. each) of a variety of fluids every day. Cranberry juice in particular can help thin mucus in your urine. Any liquid is fine to drink, especially water, but you should drink a VARIETY of fluids every day. Also, some foods may make your urine smell bad and some drugs will change the color of your urine.

Foods that can cause urine odor:
- Asparagus
- Fish
- Spices

Drugs that can discolor urine:
- Iron supplements
- Macrodantin®
- Flagyl®
- Heparin
- Coumadin®
- Laxatives such as Ex Lax®, Senokot®, Cascara®
- Ibuprofen
- Aspirin
- B-Vitamins
Clothing
There is no reason to change your style of clothing or wardrobe. You can wear anything you like.

Activity and exercise
You should avoid heavy lifting for the first 6-8 weeks after your surgery. Following your recuperative period (six to eight weeks), you can go back to your usual activities and exercises. You may even decide to take up some new ones. PACE YOURSELF SLOWLY! This way you will not over exert yourself and will slowly build up your endurance and strength. For the first few weeks after your surgery, space your activities evenly with short rest or nap periods during the day. After that, the sky’s the limit.

Swimming and other water sports will NOT harm your neobladder. If you scuba dive, check with your doctor before doing this activity because the pressure may affect your neobladder.

Driving is usually allowed after 6-8 weeks, but always check first with your doctor. The same holds true for abdominal exercises.

Work
There is no reason that having a neobladder should affect your job. After your recuperation, you can work as you did before. You may even find that now you can go to the bathroom less often than your fellow employees.

Social Relationships
Our attitudes influence how we relate to others and how others relate to us. Your neobladder itself has no affect on your social relationships but your attitude towards it may. A change has occurred in your body. This change in your body image may initially cause you to have negative feelings about yourself. People often feel anger, depression or low self-esteem temporarily after surgery. It is normal to need time to adjust to the change. With time, you will integrate the surgery and its changes into your self-concept. You are no different now than you were before your surgery.

Sexual Relations and Intimacy
Your ability to express love and feelings is not affected by your surgery. Your attitude is a key factor in re-establishing sexual expression and intimacy in your life. As with any intimate relationship, you must maintain open and honest communication with your loved one. Clarify any mixed messages you may be getting rather than try to second guess them. What you think is rejection may be your partner’s fear of hurting you. Hugging and other forms of physical contact will not harm your neobladder. Before engaging in sexual activity, you may want to empty your pouch. You should check with your doctor to find out how soon after your surgery you can resume sexual relations. This is also a good time to ask any questions you have. Feel free to contact your doctor or ostomy nurse at any time to discuss any of your sexual concerns. The American Cancer Society also has two books (one for men and one for women) that deal with sexuality in detail. Contact the American Cancer Society for a copy of these books. You can also arrange to see a counselor.

Men may have problems with erections after their bladder removal. The surgical technique that spares nerves being offered by many physicians may help prevent this. Still, there are a number of factors,
both physical and psychological, that can contribute to a problem with erections. It is important to give yourself plenty of time, even up to a year, to recuperate from your surgery before coming to any decisions about a permanent erection problem. Even if you cannot maintain an erection, you may still experience an orgasm with or without ejaculation. If traditional penile-vaginal penetration is not possible, you and your partner may want to experiment with variations to achieve sexual enjoyment and satisfaction. There are many options available to you if a problem does exist. These options, such as oral medications, penile injections, or penile implants may even improve your sex life.

We encourage you to ask any questions about your particular lifestyle that may not have been answered in this section.

WHEN TO CALL THE DOCTOR:
If you experience one or more of the following symptoms, call your surgeon or primary care physician.
- Little or no urine drains through the catheter and irrigation does not open the flow of urine.
- The catheter falls out.
- The saline will not drain from the pouch when it is irrigated.
- Unusual drainage from ANY site.
- Temperature higher than 101 degrees F.
- Vomiting with or without nausea
- Unusual pain in your abdomen, back or kidney areas.
- Blood in the urine.
- Urine that is foul-smelling or cloudy (NOT just pieces of mucus).

If you cannot contact your usual surgeon or primary care physician, call the nurse who usually works with you concerning your ostomy. Or you may also call the ostomy nurse at the University of Colorado Hospital (303-372-8964) during working hours. If it is after working hours and you are unable to reach your doctor or an ostomy nurse, please use the closest urgent care center or emergency room.

Resources
- United Ostomy of America Association:  www.UOAA.org
- Wound, Ostomy and Continence Nurses Society:  www.wocn.org
- American Cancer Society:  www.cancer.org
- Medic Alert Foundation
  PO Box 1009
  Turlock, California  95381-1009
  1-800-ID-ALERT (432-5378)
- National Association for Continence
  PO Box 8310
  Spartanburg, SC  29305
  1-800-252-3337
Special thanks to the United Ostomy Association of America, Mentor Health Care Products Co and the Convatec Co. for their assistance in compiling this informational booklet.

Other references used include:


Colwell, J., Goldberg, M., Carmel, J., Fecal & Urinary Diversion, 2004. Mosby, St. Louis, MO.


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