A Patient Guide to Urinary Diversions

This booklet is designed to help you understand your surgical procedure. It will be a resource for your ostomy care after leaving the hospital. Feel free to write down any questions you may have for your doctor and nurse.

During your hospital stay, you will be visited by a Wound, Ostomy and Continence (WOC) Nurse. This nurse is trained and certified in the care of ostomy patients. The WOC nurse will work with your doctor and staff nurses to aid you in your recovery. When you leave the hospital, the WOC nurse will continue to be a resource person for you.

The Urinary System

To understand how your ostomy functions, you need to become familiar with the urinary system. See Figure 1. The system’s main purpose is to remove urinary waste products from the body. Urine is produced in the kidneys, moves through the ureters and is stored in the bladder until urine is emptied.

Urinary Diversion – What is it?

Sometimes the bladder must be removed or no longer can store urine. In these cases, some type of bypass is needed. This is called a urinary diversion. Conditions which may lead to urinary diversion are:

- Birth defects
- Trauma
- Infections
- Tumors
- Other blockages (not managed by conservative measures).
There are several types of urinary diversions. The most common, an ileal conduit, involves a section of bowel that is removed and separated from the gastrointestinal (GI) tract. One end of this tube is sewn closed and the other end is brought to the skin’s surface. This new opening is called a **stoma**. The urine is still made by the kidneys and flows through the ureters. The ureters are attached to this section of bowel, allowing urine to flow out through the stoma into an external-collecting device, a pouch. See Figure 2.

**Ileal Conduit**
The urine is no longer stored inside the body. It will flow continually into a pouch applied to the skin. This pouch is emptied several times a day. (Pouches will be discussed on page 5.)

**About Your Stoma**
Stomas come in all shapes and sizes. Some are round and others are oval. It may stick out (a budded stoma) or be flat (a flush stoma). The color should be a deep red or pink. The stoma is warm and moist, like the inside of your cheek.

When you clean your stoma you may see a drop of blood as you wash it. This is normal. The stoma has many small blood vessels just like the inside of your mouth. (You may have noticed that your gums sometimes bleed slightly when you brush your teeth. That also is normal.) Do not be afraid to wash your stoma. However, contact your doctor or WOC nurse if you notice a large amount of bleeding.

Your stoma will change in size throughout your life with weight gain or loss. A change will be most noticeable in the first 6 to 8 weeks after surgery. Surgery causes swelling. As the swelling decreases your stoma size will become smaller. Therefore, it is important for you to measure your stoma weekly to fit the pouch opening. Your WOC nurse will show you how to do this.

Your stoma has no nerve endings so it is not painful when touched. You are able to feel pressure and touch. You do not have to be afraid to touch it. However, you should protect it from sharp objects, which could cut into the stoma, such as seat belts and large belt buckles.
**Activities**

Your nurse will give you another booklet *A Patient’s Guide to Surgery*. It will answer many of your questions about what will happen before, during and after surgery.

**Work**

Discuss with the doctor when you can return to work. Most people are able to return to the work they were doing before surgery. If your job requires heavy lifting, you need to talk with the doctor about your options.

It will take time to adjust to your urinary diversion. This is normal. Some people are afraid to face their co-workers and friends, and tell them about having a urinary diversion. Decide whom you want to tell. Do and say what makes you feel comfortable. It is your choice. Not everyone needs to know. You do not need to be embarrassed about your urinary diversion; it is a part of you. Discuss your concerns with the WOC nurse.

**Social Life**

You will be able to resume your social activities. Your urinary diversion should not interfere. You will gain confidence and security with the pouch remaining intact. You will be able to be independent in emptying and changing the pouch.

**Clothing**

You will not need special clothing. If you feel your pouch shows, talk with your WOC nurse about other available pouches. Tight clothes will not hurt the stoma. Tucking your pouch inside your underwear and wearing snug underwear helps support and conceal the pouch.

**Showering and Bathing**

The pouch is waterproof. You can wear it in the shower. The pouch will remain intact underwater while bathing or swimming. After bathing or showering (with the pouch) you can activate the wafer adhesive for a tight seal. Follow these steps:

- Dry the skin well.
- Turn a hand-held hair dryer to the lowest setting (warm).
- Direct the dryer air flow along all the edges of the wafer.

Always:

- Keep the hair dryer at least 6 inches away from the body.
- Use the dryer for a total of no more than 5 minutes.
- Do not use the dryer if your skin is red or sores are present.

On the day you change the pouch you can take the pouch/wafer off and shower. Water from the shower will not hurt your stoma. Remember to empty your pouch prior to swimming.
**Exercise and Sports**

There will be a short period of time where your activities will be restricted to allow your body to heal. These are some general guidelines to follow. Do not drive for 3 weeks from the date of surgery. No heavy lifting (over 10 pounds) is allowed for 6 weeks. If you were on an exercise routine before surgery, please check with your doctor before resuming.

After your recovery, the urinary diversion should not interfere with exercise. Daily exercise is important for your body. Contact sports such as football, karate, or wrestling are a concern, since injury to the stoma could occur. If you are interested in continuing any contact sports, check with your doctor or WOC nurse. Any non-contact sport should not be of concern.

**Travel**

You can continue to travel. Just remember to bring extra ostomy supplies with you. Always carry your supplies with you when traveling. If you are flying put supplies in “carry on” luggage and not with “check-in” luggage. In a car, store supplies in a cool spot and avoid the trunk and back window ledge. If you take long vacations, arrangements can be made to have supplies shipped along the way. Contact your WOC nurse with any questions.

**Sexual Life**

Many people have concerns about having intimate relationships after surgery. Your ability to love, care, and be intimate with another person does not change. Expressing your feelings and talking with your partner is important. Sexual activity, hugging, and affection will not hurt your stoma. Your partner may be concerned about hurting you and will need to know these activities will not cause you harm. After surgery you will need time for your body to heal, and time to adjust to this change in your body.

Males having a urinary diversion for bladder and prostate cancer may note some changes in sexual function. Talk to your doctor and WOC nurse about expected changes and ways to maintain a satisfying sexual relationship.

Women of childbearing age who have a urinary diversion will need to plan for birth control. The body needs time to heal after surgery before pregnancy occurs.

Some helpful tips when engaging in sexual activities suggested by ostomy patients are:
- Always empty the pouch first.
- Roll up and secure the spout with tape, a cummerbund, or scarf.
- Use smaller pouches.
- Make use of attractive sleepwear and intimate apparel.

Please feel free to ask questions. Your doctor and WOC nurse are available and want to help you return to your normal life-style.
**Diet**
After surgery you will be able to return to your regular diet, unless your doctor states otherwise. Asparagus, fish, and some medicines can change the odor of the urine. This is not unusual.

**Ostomy Care**

**Pouches**
There are many pouches available. Several may be tried to find the best pouch for you. You will be discharged from the hospital with a cut-to-fit pouch (you cut it to fit your stoma size). Later when your stoma size stabilizes you may wish to change to a pre-cut pouch (already cut to fit your stoma size). Your WOC nurse will show you how to size your pouch for a correct fitting. Pouches can be purchased from local medical/surgical supply companies or discount catalogues. If you are interested in trying a company’s product, contact them for free trial packets.

It is best to empty your pouch when it is about 1/3 full of urine. This will prevent the pouch from getting too full and pulling off. When you empty your pouch, place toilet paper in the toilet to prevent splashing. Then, sit down and empty the pouch between your legs. You may also stand facing the toilet to empty the pouch.

Shake the end of the spout and close.

Your pouch will need to be changed routinely every 4 to 7 days and when any of the following occurs:

- Leakage.
- Unusual itching under the pouch.
- Burning under the pouch.

Your pouch system prevents urine from getting on your skin. Urine can be irritating, therefore, if any of the above conditions occur, remove the pouch system and check your skin.

If you routinely change your pouch every 4 to 7 days, you can feel comfortable that it will not leak. Whenever you leave home carry an extra pouch already cut to fit with you. This will make you feel more secure if an accident occurs. It is also important to bring an extra pouch any time you visit the doctor, hospital, or WOC nurse.
How to Change Your Pouch

Assemble your supplies:
- Measuring guide/pattern/pen
- Wafer
- Scissors
- Convex insert (if needed)
- Pouch
- Wash cloth or paper towel
- Wick – a rolled paper towel
- Paper tape

- Prepare wafer/pouch.
  Using the measuring guide, find the circle that is closest to your stoma size. If your stoma is not round, your WOC nurse can assist in making a pattern to fit your stoma. Trace the circle or pattern on back of the wafer and cut it out. Snap the pouch on the wafer and remove paper backing. (Your WOC nurse will show you how to do this.)

- Remove the old pouch.
  Remove pouch gently by lifting up on tape while pressing underneath on your skin. Do not rip or tear pouch off as this can irritate the skin. If pouch is adhering too well, use a wet wash cloth to press on the skin behind the barrier.

- Clean the skin.
  Cleanse skin and stoma with a wet washcloth or paper towel. Soap may be used, but must be rinsed well. Allow skin to dry. Check for any skin changes. Please refer to skin irritation section, if skin changes are seen. Avoid using oils or creams under the wafer. This could decrease adherence of the pouching system.

- Measure the stoma.
  Before applying pouch remeasure stoma with the guide. Make a note of the new size opening. If stoma is larger take the prepared pouch and re-cut it. If smaller, apply pouch and at next pouch change adjust the size. For the first 2 months after surgery measure the stoma whenever you change your pouch. Adjust the size as needed.

- Apply pouch.
  Use a rolled paper towel to place on the stoma to prevent urine from getting on the dry skin. If any urine leaks on skin re-wipe and dry. Center the opening in wafer around the stoma and apply sticky side to skin. Press down to assure all edges are sealed.
How to Treat Irritated Skin

1. Remove pouch gently.
2. Cleanse with a wet washcloth.
3. Gently dry surrounding skin.
4. Sprinkle ostomy protective powder on reddened skin.
5. Dust off excess powder with a damp washcloth. It will look like most of the powder has been removed. The powder will seal in to allow the irritation to heal. It will also provide a dry surface for the pouch to adhere to the skin.
6. Recheck the size of the stoma opening used.

There are several types of skin conditions that can occur with urine pooling on the skin. Any change from the normal skin should be reported to your WOC nurse or doctor.

Skin Problems

**Folliculitis** are raised areas noted at the base of hair follicles caused by hair being pulled with pouch removal. Shaving with an electric razor, or fresh disposable razor or using an adhesive removal product can easily treat this. It is best to begin shaving close to the stoma and moving outward to avoid any injury to the stoma.

**Hyperplastic skin** is a thickening, wart-like appearance around the stoma. This is caused by too large of a pouch opening, which allows continuous contact between the urine and skin. This can be treated with a proper fitting appliance.

**Candida Albicans** is a rash or reddened itchy area around the stoma caused by a change in the skin chemistry. Contact your doctor or WOC nurse for treatment.

**Urine crystal formations** are white, gritty, crystal deposits on or around the stoma. This is caused by a change in the acid of the urine. Contact your WOC nurse for treatment.

Night Drainage System

Research has shown several advantages of a night-time drainage collection system. If urine remains in the pouch the entire night it can promote growth of bacteria. This may lead to a kidney infection. The pouch seal could also break by the weight of the urine and burst if you roll on it while sleeping. By connecting to a night drainage system, you are able to sleep in any position including your stomach without worry.

At night, connect the pouch to a night drainage bag to collect the urine so it will drain freely. Run the tubing down the leg of pajama bottoms. In the morning, empty the night drainage bag and disconnect it from the pouch. Rinse the tubing and bag with water and store the night bag in a clean place covered with a towel. Calcium deposits or mucus build-up will occur in the night bag. To prevent this build-up, pour full strength white vinegar (30cc or 1 ounce) into the tubing and leave in the bag for 30 minutes. Then empty the bag and rinse with tap water. The night bag can be used for 1 to 2 months as long as it is kept clean and there are no cracks in the tubing.
You will always be aware of mucous in your urine. (The mucous is secreted by the stoma itself.) The mucous can become thick and occasionally block the flow of urine from the pouch when you are trying to empty it. By drinking enough fluids you can help thin the mucous which allows the pouch to empty easily. If the mucous still blocks the pouch from draining, gently push on the bag to force it through.

**Urinary Infections**

Drinking six to eight glasses of fluid a day is advised. This provides the proper amount of fluid for your body and reduces the chance of urinary tract infections. It is important for you to recognize early signs and symptoms of urinary tract infection. These include: **fever, flank pain, chills, and foul smelling/cloudy urine**. Contact your doctor and increase your fluid intake if any of the above occur.

**Urine Samples**

A routine U.A. (urine analysis) may be obtained from a clean pouch (changed in the last 24 hours). Empty the urine that has been sitting in the pouch so a fresh urine sample can be collected.

If the doctor wants a urine C & S (culture and sensitivity), a sterile specimen is needed. The doctor or nurse will remove the pouch and insert a sterile catheter into the stoma to get a few drops of urine.

It is a very important to bring an extra pouch anytime you visit the doctor or WOC nurse so your pouch can be removed and a thorough exam can be done.

**Follow-up Visits**

Your doctor will tell you when a follow-up appointment is needed. We suggest regular yearly visits with your WOC nurse. Manufacturers develop newer, more effective equipment. Stomas can change for various reasons. It is important to have equipment that fits and works well for you and allows you to lead a normal active life. Remember to bring an extra pouch when you visit the doctor, hospital or WOC nurse. The appointment with the WOC nurse can be made to coincide with a visit to your doctor.

**Call Your Doctor**

Check with your doctor if any of the following occurs:

- Stoma changes color from pink-red to purple-black.
- Excessive bleeding from stoma opening.
- Continuous bleeding between stoma and skin.
- Unusual bulging around your stoma.
- Unusual problems with abdominal pain or continuous nausea and vomiting.
- Urine becomes bloody.
- Signs of urinary tract infection: fever, flank pain, chills, foul smelling or cloudy urine.

**Call Your WOC Nurse**

Check with your WOC nurse if you have:
- Any skin irritations (redness, itching or burning).
- Any questions or problems with pouching or leakage.
- Questions about activities of daily living, or require more information.

**Where to Buy Supplies**

Look in the Yellow Pages under *Medical/Surgical Supply Companies*. Choose one close to you. There are also several mail order companies available who have free delivery and may assist you with insurance forms. Contact your WOC nurse for information. Many pharmacies carry or will order supplies, but there may be added charges. Price comparison is strongly suggested.

**Insurance Coverage**

Most ostomy supplies are covered partially under part B of Medicare and may be covered under Medicaid. Social Security Disability benefits are available to those who qualify. Insurance coverage is different for each policy. We suggest saving receipts and asking your insurance company or third party payor if coverage is available.

**Organizations**

There are groups that provide support and information for persons with ostomies and their spouses/significant others. UOAA for example has programs that have educational, business, and social components. Contact the following organizations for more information.

- United Ostomy Associations of America, Inc. (UOAA)
  (800) 826-0826
  www.uoaa.org

- Wound Ostomy and Continence Nurses Society
  (888) 244-9626
  www.wocn.org

- The American Cancer Society
  (312) 372-0471
  www.cancer.org
Notes

Health Information Resources

For more information, visit one of Northwestern Memorial Hospital’s Health Learning Centers. These state-of-the-art health libraries are located on the third floor of the Galter Pavilion and on the first floor of the Prentice Women’s Hospital. Health information professionals are available to help you find the information you need and provide you with personalized support at no charge. You may contact the Health Learning Centers by calling 312-926-LINK (5465) or by sending an e-mail to hlc@nmh.org.

For additional information about Northwestern Memorial Hospital, please visit our Web site at www.nmh.org.

Para asistencia en español, por favor llamar a el departamento de representantes para pacientes al 312-926-3112.

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