A Patient Guide to Urinary Diversions

This information will 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 physician 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 patients with an ostomy. The WOC nurse will work with your physician 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.

Figure 1
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, called 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 4.)

**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 around your stoma, you may see a drop of blood on the wash cloth. 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 of your stoma, but if you notice a large amount of bleeding when you are changing your pouch, contact your physician.

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 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**

**Work**
Discuss with the physician 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 physician 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. Your pouch will remain intact underwater, while bathing or swimming. Remember to empty your pouch before swimming.

On the day you change your pouch, you can take the pouch/wafer off and shower. Water from the shower will not hurt your stoma. Dry your skin well with a towel and air dry.

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:

- No heavy lifting (more than 10 pounds) is allowed for 6 weeks.
- Ask your physician when you may drive after surgery.
- If you had an exercise routine before surgery, please check with your physician before resuming it.

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 physician. 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 checked 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 by your supply company. Contact your WOC nurse with any questions.

Sexual activity
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 physician 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:

- Always empty the pouch first.
- Roll up and secure the spout with tape, a cummerbund or scarf.
- Use smaller pouches.
- Select attractive sleepwear and intimate apparel.

Please feel free to ask questions. Your care team is available and wants to help you return to your normal lifestyle.

**Diet**

After surgery you will be able to return to your regular diet, unless your physician 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 suppliers, mail order or online companies. 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 twice a week 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 to your skin; therefore, if any of the above conditions occur, remove the pouch system and check your skin. If you routinely change your pouch twice a week, you can feel comfortable that it will not leak.

Whenever you leave home, carry an extra pouch with you that is already cut to fit. This will make you feel more secure if leaking occurs. It is also important to bring an extra pouch any time you visit the physician, hospital or WOC nurse.

**How to change your pouch**

1. **Assemble your supplies.**
   - Scissors
   - Measuring guide
   - Wash cloths or soft paper towels
   - Non-moisturizing soap (optional)
   - Towel
   - Ring (optional)
   - Paper towel rolled into a wick

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

3. **Clean the skin.**
   Wet a washcloth or soft paper towel with tap water and clean the skin around the stoma. You may use a non-moisturizing mild soap and rinse well with water. Allow skin to dry well. **Do not** use wipes that have lotion in them. Check your skin for any changes. Refer to skin irritation section if changes are seen.

4. **Measure the stoma.**
   Before applying the pouch, remeasure the stoma with a guide. Make a note of the new opening size. Trace the new opening on the back of the wafer and cut it out. For the first 2 months after surgery, measure the stoma whenever you change your pouch. Adjust the size as needed.

5. **Prepare wafer/pouch.**
   Remove the paper backing from the barrier wafer. (If you use a 2-piece system, you would be removing the backing from the wafer.) Paste, ring or strip paste may be used on the sticky side of your wafer/barrier around the opening edge or wherever minor creases are to fill in, making a flat surface. This will improve the fit and seal of your pouch. Your WOC nurse will show you how to do this.
6. **Apply pouch.**
   Use a rolled paper towel to place on the stoma to prevent urine from getting on the dry skin. If urine leaks on skin, re-wipe and dry. Center the opening in the wafer/barrier around the stoma and apply the sticky side to the skin. Press down to ensure all edges are sealed. To close the bottom of the pouch, fold up the lower edge 3 times and pinch.

**How to treat irritated skin**
1. Remove the pouch gently.
2. Cleanse with a wet wash cloth.
3. Gently dry surrounding skin.
4. Sprinkle ostomy protective powder on reddened skin.
5. Dust off excess powder with a dry cloth. The powder will stick only to where the skin is irritated. The powder provides a dry surface so the wafer is able to stick.
6. Dab a protective barrier wipe on top of the powdered skin.
7. Recheck the size of the opening used. Be sure the opening in the wafer is the same size as your stoma.
8. Prepare and apply your wafer and pouch as usual.

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 physician.

**Skin problems**

**Folliculitis** is a skin condition that can be caused by hair being pulled with pouch removal. This can result in raised areas at the base of hair follicles. 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 physician 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 (30 cc 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**

Drink 6 to 8 glasses of fluid a day. 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 physician and increase your fluid intake if any of the above occur.

**Urine samples**

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

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

Your physician will tell you when a follow-up appointment is needed. 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 physician, hospital or WOC nurse. The appointment with the WOC nurse can be made to coincide with a visit to your physician whenever possible.

Call your physician

Check with your physician 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, or foul-smelling or cloudy urine

Call your WOC nurse

Check with your WOC nurse if you have any of the following:
- Skin irritations (redness, itching or burning)
- Questions or problems with pouching or leakage
- Questions about activities of daily living, or a need for more information

Where to buy supplies

Look in the Yellow Pages or on the internet under “medical/surgical supply companies.” Choose one close to you. There are also several mail order or online companies available that offer 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. A prescription from your physician may be required to obtain supplies. Talk with your physician about this.

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 for their spouses/significant others. United Ostomy Associations of America, for example, has programs that have educational, business and social components. Contact the following organizations for more information.

United Ostomy Associations of America, Inc.
800.826.0826
ostomy.org

Wound Ostomy and Continence Nurses Society
888.224.9626
wocn.org

American Cancer Society
312.372.0471
cancer.org

Crohn’s and Colitis Foundation of America (CCFA)
800.932.2423
CCFA Illinois Carol Fisher Chapter
847.827.0404
ccfa.org

MedicAlert cards and/or bracelets are recommended and available by calling:
MedicAlert
800.432.5378
medicalert.org

Notes