Washington University Department of Surgery Division of General Surgery Section of Colon and Rectal Surgery 660 S. Euclid Avenue, Campus Box 8109 St. Louis, MO 63110 Phone: 314-454-7177 ColonRectalSurg.wustl.edu



Surgery

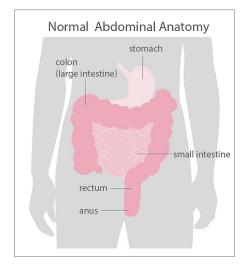
# Colon and Rectal Surgery Ileoanal Anastomosis (J-Pouch) Surgery

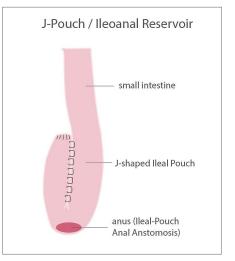
Washington University Department of Surgery
Division of General Surgery
Section of Colon and Rectal Surgery
660 S. Euclid Avenue, Campus Box 8109
St. Louis, MO 63110
Phone: 314-454-7177
ColonRectalSurg.wustl.edu

## Ileoanal Anastomosis (J-Pouch) Surgery

## What you need to know:

Ileoanal anastomosis surgery (also called J-pouch or IPAA) allows patients to move their bowels normally after the removal of their colon and rectum. A reservoir is created from loops of the small intestine and is connected to the anal canal. J-Pouch is usually done in either 2 or 3 staged surgical procedures.





## Why do I need surgery?

Patients with ulcerative colitis (UC) who have not had success with medical management and those diagnosed with familial polyposis (FAP) often undergo J-Pouch procedures. These diseases affect the large intestine (colon) and are often treated with the complete removal of the colon and rectum. IPAA surgery can prevent patients from needing a permanent ileostomy.

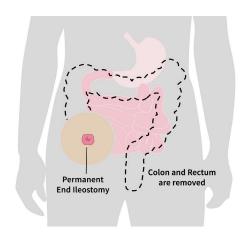
## How many operations will I need?

J-Pouch surgery is performed in either two or three stages. Your surgeon will talk with you about which option is right for you and create a surgical plan based on your health and the severity of your disease. Your surgical plan may change based on surgical and radiology findings.

## Total Proctocolectomy with J-Pouch Two Stage Procedure

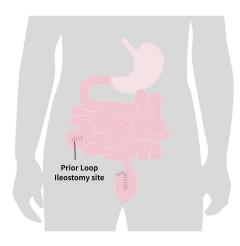
## **Stage One:**

The colon and rectum are removed. The ileal reservoir, or J-Pouch, is created and is surgically attached to the anal canal. This connection is called an anastomosis (Ileal-Pouch Anal Anastomosis). A temporary loop ileostomy is created to allow stool and gas to leave the body while the new anastomosis heals. Patients usually spend 3-5 days in the hospital.



## **Stage Two:**

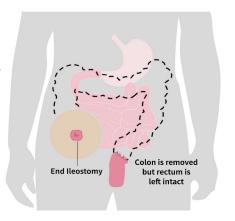
The second procedure usually takes place about 12 weeks following the first surgery. Patients will have an x-ray test called Hypaque Enema to look at the J-Pouch and make sure it has healed and that the anastomis doesn't have any leaks. The temporary loop ileostomy is "taken down" and stool will begin to pass into the pouch and out through the anus. Patients usually spend 3 days in the hospital.



## Total Proctocolectomy with J-Pouch Three Stage Procedure

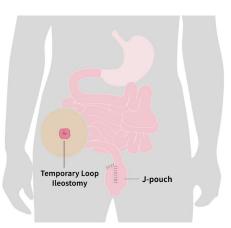
## **Stage One:**

The colon is removed, but the rectum is left intact, so that the patient can recover from the disease. A temporary end ileostomy is created, allowing stool and gas to leave the body. Patients usually spend 3-5 days in the hospital.



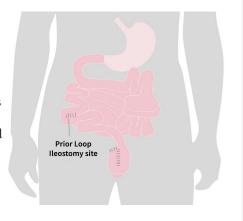
## Stage Two:

The second procedure usually takes place about 12 weeks after the first surgery. The rectum is removed and the ileal reservoir, or J-Pouch, is created and is surgically attached to the anal canal. This connection is called an anastomosis (Ileal-Pouch Anal Anastomosis). A temporary loop ileostomy is created to allow stool and gas to leave the body while the new anastomosis heals. Patients usually spend 3-5 days in the hospital.



## **Stage Three:**

The third procedure is usually about 12 weeks after the second surgery. Patients will have an x-ray test called Hypaque Enema to look at the J-Pouch and make sure it has healed and that the anastomis doesn't have any leaks. The temporary loop ileostomy is "taken down" and stool will begin to pass into the pouch and out through the anus. Patients usually spend 3 days in the hospital.



## Adjusting to your pouch:

Patients who report the highest satisfaction following J-Pouch surgery are patients who are well informed and motivated to follow the dietary and medication routines necessary for optimal pouch performance.

## The first year:

Following surgery it is normal to have 12-15 loose bowel movements daily. As your diet is advanced, fiber supplements can be added to bulk stools. Antidiarrheal medications can also be added to decrease the frequency of bowel movements. At the end of the first year, many patients report an average 6 bowel movements daily. Normal can range from 4-12 daily bowel movements. It is suggested you keep track of your daily bowel movements and know the signs and symptoms of dehydration (see dehydration section).

- It can take a full 6 to 12 months to achieve ideal bowel function following IPAA surgery.
- You will have frequent urges to have a bowel movement as the sphincter becomes accustom to holding stool.
- Try to delay emptying your pouch, often the urge will pass. As the pouch capacity increases and stool becomes more formed you will have fewer urges.
- When having a bowel movement, do not try to push the stool out or sit on the toilet for longer than 5 minutes.
- Following surgery you may empty your pouch and a short time later have
  to return to the bathroom. The pouch fills as stool descends from the small
  intestine, you cannot speed this up by pushing. Over time the pouch will
  expand and repeat trips will not be necessary.

#### Diet:

- Foods that help reduce diarrhea: cheese, cheesecake, smooth nut butters, pretzels, white rice, tapioca, matzo, water crackers, marshmallows, jell-o, bananas, applesauce, oatmeal.
- When making changes to your diet to reduce bowel movements, try one strategy at a time and for a few days to determine the benefit, or lack of benefit, to each strategy.
- Keep a food journal to track foods that you may not be tolerating well. It can
  be helpful to add new foods, one at a time every 3 days to get an accurate
  assessment of your response.
- Sugar-free foods that contain mannitol, sorbitol, ISO malt, or xylitol can cause gas, bloating, diarrhea and abdominal cramping.
- Timing of meals is important. Eating your largest meal of the day at dinner may cause nighttime waking. Try having your largest meal of the day at lunchtime.
- Foods containing simple sugar can worsen diarrhea. This includes many sports drinks, juices, candy, sugar, pastries, honey, jam and jellies.
- Eat protein, fat, complex carbohydrates and soluble fiber (see below) at each meal. High fructose corn syrup commonly found in fruit drinks, baked goods and soda can cause diarrhea.
- Try small, frequent meals (5-6 per day) and make sure to chew thoroughly.
   Skipping meals may worsen watery stools and cause increased gas. Milk and dairy products contain lactose and can worsen diarrhea for some people. Try lactose free or enzyme tablets if dairy affects you.
- Slowly increase the amount of soluble fiber in your diet to thicken stool.
   Eating soluble fiber with meals can increase its ability to thicken stool. Oat products (oatmeal, oat bran), barley, tapioca, pectin, banana flakes, legumes (cooked/canned chickpeas, kidney beans, and lentils).
- Taking Psyllium powder (Metamucil, Konsyl) supplement prior to a meal may help slow output.

## Fluids:

- Drink a glass of water every time you have a bowel movement.
- Drink 10-12 glasses of fluid a day. Some patients choose to use a "shot glass" and drink small amounts throughout the day rather than full glasses of water.
- If drinking alcohol or caffeine, replace each glass with an additional glass of water.
- Drinking coffee and tea may increase urine and salt output.
- Wait 30-45 minutes after a meal to consume liquids (sipping with the meal is okay).
- If drinking sports drinks for electrolyte replacement, try diluting the drink with water 1:1 to reduce the amount of sugar per serving (ex. 1/2 cup water + 1/2 cup Gatorade).

#### **Medications:**

- Your surgeon may recommend using over the counter Imodium AD to control bowel movements. You may take up to 8 tablets a day (16 mg total). As with any strategy begin slowly when introducing Imodium AD.
- You may want to begin with 1 tab 2-4 times a day and advance to 2 tabs 4 times daily if necessary. Some patients find taking 1 Imodium prior to each meal and 2 at bedtime is most helpful.
- Psyllium powder (ex. Metamucil, Konsyl) taken with a glass of water before meals may decrease bowel movements.
- Over the counter probiotics such as Align, Culturelle, or Ker can be helpful.
- Skin-protective ointments (such as Calmoseptine, zinc based products, or other "diaper-type" barrier ointments) can be used to soothe and protect your skin.

### **Perianal Skin Care:**

- It is important to begin a skin care routine when pouch function begins. Frequent liquid bowel movements and certain foods can irritate the anus and surrounding skin.
- Gently cleanse your skin with warm water after each bowel movement. A
  peri squirt bottle, sitz bath or shower work well. You may also use a soft
  damp washcloth, baby wipes, or Tucks pads to gently wipe the area. Pat the
  area dry after cleansing.
- If you are using soap and water to cleanse the area be sure to completely remove soap residue.
- After cleansing the perianal skin it is recommended that a barrier cream be applied to protect the skin from drainage. Products that contain zinc oxide and dimethicone provide protection and treat perianal skin irritation. Examples include Calmoseptine, A&D ointment, Desitin and Triple Paste.
- You do not need to completely remove the barrier cream after a bowel movement. Cleanse the area so that it is free of stool, dry gently and reapply a thin layer of barrier cream.
- A gauze pad tucked against the anal opening or a panty liner can help absorb moisture between bowel movements.
- Cotton underwear is preferred to synthetic materials. Cotton naturally absorbs moisture and allows air to circulate.

#### Certain foods are common anal irritants:

- Coffee
- Tea
- Spicy foods
- Certain raw fruits and vegetables: oranges, apples, coleslaw, celery, and corn
- Popcorn
- Nuts
- Foods with seeds
- Dried fruits
- Coconut

## Leakage:

- Anal leakage is normal following ileostomy take-down surgery. As your stool
  becomes thicker and the pouch stretches, this should decrease. Some
  patients wear a panty liner or a cotton square or ball (cosmetic pads work
  well) against the anal opening for security during the day.
- Kegel Exercises can be done to strengthen the anal sphincter muscle
  following surgery. Tighten the anal muscle (sphincter) as if you are trying to
  prevent a bowel movement. Hold for a count of 10 while squeezing, relax for
  a count of 10. Repeat each step 10 times. You can do 4 sets a day.
- It may be difficult to distinguish between a bowel movement and the need to
  pass gas following surgery. This will improve with time. Nighttime leakage
  can continue even after the first year due to relaxation of the anal sphincter.
  Wearing a pad at night can prevent soiling.

#### Sex:

Concerns about sexual activity are common. Patients are anxious to resume sexual activity due to a renewed sense of well being after removal of diseased bowel and recovery from surgery. Anal sex is prohibited in patients who have an ileoanal pouch due to possible damage to the pouch. Speak to your surgeon prior to resuming sexual activity.

#### Women:

- It is important to let your OB/GYN know you have an ileoanal pouch.
- Menstrual cycles can be disrupted following surgery. If your menstrual cycle does not resume in 1-2 months you should speak to your OB/GYN.
- Birth control pills may not be fully absorbed during periods of high output.
   You may want to speak with your OB/GYN regarding other forms of birth control.
- You may get pregnant with an ileoanal pouch. Caesarean section is often
  the recommended method of birthing for ileoanal pouch patients. A vaginal
  birth may injure your anal muscles and nerves, though women with ileoanal
  pouches have had successful vaginal births. It is important to discuss this
  with your OB/GYN to make the best decision for you and your baby.

#### Men:

- In rare cases, men who have had ileoanal pouch surgery are at risk for impotence and infertility related to retrograde ejaculation, 1-3%.
- If you have symptoms of impotence contact your surgeon for a referral to a urologist who can discuss possible treatments.

## Adjusting to life with a pouch:

- It is normal to have emotional ups and downs following your surgery. You
  may be relieved to have your surgeries behind you but find yourself
  frustrated and exhausted. Although your surgical wounds may be healed in a
  few weeks, adapting to your pouch can take several months, up to a full year
  for some.
- Pouch patients may go through a grieving process related to the loss of what was "normal" bowel function.
- The new normal of a pouch is one of trial and error, requiring patience.
   You may have good days where you are eager to get out and see family and friends followed by days where you feel isolated and misunderstood.
- High output, skin irritation, dietary changes, leakage, pouchitis, and disrupted sleep all contribute to your sense of well-being. To feel frustrated or sad is normal.

If you feel that you are not adjusting to your new ileoanal pouch there is help. Contact you surgeon, primary care physician, or your ostomy nurse. Support groups are available and mental health counseling is available.

## **Bowel Obstruction:**

- Bowel obstructions or blockages can occur as a result of scar tissue, kinking, or twisting of the bowel.
- Symptoms include: abdominal pain, nausea, vomiting, and a decrease or absence of bowel movements.
- If you are experiencing symptoms of a bowel obstruction it is important to contact your surgeon or go to the emergency room for care.

### **Pouchitis:**

- Pouchitis is inflammation of the lining of the pelvic pouch. Symptoms include but are not limited to an increase in frequency of stools, loose stools that do not respond to changes in diet or anti-diarrheal medications, abdominal cramping, leakage or loss of control of bowel movements, "not feeling well", blood in stool or tissue after bowel movements. Symptoms of pouchitis should be evaluated by your surgeon or gastroenterologist.
- Treatments may include antibiotics, probiotics, medications used for ulcerative colitis, or removal of the pouch if symptoms persist.

## **Dehydration:**

Symptoms of dehydration include fatigue, nausea, vomiting, light-headedness, dry mouth, stomach cramps, muscle cramps, decreased or dark urine, rapid weight loss, diarrhea or increased stoma output, and / or increased thirst.

#### Low sodium:

- Symptoms of low sodium (Na+) include loss of appetite, abdominal cramping, drowsiness, faintness, and/or a cold feeling in arms and legs.
- Foods to help replace sodium: canned soups and vegetables, broth and bouillon cubes, tomato sauce, snack chips (pretzels, salted crackers, potato chips), processed foods (cheeses, meats), canned fish (tuna, salmon), ready to eat cereal (instant oatmeal), table salt, ketchup, soy and BBQ sauces, V8 juice, sports drinks.

## Low potassium:

- Symptoms of low potassium (K+) include fatigue, muscle weakness, gassy bloated feeling, shortness of breath, decreased sensation in arms and/or legs.
- Foods to replace potassium: Potatoes, bananas, avocado, tomato (sauce, paste, soup), melon (cantaloupe, honeydew, watermelon), pumpkin, sweet potato, smooth nut butters (peanut, almond), brown sugar, molasses, maple syrup, chocolate, coffee, tea, coconut water, juices (orange, carrot, tomato, vegetable) or sports drinks.

#### Resources:

Wound Ostomy Continence Nurses Society (to help locate a local ostomy nurse in your area) | wocn.org

United Ostomy Association | uoaa.org

The J-Pouch Group | j-pouch.org

Support for Hereditary Colon Cancer Syndromes | hcctakesguts.org/patients-and-families

Support Organizations for those affected by colon cancer | hcctakesguts.org/support-organizations

Crohn's and Colitis Foundation of America, Inc | ccfa.org

oneFAPvoice | fapvoice.com

Notes:			