Patient Handbook

The Barnett Continent Intestinal Reservoir

Continent Ostomy Center

Preface

The information in this booklet is provided to you by the Continent Ostomy Center as a courtesy to you, your physician, and your surgeon. Your physician or surgeon has advised you that the BCIR is an appropriate treatment for your condition. The Continent Ostomy Center provides facilities and nursing staff which are dedicated to the care of BCIR recipients. Any questions or concerns you have regarding the BCIR procedure, post-surgical care, or possible complications, should be directed to yoru physician or surgeon. They are responsible for providing you with all the information you need in order to make an informed decision about undergoing the BCIR procedure.

THE BARNETT CONTINENT INTESTINAL RESERVOIR (BCIR)

PATIENT HANDBOOK

I. Introduction

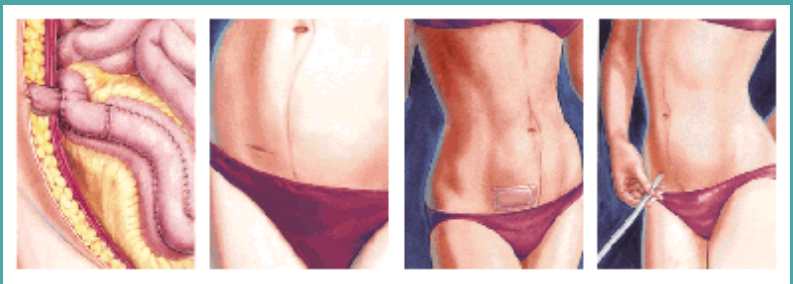
The Barnett Continent Intestinal Reservoir (BCIR) is a modified version of the continent intestinal reservoir or Kock Pouch which was pioneered by Dr. Nils Kock in the 1960s. The major modifications are a collar formed from a piece of the patient's intestine, an isoperistaltic valve, and a lateral, rather than globular pouch design. These changes were made in an effort to decrease the most serious complications of continent reservoirs as originally designed-slipped valves and fistulae.

A general surgeon, Dr. William O. Barnett, began making these modifications to the original Kock technique in 1979 and accumulated a personal series of over 300 cases. Since 1988, thousands of BCIR's have been performed.

Indications for the Barnett Continent Reservoir are as follows:

- ★ Patients experiencing problems, unhappiness or dissatisfaction with a conventional Brooke ileostomy with external appliance.
- ★ Patients who have a failed Kock Pouch, failed ileal pouch anal anastomosis (IPAA or ileoanal J-pouch), or other alternative procedures.
- ★ People who must undergo primary proctocolectomy (removal of the large intestine), but are not candidates for - or chose not to have - the ileoanal J-pouch (IPAA).

Barnett Continent Intestinal Reservoir (BCIR)



II. Anatomy

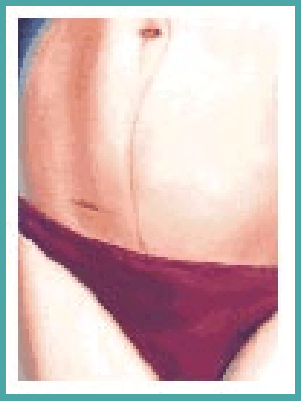
Construction of the BCIR involves removing the colon and rectum, if this has not previously been done. The pouch itself is formed of about two feet of the patient's small intestine, and has a living collar and valve also made of intestinal tissue.

The pouch stores the liquid waste for several hours and is drained through a catheter (soft rubber tube) which is inserted 3-4 times per day. The capacity of the internal pouch will increase from 150cc, when first constructed, to 600-1000cc (about a quart) over a period of months.

The opening through which the catheter is introduced into the pouch is called the "stoma". It is made from the same kind of mucous membrane that is inside your mouth and keeps a pink color. The stoma has no nerve endings, so inserting the catheter is not painful. The process of inserting the catheter and draining the pouch is called "intubation".

The BCIR is designed not to leak fecal contents. The nipple valve mechanism and the collar, which are constructed from the intestine during surgery, were innovations designed to reduce the chance of leakage.

III. While You Are In the Hospital



Prior to your surgery, the surgeon will mark or select the proper place on the right side of your abdomen for the placement of the stoma. The intestinal tract will also be prepared for surgery so that it will be clean of intestinal waste. Your surgeon may order a liquid diet and medications during the preparation process.

Following the surgery, a catheter (inserted into the stoma and sutured to the skin during surgery) from the BCIR will be connected to low suction or gravity drainage to allow for continuous drainage of the BCIR. Approximately 2-4 days following surgery, drainage from the pouch changes in color from blood tinged to pink, and then to green-brown. The green-brown indicates that normal bowel functioning has begun. The catheter will remain in place to permit constant drainage for approximately 10-12 days.

You will also have a small tube inserted into your stomach directly through the abdominal wall (gastrostomy) to prevent nausea and vomiting. This tube will allow for continual drainage of the stomach contents until your normal bowel functioning has returned. Of course, your abdomen will be sore, but this is temporary and will be decreasing each day as you move about. The abdominal incisional scar and stoma will be covered by a dressing.

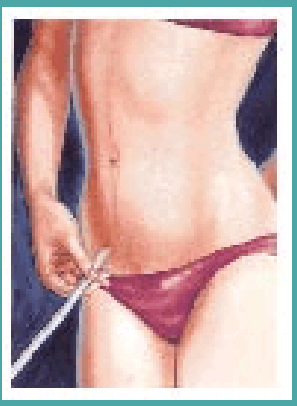
When the pouch has properly matured, the catheter will be disconnected from the continuous drainage and will be drained initially every 2 hours by the intubation process.

The BCIR may also be flushed out with a small amount of water (20-30cc). The surgeon or nurse will begin to instruct and allow you to do your own intubation. You may be a little anxious about doing your first intubation. This is a natural feeling, but you will soon gain confidence with the intubation procedure.

The catheter may be connected for continuous drainage at night or intubated at longer intervals during the night while you are in the hospital. The length of time between intubation will gradually increase over a period of several months until the pouch has to be drained only 3-4 times a day.

IV. Care and Management

Most people with the BCIR report a feeling of fullness or abdominal pressure when the pouch needs to be drained. To do this procedure, you can sit on the toilet or a bathroom stool and allow the contents to drain into the toilet. Some prefer to stand when intubating and draining the BCIR. It may take anywhere from 5-20 minutes to drain the pouch completely. The time depends on what you have eaten and how much flushing of the pouch is required.



How the catheter is positioned for insertion during intubation varies with each individual, but it is usually in a slightly downward direction. You may feel a resistance after inserting the catheter 2-3 inches. This is caused by the pressure of drainage closing the nipple valve. If the catheter does not slide in easily, it may be due to your anxiety and tightened muscles. If you take a deep breath and apply pressure while exhaling, it will usually slide in without difficulty.

Helpful Hint: Empty your bladder prior to intubation.

The catheter should be removed slowly to prevent damage to the pouch, nipple valve, or stoma. You can fold or pinch the end of the catheter when removing it, to prevent leakage from the catheter. Some people use a protective covering under the catheter to prevent soiling, especially during the learning process. A small amount of bleeding is not unusual in the early healing stages.

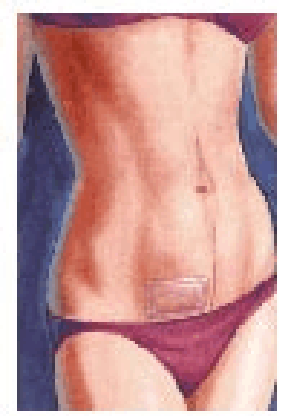
If the contents do not drain easily through the catheter, try the following:

(1) Irrigate the pouch with 30cc of water at the time.
(2) Slowly move the catheter in and out.
(3) Relax!

You should always take your supplies with you when going anywhere. Most people recommend a Teflon-coated number 30 French catheter. To lubricate the catheter for intubation, you may use mineral oil, tap water, or a water soluble lubricant. The life of the catheter can range form a few weeks to a few months.

Everyone has his or her own management routine and you will develop you own. Some prefer to flush the pouch with each intubation while others choose to flush only once a day or less. The pouch should be flushed with 150-200cc of water once weekly to prevent a build-up of residue on the bottom of the pouch. You will be instructed by your surgeon as to how often this should be done. Some suggest using slightly warm water when flushing out the pouch. A folding cup may be purchased for travel use.

There will be mucous drainage from the stoma, therefore, the stoma should be covered with an adhesive bandage or a small absorbent dressing. Mucous drainage will vary from individual to individual. The size of the bandage will depend on the amount of mucous drainage.



A skin barrier, e.g., United Skin Prep Wipes, Hollister Protection Wipe or Bard Barrier Film, may be used to coat and protect sensitive skin. If a slight skin irritation does occur, you may apply a skin ointment or cream which should heal the temporary irritation. Treat the skin around your stoma as any other part of your body. Just keep it clean and dry!

Prior to discharge, you will be given a discharge kit with the supplies needed along with a source from which to purchase supplies. You will also be given information on how to contact your surgeon when necessary.

V. Dietary Considerations

Once your bowel function has returned, your doctor will allow you to have ice chips, progressing to liquids and then to soft foods. You should follow a low residue diet (one without roughage or fibrous foods) for the first few weeks. You should always try small portions of new foods and always chew thoroughly before swallowing.

Foods which contain roughage are more difficult to digest and will require more time and flushing when draining the internal pouch. While the following list is by no means a comprehensive one, the foods listed are the most common offenders: whole corn, nuts, popcorn, cabbage, leafy raw vegetables, Chinese vegetables, pickles, mushrooms, and fresh fruit. While the consumption of these foods can create a drainage problem, if they are eaten in small amounts and chewed well, they may be worth a little extra time it takes to drain.

You will need to drink more liquids now because extra fluid is drained out with the digestive wastes. Six to eight glasses of fluid a day is recommended. An additional glass or two or grape or prune juice each day will help to thin the drainage, so that intubation and drainage through the catheter will be easier.

Gas pains may be alleviated by chewing foods with the mouth closed, limiting conversation while eating, not smoking, and not using a straw to drink fluids. Eating regularly can help prevent gas production, as well. The gas won't escape from the pouch unexpectedly, but will make the pouch fuller and result in more frequent intubation.

Points to Remember

(1) Chew foods thoroughly.

(2) Add new foods to your menu one at a time, so that you can identify any problem foods.

(3) Grape or prune juice may be needed daily.

(4) Drink liquids.

(5) Cocktails and beer cause no harm. However, beer and carbonated beverages may cause more gas.

(6) Foods which are difficult to digest (roughage or fibrous foods) will take longer to drain.

VI. Lifestyle Changes

You can discover from others who have a BCIR how improved your lifestyle may become. If you work outside the home, you may intubate before and after work. Some choose to intubate during a lunch break in public restrooms. You have the choice to intubate where and whenever it is convenient for you.

While swimming, you can wear a small adhesive bandage. Most stomas are placed low enough that women can wear two piece swim wear. Exercise will aid in toning abdominal muscles and leads to easier intubation.

If traveling by air, keep your supplies with you and do not check them through baggage. When visiting a foreign country, use only the drinking water for intubation and flushing. If you can safely drink the water, then you can use it for flushing the pouch.

A non-profit organization - The Quality Life Association - has been formed by people with a continent intestinal reservoir. This informal and up-beat group welcomes new members. For information about joining call (478) 982-2340.

VII. Pregnancy

Women who has a BCIR can become pregnant and give birth. However, because the pouch is located in the lower abdomen, pressure from the enlarged uterus during pregnancy will reduce the BCIR's capacity and intubation must be done with increased frequency. Most doctors recommend waiting at least a year after surgery for childbearing. Women should discuss their plans with their doctor before becoming pregnant.

VII. Conclusion

We believe the Barnett Continent Intestinal Reservoir is a wonderful advance in ostomy surgery. You may wish to share your information and inform others of your experience with the BCIR following surgery. You will develop your individual routine of care and management. And, in time, caring for your BCIR should become "second nature".

This booklet is not intended as a substitute for professional medical care. Only your doctor can diagnose and treat your medical problem.