# THE MANAGEMENT OF THE PATIENT WITH THE PERMANENT COLOSTOMY

# R. B. TURNBULL, JR., M.D. and ARTHUR G. MICHELS, M.D.\* Department of Surgery

"THE term colostomy, or artificial anus, is of ominous significance to the patient. However, it is interesting to follow the change in his attitude from doubt and depression, through increasing confidence, and finally to personal pride in his ability to manage the artificial opening. As he begins to realize that he can actually lead a normal life despite his handicap, depression is replaced by planning for the future.

Many physicians who refer patients ultimately requiring colostomy sec only a few such cases in the ordinary practice of medicine and as a result have little experience in its management. Since these same patients will return with many of their problems to the referring physician, we feel that our experience in dealing with such problems might well be described.

In the past 5 years we have had the opportunity to instruct and follow 500 patients with permanent colostomies."  $^{1}$ 

#### **Initial Contact**

Most patients with carcinoma of the rectum are somewhat aware of their plight before they are seen at the Clinic. The referring physician has made a digital examination in most cases and referred the patient for biopsy and treatment. Information regarding the diagnosis may have been passed directly or inferred. In either case, the patient is worried and in great fear. Unfortunately, it seems that most of them have been acquainted with or know of some person who has had a palliative colostomy; therefore they have a preconceived idea of their future which may be unjustified.

As soon as the biopsy specimen has been taken and proctoscopic examination has been completed, the average patient expects a definite answer to his questions. If an ulcerating carcinoma has been found, frankness and truth are appreciated by the patient and his family. Except in rare instances, most persons accept the diagnosis with little demonstration of emotion. A quiet, positive answer is generally appreciated. In the case of a large papillary lesion that may be benign, the patient may be so informed. Reassurance is necessary at this point. Under no circumstances should a positive diagnosis of cancer be given when there is doubt.

The reaction to the diagnosis of "cancer of the rectum" is a flood of questions such as, "Will I have an artificial opening?" "How will I live?" The guilt complex is illustrated by, "What have I done to deserve this?" or, "I have

<sup>\*</sup>Former Fellow. Now located in Vallejo, Calif.

### PERMANENT COLOSTOMY

always led a good life, why has this happened to me?" The public's "hopelessness of cancer" attitude is illustrated by such remarks as, "Nothing can be done for cancer," and "I suppose I'll just be opened up and closed again."

At this point, it is an unusual person who is ready to assimilate any information about a colostomy or the details of operation. Therefore the less said about the future in this respect the better.

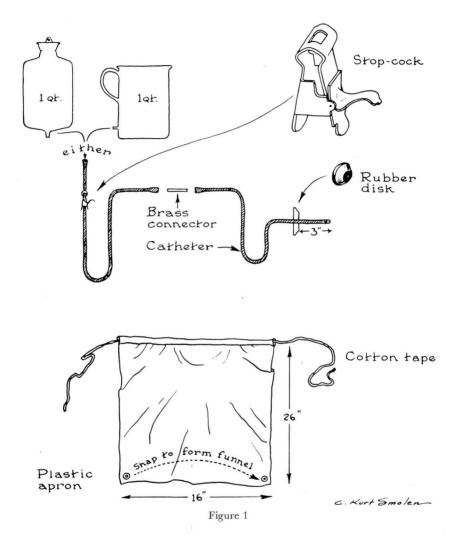
The surgeon should attempt to do most of the talking, mainly because the patients' questions are unanswerable. The necessity for colostomy is stressed but questions pertaining to its management must be postponed and the patient assured that an educational program pertaining to its care will be instituted before he leaves the hospital. The only decision the patient must make is whether or not he will submit to radical surgery. Admittedly, a colostomy is a chore and an inconvenience. It is not as satisfactory as a normally functioning rectum but it is a more than satisfactory trade for cancer. One can learn to live with a colostomy but not with a cancer. When deluged with questions regarding curability, colostomy management, and operative procedure, one can counter with asking the patient whether or not he will choose a surgical approach. With this point agreed upon, the surgeon can avoid further questioning by stating that many patients experience excellent results, all inquiries will be answered during hospitalization, and that adequate management of the colostomy may be obtained soon after operation. No promises can be made as to the "cure." The patient must be reminded that a cancer is a cancer and neither makes rules nor obeys them. Certain gross predictions may be made on pathologic considerations; however, these are not available until after operation is completed.

To withhold information about a cancer from a patient who wants it is to start an elaborate amateur "cat and mouse" production. The patient realizes he is not well and will frequently go from one doctor to another to have his illness diagnosed. He begins to distrust both family and physician and, in the end, there is bitter resentment from all sides.

# Hospital Management

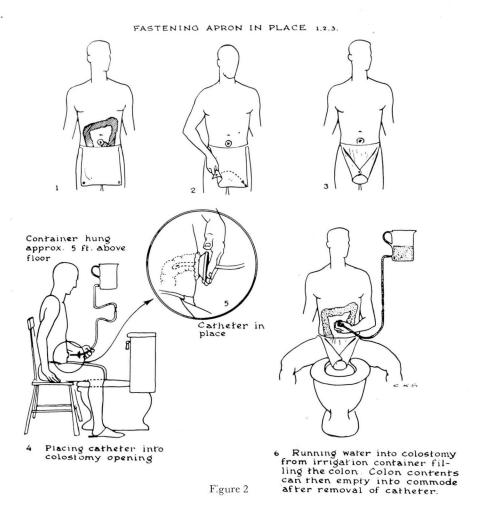
The newly made colostomy will function better if left to its own devices. Diarrhea or frequent bowel movements are undesirable and break down the patient's morale. Cathartics in any form are contraindicated. The ideal situation is a daily spontaneous movement that is dry and formed. Toward this end we have initiated a "colostomy diet." This consists of a nourishing regimen which omits gas and diarrhea producing foods. Although there is great individual variation in this respect, certain foods may be eliminated from the first. In general, fruits (cooked or raw) are omitted. Uncooked vegetables (salads) often cause diarrhea. Milk and other dairy products should be encouraged because of their constipating effect. Each patient is asked to list foods that formerly caused gas or frequent bowel movements, and to avoid them. Among the undesirable foods are the following: raw salads, tomatoes, string

# PARTS OF COLOSTOMY IRRIGATION SET



beans, baked beans, peas, lima beans, apples, tough celery, cabbage. It is important to adhere strictly to the "colostomy diet" for a few weeks. This period is the most critical for the patient because, if he finds that he has some control over his colon, he will make a rapid adjustment. The fear that all colostomy patients have is that it will "run all over" when they are away from the protection of their homes. Although some never have this happen, they still avoid social contacts for long periods. The foundation for this attitude is

## A METHOD OF COLOSTOMY IRRIGATION



laid in the first few colostomy movements and for this reason the first week to 10 days following surgery are the most important.

Besides a dry, constipating diet, some agent is desirable to reduce the odor of gas and stool. The chlorophyl compounds have been of great value and two products in particular, Chloresium\* and Olodex\*\* have been most useful. Beginning the second postoperative day, one tablet is taken with each meal and if tolerated the dose is doubled. There have been no evident side effects

<sup>\*</sup>Rystan Co., Inc., New York, N. Y.

<sup>\*\*</sup>Walker Vitamin Inc., Mt. Vernon, N. Y.

#### TURNBULL AND MICHELS

and the stool and gas are rendered almost odorless. Another product of great value is Kaophyl.\* This capsule containing kaolin and chlorophyl is placed in the colostomy morning, noon and night and completely deodorizes gas. Although it is impractical to use these products continually, they are of value in the early weeks and on special occasions.

## Colostomy Management

There are two kinds of "control" over normal bowel function: (1) sphincteric and rectal control (the sphincter and rectum acting as one unit), and (2) colon (reservoir) control. Since the rectum and sphincter are sacrificed, the patient must take advantage of the reservoir control that is already present. The left hemicolon acts as a storage and dehydrating space and takes from 24 to 48 hours to fill in the average adult. "Reservoir continence depends on the plastic adaption of the smooth muscle of the colon to the enlarging fecal mass. It is this type of continence which is retained by the patient with a well managed abdominal colostomy and its full utilization makes colostomy a well tolerated deformity."<sup>2</sup>

To prevent spontaneous colostomy evacuation, the patient must determine the time at which his colon is filled, and anticipate this by a thorough evacuation with a cleansing enema.

Most patients find colostomy irrigation is convenient and adequate at 48 hour intervals. A small group prefer daily enema evacuations. The important point is that the dressing does not become soiled between evacuations. Whether morning or evening irrigations are used depends on the convenience of the patient. We advise morning irrigation in most cases because this has been the most frequent preoperative bowel habit.

Older patients with bowel habits of clock-like regularity may follow this plan after operation. Some have spontaneous evacuations at 7 a.m. each day and remain dry and comfortable until the next day. This is to be encouraged, and care must be taken not to interfere with such regulated reservoir continence. The best plan is to determine the preoperative bowel habit of each patient and to try to match this with an appropriate irrigation pattern.

The amount of water to be used at each irrigation is remarkably constant. Generally one quart of warm water is allowed to run slowly into the colon. The water is not only a medium for the recovery of colon content but acts as a stimulus to mass peristalsis through overdistention of a hollow viscus. The irrigation is to be repeated as many times as necessary to evacuate the colon. Salt or soda may be added occasionally as both are known to stimulate peristalsis. Soap should be avoided as it is irritating to the mucosa.

# Irrigating Equipment

Many types of apparatus have been invented for irrigating the colostomy. The accompanying diagrams show the simplest of these (fig. 1). There is so

<sup>\*</sup>Warren-Teed Products Co., Columbus, Ohio.

#### PERMANENT COLOSTOMY

much variation among patients that a standard set or method is not applicable in each case; however, the applied principles may be varied to suit individual needs. It must be explained to each patient that the equipment and method introduced while in the hospital is not necessarily inflexible. The apparatus may be either an enema syringe or can with attached tubing and rubber disk. Some women who travel prefer a "Sojourn" (douche) bag because it is easily packed. Of the commercial products, the John Greer colostomy compact\* is effective, clean and adaptable to the needs of the colostomy patient. On the seventh or eighth postoperative day, a doctor visits the patient and presents the equipment shown in figure 2. Colostomy irrigation is explained simply as an enema to be taken at intervals. Reservoir continence is discussed and the accompanying diagrams interpreted. The patient is taken to the bathroom and instructed personally during the first two irrigations. Questions are answered as they arise. The importance of personal help at this critical period cannot be overestimated. It usually is not necessary that subsequent irrigating periods be supervised.

# Technic of Irrigation

Morning hours suit most patients best. A position of comfort is necessary since the average time of irrigation is 45 minutes.

The plastic apron is fastened around the waist below the colostomy and acts as a funnel. The lubricated index finger should be inserted at full length into the colostomy to dilate it and to straighten out a kink usually present just inside the peritoneum. The catheter is inserted 3 or 4 inches with the water running and is moved in and out a number of times until the terminal 3 to 6 inches of colon are cleansed. Following this, one quart of water may be introduced slowly into the colon, the rubber disk acting as a dam to prevent reflux. A few minutes later the catheter may be withdrawn, allowing the escape of contents. The whole operation should be repeated as many times as necessary to evacuate the colon. Abdominal massage (from right to left) has been found helpful by many patients. Some complain of ejection of enema water 1 to 2 hours after irrigation. This is troublesome, wets the clothing and is embarrassing. It may be avoided by catheterizing the colostomy at the end of the irrigation period. The water is usually pooled in the lower colon within reach of the catheter. The following precaution should be observed: if irrigation is not properly completed and if the colon is left partly full, the remaining contents will be ejected at frequent intervals throughout the subsequent 48 hour period. Although such patients complain of diarrhea, they are in reality showing the effects of an incompletely evacuated colon. One patient states, "If, by chance, you should stop short of the complete cleansing, the result will be known during that day. Not only will any gas emitted be malodorous but you have small excretions late in the day. Conversely, if a thorough job has been done, any gas emitted will be odorless. Except for some occasional small accumulations of residue evident at bedtime, cleanliness endures for 48 hours. The routine requires just one hour every other morning."

<sup>\*</sup>John Greer Co., Oakland, Calif.

## Colostomy Dressing

The colostomy dressing may be simple (fig. 3). A common method is effectively described by a male patient: "For dress during the day an elastic abdominal supporter is worn. Under this (and over the colostomy) is a plastic refrigerator bowl cover containing 4 thicknesses of toilet paper and a  $2\frac{1}{2}$  inch square pad of cotton next to the colostomy. The toilet paper is a moisture absorbent. For night dressing I have wide unbleached cotton bands which my nurse made for me. A small piece of cotton is placed over the colostomy. This

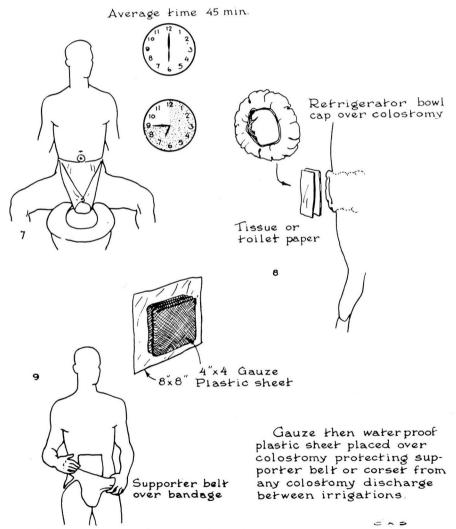


Figure 3

## PERMANENT COLOSTOMY

is covered with folded toilet paper. Over this I place a sheet of towel paper, then the band. Usually, except for some moisture, the covering is still clean in the morning." For day wear most patients place Kleenex tissue over the colostomy, several gauze squares and an 8 x 8 inch square of pliofilm. Over this may be worn a wide elastic supporter belt. The B. U. B. supporter\* is particularly well suited to the needs of most male patients.

In general women use the same colostomy dressing as men and a two way stretch girdle is pulled over all. Again, a pliofilm square is important as a protection against moisture from the colonic mucosa.

## Colostomy Bags

The use of colostomy appliances is never encouraged. To wear a bag is to admit defeat in management. They are bulky and foul smelling in most instances. The odor of fecal contaminated rubber is penetrating and permanent. Ileostomy appliances that are cemented on the skin are not applicable to colostomy since a large amount of gas soon balloons the bag out. Moreover, solid stool cannot be let out of the bag through the valve. There is some evidence to show that colostomy bags encourage prolapse.

## Conclusions

A well planned educational program for the patient with a permanent colostomy should be initiated in the immediate postoperative period. Dietary factors and colostomy irrigation technic have been presented. Such programs have proved of inestimable value in early rehabilitation.

## References

- 1. Jones, T. E. and Kehm, R. W.: Management of permanent colostomy. Cleveland Clin. Quart. 16:198 (Oct.) 1946.
- 2. Gaston, E. A.: Physiology of fecal continence. Surg., Gynec. and Obst. 87:280 (Sept.) 1948.

<sup>\*</sup>Made by the John B. Flaherty Co., New York, N. Y.