CARING FOR THE OSTOMY PATIENT

Course #218

4 Contact Hours

Author:
James Wittenauer, RN, BSN, MPA

Editor:
Peggy M. Goulding, Ph.D.
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About the Author

James Wittenauer is a graduate of Lewis-State College with Associates and Bachelors Degrees in Nursing. He also received a Masters Degree in Public Administration with a concentration in healthcare administration from Troy State University. Mr. Wittenauer is a Captain in the United States Air Force and has served in the armed services for the past 15 years. He has written articles for the newsletter Pulseline and for the National Association of Profile Nurses, and has been published in the Journal of Christian Nursing. Mr. Wittenauer is also a peer reviewer for Federal Practitioner. He lives in Las Vegas, Nevada, with his wife Erika and their two daughters, Amanda and Faith.

About the Editor

Peggy M. Goulding, Ph.D., received a doctoral degree in educational psychology from the University of Texas at Austin and completed a post-doctoral program in clinical neuropsychology at the University of Houston. She has over twenty years of professional experience in a variety of settings, including state, local and Federal government; private industry; hospitals; rehabilitation facilities; nursing homes; and public and private schools. A former faculty member in neurology at the Saint Louis University School of Medicine, she has also taught at the University of Houston, University of Missouri, and Maryville University. In addition to her work with the National Center of Continuing Education, she currently is in private practice in Georgetown, Texas.
Instructional Objectives

The objectives for this course address the gastrointestinal system, with a concentration on the ostomy patient. By the end of the course the nurse will be able to:

1. Name the major components of the gastrointestinal system and their functions.
2. List the accessory organs that assist the gastrointestinal system in its functioning.
3. Identify the focal points of a gastrointestinal assessment, including lab work.
4. Name the reasons for needing an ostomy.
5. Name the main steps in initial postoperative care of the ostomy patient.
6. Identify the most common ostomy problems and their solutions.
7. List the types of foods that are likely to affect the system of an ostomy patient.
8. Name the psychological problems that an ostomy patient may experience.
9. Categorize the different nursing diagnoses that are appropriate for the patient with an ostomy.
10. Identify the strategies used to help the patient who has sexual dysfunction from an ostomy.

Purpose and Goals

Nurses have tremendous impact on how a patient adapts to a new ostomy. The goal of this course is to increase knowledge regarding basic ostomy management, common surgical procedures, and assessment of the stoma. Diet and nutrition issues and psychological factors are also discussed.

Introduction

In our day and age, ostomy placement is more common than ever, yet many nurses are anxious about taking care of a patient with an ostomy, whether it is a new ostomy or an old one. The nurse taking care of a patient with an ostomy is crucial in their care and must be comfortable in dealing with an ostomy; not only for themselves but to be more at ease with their patient. In this course, ostomies will be examined and looked at from a fresh perspective. We will review the gastrointestinal system and its assessment. We will learn why ostomies are placed, and the postoperative care needed by the patient with a fresh ostomy. We will learn about handling the problems that can occur from having an ostomy long after the patient has gone home, such as the psychological implications as well the sexual concerns of the ostomate. We will also look at the nursing diagnoses that can be used in treating the ostomy patient. The course will end with a look at alternative procedures for the patient who may not want a conventional ostomy.

Gastrointestinal Anatomy

In reviewing gastrointestinal anatomy and physiology, it is noted that the system is divided into two parts. The first part is the digestive tract. This tract is a continuous passageway that starts from the mouth where food is taken in and ends up with the anus where the solid waste is expelled. The second part of the digestive system is made up of the accessory organs. These organs, which are not part of the digestive tract, are necessary for the digestive process because of the substances they make to aid in the digestion, metabolism, and waste of food.

Digestive Tract

The digestive tract is a muscular tube that extends throughout the entire body and is comprised of the mouth, pharynx, esophagus, stomach, small intestine, large intestine, rectum and anus.

The mouth has three purposes. These purposes are to receive incoming food; prepare food for ingestion; and aid in the production of speech, which will not be covered here.

The pharynx, more commonly called the throat, can be visualized by opening the mouth and depressing the tongue.

The esophagus is a long muscular tube that is approximately twenty-four centimeters in length. The primary purpose of the esophagus is to carry food from the mouth to the stomach.

The stomach is an expanded J-shaped organ in the upper region of the abdominal cavity. It has not one but three layers of muscle. The third muscular layer, the inner oblique, aids in the digestion of food by grinding the food and mixing it with digestive juices. At each end of the stomach the openings are guarded by a sphincter that permits the passage of food in one direction only. The first sphincter is called the cardiac sphincter and is located between the esophagus and the stomach. The cardiac sphincter is so named because of its proximity to the heart. The second sphincter
is called the pyloric sphincter and is located at the bottom of the stomach. It separates the pylorus, which is the bottom of the stomach, from the duodenum.

The small intestine is the longest part of the whole digestive system. The reason the small intestine is so named is because of its small diameter. The small intestine can be anywhere from ten to thirteen feet in length. The small intestine is made up of three parts: the duodenum, jejunum and ileum. The duodenum is responsible for secreting large amounts of mucus, to protect the small intestine from the hydrochloric acid that is carried over from the stomach. The jejunum has a slightly larger diameter than the rest of the small intestine and has a thicker muscular wall. The ileum is the last portion of the small intestine and has been noted to have a large number of lymph node clusters.

Most absorption of food takes place in the small intestine by way of structures called villi. These villi are little outreaches of the small intestine that actually increase its surface area and absorb the digested food through special mucosal cells. Digestive enzymes from the liver and pancreas also enter the small intestine to aid in the digestive process, but the liver and pancreas will be discussed at a later time. This is the end of the small intestine; now we move on to the large intestine by way of the ileocecal valve.

The large intestine has three main purposes. The first one is storage and elimination of waste. The second one is the reabsorption of the water added to the food when in the small intestine. The third purpose is for the synthesis of certain bacteria that the body needs. The large intestine is usually divided into three portions and begins in the lower right side of the body. The first portion of the large intestine is called the ascending colon, because it travels upward in direction. The next portion is called the transverse colon, because it makes a turn at a right angle and extends across the abdomen. The portion of large intestine extending downward is called the descending colon. From the descending colon, the colon forms into an S-shape piece of bowel called the sigmoid colon. The sigmoid colon continues on until it empties into the rectum, which has two sphincters: one internal and one external. The rectum continues to the anus and from there the solid waste of food passes out of the body.

**Accessory Organs**

There are three accessory organs that will be discussed here: the liver, gallbladder, and pancreas.

The first and foremost to be discussed is the liver. The liver is the largest gland in the body and is noted to perform over five hundred functions. The liver is an encapsulated organ and is divided into three main lobes, which are in turn divided into smaller lobules. The functional unit of the liver is called the hepatocyte. Some of the liver’s functions include: carbohydrate metabolism; detoxification of toxins in the plasma and the blood; synthesis of plasma proteins, amino acids, and vitamin A; the storage of vitamins K, D and B12; and the removal of ammonia from the body by conversion to urea for excretion in the form of urine.

The gallbladder concentrates and stores the bile that is made by the liver.

The last accessory structure to be mentioned is the pancreas. Since the pancreas is both an endocrine and exocrine gland, only the exocrine portion will be mentioned here. The functional cells of the exocrine part of the pancreas are called acinar cells. These cells secrete the digestive enzymes into the small ducts that emerge into the main pancreatic duct.

The alimentary canal is made up of four walls: the mucus, the submucosal, the muscular, and the fibroserous. The mucus layer secretes digestive juices and mucus that protects and aids in propulsion. The submucosal layer contains blood vessels, lymph tissue, and nerves. The muscular portion of the alimentary canal contains smooth muscles that contract and relax in a certain way that promotes peristalsis. The last layer of the alimentary canal, the fibroserous, is the visceral peritoneum that covers the outer walls of the alimentary canal.

Now that we have completed a review of the gastrointestinal system, let’s move on to the next part of the course, the gastrointestinal assessment.

**Gastrointestinal Assessment**

**History**

In assessing the gastrointestinal system, as with any system, one must start with a good history. The first thing that should be done before taking the history is to ensure as much privacy as possible. The reason for this is because the patient who is giving the history may consider this a very private matter since it pertains to their elimination.

The next step would be to explore all gastrointestinal complaints that the patient offers. These complaints should be explored no matter how trivial they may seem at the time. During the history taking, ask only the questions that pertain to the patient’s condition.

In taking the history, there are certain questions that can and should be asked. These cover the patient’s past health status and include any chronic health
problems. An example of this would be finding out about past alcohol abuse; this would be a good signal for possible liver problems and/or gastrointestinal bleeding. Other questions that should be asked are about the family history of gastrointestinal problems. This is very important, especially if the patient has a family history of cancer or polyposis. The last thing that should be included in the history is the person's stool pattern, any deviation from the stool pattern, the reason for the stool pattern deviation, and history of laxative use/abuse.

**Inspection**

The entire abdominal area should be inspected for contour, skin integrity and peristalsis. In inspecting the abdominal area for contour, remember that the normal contour is slightly rounded. Thin people tend to have a flat abdomen, while heavier people may have more of a rounded one. While assessing the contour of the abdomen, note any discoloration and/or irregular contours. The skin integrity of the abdominal area should be smooth and intact. Look for discolorations, rashes, lesions, dilated veins and scars.

A concave abdomen may be indicative of malnutrition, while a distended abdominal area may indicate the presence of a tumor. Other skin abnormalities to look for are striae, which may signal either a tumor or Cushing's syndrome; tense glistening skin, which can be an indicator of ascites; and cutaneous angiomas, which are indicative of liver disease. The presence of strong peristaltic waves may indicate intestinal obstruction.

**Auscultation**

Auscultation is the method that we all use when assessing a patient. Use the stethoscope and listen to all four quadrants of the abdominal area for bowel tones. There are some schools of thought that recommend using the nine-region method of listening to bowel tones and using the bell to listen for vascular sounds.

Bowel sounds should be interspersed every five to fifteen seconds. Each quadrant should be auscultated for at least one to two minutes; other sources go so far as to say five minutes for each quadrant. Be sure that the patient has an empty bladder, as urine may obscure bowel sounds.

Hyperactive bowel tones that are unrelated to hunger represent diarrhea or early intestinal obstruction. Hypoactive bowel sounds may be a clue to a paralytic ileus or peritonitis. High-pitched bowel noises may be indicative of intestinal fluid and air under pressure in a dilated bowel. High-pitched noises that go along with the complaint of cramping may indicate intestinal obstruction.

**Percussion**

Percussion is useful in determining the size and location of abdominal organs and excessive amounts of fluid and air in the abdominal area. In percussing the abdominal area it is important to percuss all four quadrants and keep in mind the structures that are below what you are percussing.

The two types of sounds that will be heard upon percussing the abdomen are dull and tympanic. The dull sound is made when something solid is hit; solid organs are a good example, like the liver, spleen, and intestine if fecal matter is present in it. The tympanic sound is made when there is air present. An example of this would be an air filled stomach or intestine. Abnormal findings to be noted include high-pitched tympanic sounds that are indicative of a gaseous bowel distention. A shifting dull sound is representative of ascites; this is produced when there is a change in the patient’s position that causes a shift in the fluid to the dependent areas.

**Labs to Consider**

Certain lab values that should be considered are the complete blood count (CBC), amylase and lipase, occult blood test, basic chemistry panel, comprehensive chemistry panel, and prothrombin time (PT/PTT). The complete blood count will alert the practitioner to an increased white blood cell count, which is a sign of infection. The hemoglobin and hematocrit levels from the complete blood count will tell of a possible internal hemorrhage, even a gastrointestinal bleed. The occult blood test will also determine the presence of blood in the gastrointestinal system.
especially in the lower parts of the system. Increased amylase and lipase will be indicative for pancreatitis or pancreatic cancer. The prothrombin and partial thromboplastin time are tests for coagulation defects; if the pt or ptt is abnormal, this could signal problems with the liver and its ability to synthesize vitamin K and other factors needed for clotting.

The Need for an Ostomy

In dealing with diversions, whether they are fecal or urinary, there are reasons that the diversions must be created. In this offering, only the fecal diversions will be dealt with.

There are in essence only three reasons that an ostomy has to be placed in a patient. They are trauma to the gastrointestinal tract, disease process, or the presence of a congenital anomaly.

Patients needing an ostomy from trauma to the gastrointestinal tract may have sustained a gunshot or knife wound that is so severe that it warrants part of the injured colon being removed. An example of a disease process necessitating the placement of an ostomy is cancer of the colon, in which everything from the tumor on down has to be removed and a fecal diversion placed. An example of a congenital anomaly of the gastrointestinal system is an infant who is born without an anus who needs to have an ostomy placed to allow for elimination of waste.

Different Types of Ostomies

Just as there are varied reasons for needing a fecal diversion, there are many types of diversions. Of course, the type of diversion will depend on the part of the bowel being removed. The main types of fecal diversions discussed here will be the ileostomy, double barrel colostomy, loop colostomy, and sigmoid colostomy.

The ileostomy is defined as a stoma created after the removal of the large intestine. It is located at the terminal ileum in the lower right quadrant of the abdomen. The fecal matter of the ileostomy, or effluent as it is called, will be semi-liquid. The ileostomy can be managed by having a drainage device attached to the outside of the ostomy.

There are instances where a continent ileostomy can be used. A device called a Koch pouch is made by forming a loop in the ileum to make a pouch that can be closed off by a nipple valve and accessed later for emptying. Although this kind of ileostomy eliminates the need for external appliances to be worn, other problems can develop such as valve failure, incontinence, and inflammation of the pouch. The Koch pouch is rarely used today, with the conventional ileostomy with pouching system taking precedence. The Koch pouch along with other alternatives to fecal diversions will be discussed later.

The double barrel colostomy type of fecal diversion is used when the diversion is meant to be temporary or when the alimentary canal will be reestablished at some point. The double barrel colostomy is just that: two stomas for one fecal diversion. With the double barrel colostomy, one stoma is present for passing the effluent to the outside and the other stoma is used as a mucus fistula. This mucus fistula secretes mucus that is normally secreted. When dealing with the double barrel colostomy, it is not necessary to put a drainage device over the mucus fistula. Normally only a gauze dressing over the stoma site is needed to collect the mucus.

The loop colostomy is the next fecal diversion discussed here. The loop colostomy is used when a diversion is needed immediately, as in the case of a bowel obstruction. The loop colostomy is a single stoma diversion that is made just the way it sounds. A loop of colon near the site of the injured, diseased or obstructed colon is brought up to the skin through an incision, then a stoma is created from that piece of bowel and sutured in place. The loop colostomy may also be called a temporary colostomy and can be created anywhere in the large intestine. The loop colostomy, because of its temporary nature, is managed by way of a pouching system.

The sigmoid colostomy is a stoma that is created on the lower left side of the abdominal area, and is made via the sigmoid portion of the colon. The stool from the sigmoid colostomy is soft to firm. The method of stool evacuation can be either by way of a pouching system or by irrigating the stoma at a certain time of day to produce regular bowel movements.

Preoperative Care and Diagnostic Studies

In preparation for the surgery, the patient should undergo certain tests to ascertain underlying health status. The most basic of these tests are mentioned here.

The first test is a complete blood count. Not only will this determine if the patient has a low hemoglobin, but an elevated white blood cell count may alert the health team to an infection. The next test is the electrolyte panel or chemistry panel. This serum blood test is done to detect any electrolyte anomalies present in the patient’s system. The test’s protein levels will show if the patient has a nutritional deficit. The test will also give the practitioner a baseline of the patient’s kidney function by way of the blood urea

Postoperative Care

In dealing with the postoperative care of the ostomy patient, the basics must always be remembered. These basics include assessing the vital signs. This may sound redundant, but vital signs are very important and need to be done on a regular basis following the return of the patient to the nursing unit.

The next thing that needs to be done after assessing the vital signs is the assessment of the stoma itself. The stoma should appear beefy red, at least one inch around and moist. If the nurse should happen to note a stomal color like brown, purple or black (especially black), the surgeon must be notified at once.

A change in color may mean that the pouching appliance may be on too tight, or an internal problem is present. Any color other than beefy red may indicate that the stoma may not be perfused and that stoma death may follow if interventions are not done. Whatever the reason for the change in stoma color, call the surgeon.

The stoma will appear swollen along with appearing beefy red in color; the swelling should subside in about six to eight weeks to the size it will stay.

Peristomal skin is another thing that should be assessed. The peristomal skin should be checked frequently and skin care done meticulously to prevent skin breakdown. After assessing the stoma and peristomal skin, the nurse should assess the abdomen to check for distention and check the surgical incision for bleeding, dehiscing, or any other abnormality. Drains should also be assessed for the type and amount of drainage. Another thing that should be monitored carefully is intake and output. This is especially important for the patient with an ileostomy because that person can be at risk for dehydration and electrolyte imbalance if too much fluid is lost without adequate replacement.

Managing Common Ostomy Problems

Assessing the Stoma

Even after all the patient education has been done and the patient has gone home, there still may be problems that come up with everyday living with an ostomy. Problems such as mechanical breakdown, chemical breakdown, prolapsed stoma, and stenosis of the stoma will be covered as well as assessing the stoma itself.

The first thing is assessing the stoma itself; of particular importance is where the stoma is located. By knowing its location, the nurse can anticipate the kind of effluent that will be discharged. For example, the nurse should know that a sigmoid colostomy will put out more of a formed effluent than an ileostomy, which puts out more of a semi-liquid effluent.

The second thing to look for is for a healthy stoma. The stoma should appear beefy and red. The one exception to this is when a patient has a low hemoglobin; in that case the stoma would be pink looking. If the stoma appears brown, purple, or black, this should be documented and the physician notified, since this may indicate ischemia to the stoma.

The next thing to look for is how far the stoma protrudes from the skin. The normal stoma protrudes only slightly. Other examples of stomas are a flush stoma where the stoma is actually in line with the skin, and a retracted stoma where the stoma goes below the skin line. The last example is a protruding stoma, in which the stoma is out far above the skin line.

Assessing the size of the stoma is very important. As stated earlier, stomas will shrink in the six to eight weeks following surgery. The stoma should be measured in inches or millimeters. The stoma should be measured at least once a week or when there is a change in the patient's weight.

The output of the stoma should be assessed as well. The amount of output varies greatly depending on the type of stoma, but a range of 500 to 1500 cc per day is a good estimate to go by.

Last but not least, the peristomal skin should be examined. It should be free of redness, tenderness, rashes or weeping.

Mechanical Breakdown

The first common problem that the nurse may encounter is mechanical breakdown of the peristomal skin. This is caused from too frequent removal of the wafer/pouching system, removing the tape, or using adhesive solvents. These actions remove the protective layer of the epidermis, which leaves the skin raw, moist and painful.

The treatment for mechanical breakdown is simple. First, remind the patient that it is not necessary to remove the pouching system after each bowel move-
Chemical Breakdown

The next problem common in patients with an ostomy is that of chemical breakdown of the peristomal skin. This kind of breakdown is caused by irritation from the stool, or inappropriate use of adhesive solvents. There are a number of ways to treat chemical breakdown and prevent its recurrence.

The first thing to do in treating chemical breakdown is to evaluate the pouching system and adjust it to prevent leaking. The next step is to clean the peristomal skin with soap and water after using adhesive removers to remove any residual chemicals. If the skin is moist and raw, keep the skin dry and use stoma powder as mentioned earlier.

Stoma paste can be used to fill in the skin folds and creases; this will prevent leakage of stool. Using a thin flexible wafer may provide extra comfort and protection to the irritated area.

Rashes

Rashes are usually an allergic reaction to a stoma product or a fungal infection, and the treatment is simple depending on the cause of the rash. For an allergic reaction, obtain an order from the patient’s physician for a steroid cream, then find and discontinue the use of the product that is causing the reaction. If the rash is caused by a fungus, keep the peristomal skin clean and dry, and use the appropriate antifungal powder.

Prolapsed Stoma

Prolapsed stomas are often seen in overweight patients or patients with weak abdominal muscles. The treatment for a prolapsed stoma is to use a flat and flexible pouching system; this will prevent trauma to the stoma when pouching. Using a support belt can prevent trauma, as well as preventing the stoma from protruding further.

Flush Stoma

A flush stoma is a stoma that, as its name implies, is flush with the skin. The best way to deal with this problem is to use a wafer system that has convexity. This will help the stoma stand out more against the skin so that a better seal will form.

Stenotic Stoma

Sadly enough, the only thing that will fix a stenotic stoma is surgical intervention.

Dealing With Mucus Fistula Discharge

Discharge from a mucus fistula occurs with a double barrel colostomy; one stoma being for drainage of fecal matter and the other for drainage of mucus, which is a normal secretion of the bowel. The only thing that a mucus fistula requires is a dressing over the stoma rather than a pouching system, unless of course the mucus drainage is excessive.

Fluid and Electrolyte Imbalances

Fluid and electrolyte imbalances are a major concern for the ostomy patient, especially the ileostomy patient. The first thing to do is to teach the ostomy patient about the signs and symptoms of dehydration, including thirst, dry tenting skin, abdominal cramps, rapid heart rate, confusion and low blood pressure. Prevention and treatment of fluid and electrolyte imbalances can be accomplished by having the patient drink two to three quarts of fluid every day, especially fluids rich in sodium and potassium; teaching the patient to avoid the use of laxatives and other over the counter medications; and encouraging the patient to notify the physician if dehydration persists.

Irrigation of the Colostomy

For those patients who do not want to wear a pouching system and have the right type of colostomy, there is the option of irrigation of the colostomy. The procedure of colostomy irrigation is started seven to ten days after surgery, with the patient participating in the procedure as much as possible.

In preparing for the irrigation, the procedure is explained on a step-by-step basis. It is important to have the same equipment to teach the patient the irrigation process that he or she will be using in the home.

The first step in the irrigation of the colostomy is to have the patient sit up in a semi- or high Fowler’s position. The patient can even sit on a bathroom commode seat; this may help the patient with the process by making it feel more natural.

Next, a flexible catheter lubricated with water-soluble jelly is inserted gently into the stoma. The catheter should not be inserted more than three inches into the stoma and should only be advanced as far as it will go without resistance. Do not force the catheter into the stoma! If there is a problem advancing the catheter, the stoma may need to be dilated. This can be done by placing a gloved lubricated finger that is the size of the stoma opening carefully into the stoma, and
rotating the finger.

After the catheter is inserted, the irrigating bag filled with 500-1000cc of warm fluid is instilled slowly into the colon. The bag should be held twelve to twenty-eight inches above the stoma. If cramping occurs, the flow of fluid is stopped for a few minutes and then resumed. The irrigant is retained in the colon for few minutes, and then drained through the outlet into a basin or commode. The process usually takes about thirty to forty-five minutes. If the return on the irrigant is noted to be slow, then the patient should lean forward or move from side to side. The character and total return of fluid should be noted. Be aware that a dehydrated person may retain some of the fluid that has been instilled.

In teaching the patient how to do an irrigation, the nurse must also stress the importance of reporting any obstruction or prolapse of the stoma. Teaching the patient where to purchase the needed equipment for the irrigation is also a great help.

Pouching the Ostomy

The only two ostomies that can be irrigated are the descending colostomy and the sigmoid colostomy, because of the paste-like consistency of the stool. The other types of stomas such as the ileostomy and the ascending colostomy cannot be irrigated due to the thinner consistency of the stool. For those patients that do not have the kind of ostomy that can be irrigated, or those who do not wish to irrigate, the only choice is to wear a pouching system.

The two types of pouches used are the disposable kind and the reusable kind. The disposable kind can be thrown out after it has been used and is emptied as needed. The reusable pouch is washed, allowed to dry and used again as needed. The person who elects to use the reusable pouch should have at least two pouches, and an extra one with him or her at all times.

There are also two kinds of pouching system setups. The first is a system where the wafer and the pouch are one piece and attach as one to the peristomal skin. The other type is the two-piece system where the wafer is separate and attached to the peristomal skin, and the pouch attaches to the wafer. Both types of pouching systems have their advantages. The one-piece system is more flexible, so this may be good for the active or athletic person, but it needs to be irrigated with water after being emptied and will need to be changed about every four to five days. The two-piece may only need to be changed once every five to seven days, and the pouch can be removed, rinsed out and then put back.

There are certain things to remember about the pouching appliance that the patient must be made aware of. The first thing is that the part of the appliance that the pouch attaches to is called the wafer or flange. The wafer also has a sealant (similar to hydroactive dressings) that adheres to the peristomal skin. One side of the wafer is the part that the pouch hooks onto; the other side is the part that adheres to the peristomal skin, and the stoma is in the middle.

The person should be able to wear the wafer from four to seven days, so long as it gives a good seal. If it is noted at any time that the wafer leaks, it must be changed as soon as possible; or the skin exposed to the caustic substance of the fecal matter will become irritated and painful. Do not try to patch or fix the wafer. The patient must be taught to empty the pouch when it is one third to one half full; if it is not emptied then, the pouch full of stool could loosen the seal from the wafer and cause a leak.

The patient can be taught to change the appliance while either sitting or standing; standing may actually be more effective because the skin folds in the abdominal area will be less of a problem, and the peristomal skin may flatten as the person stands up. Teach the patient to remove the appliance with both hands. If needed, the person can use adhesive remover to assist in removing the wafer, as this may reduce the incidence of skin irritation or mechanical breakdown. The patient should hold onto the skin when removing the wafer, and he should go slowly as this will also cut down on peristomal skin irritation. Once the appliance is removed, the patient should be taught to observe the peristomal skin for irritation, redness, rash or weeping. If any of these conditions are present, the patient should inform his or her physician or enteral stomal therapist.

Next, the patient should be taught to wash the peristomal skin with warm water only and to pat the skin dry when done. Slight bleeding is normal at the stoma if it is rubbed too hard in the process of cleaning the peristomal skin; this shouldn't cause any pain because there are no nerve endings there. If bleeding occurs, put pressure onto the site for two to five minutes. The bleeding should stop by then. If the bleeding doesn't stop, the patient should call their physician at once.

The next step is to remove the wafer from the package and center it over the stoma. The opening of the wafer should not be any more than 1/8 of an inch over the actual stoma size. There are two reasons for this. First, if there is too much peristomal skin exposed, it can become irritated from the caustic substances from the stool. The other reason for leaving the 1/8-inch margin is to allow for...
expelling stool into the pouch. The patient can use the old wafer to cut an outline for the new wafer. For the patient with a new stoma, they may need to cut the hole in their wafer slightly smaller each time they change their wafer due to shrinkage of the stoma until it reaches the size that it will stay.

After centering the wafer over the center of the stoma, apply it to the site, placing the wafer on with two fingers and holding pressure for at least one to two minutes to make sure that the wafer has good enough contact with the skin to form a seal that will not leak. For periods of increased activity, the person can tape around the edges of the wafer to ensure the edges of the wafer will not come off; this can also be done for showering. If the person has a problem with uneven skin or getting a good seal, he or she can use stoma adhesive paste or powder with skin sealant to get a better seal. The stoma adhesive paste can be applied around the stoma right up to the edge of the stoma itself and will not hurt it. If the person chooses to use the skin sealant with the stoma powder, the skin sealant should be applied first and left to dry; the sealant will act as a barrier or a second layer of skin, so to speak. The powder will be applied after the skin sealant has dried; it should be brushed on around the peristomal skin lightly, and any excess should be brushed away. Either of these two ways of producing a better seal is acceptable and depends on the ostomate's choice.

In teaching the patient about pouch changes, there are certain tips that the person may find very helpful. The nurse can recommend using eight to ten drops of Banish odor deodorizer in the pouch between changes, or the patient can insert deodorant charcoal filter caps into the pouch to help absorb odors. The nurse should also advise the patient not to leave their ostomy supplies in the car during the warm months, as this may damage the integrity of the wafers. The patient must be advised to always check supplies and reorder them as necessary, and never to wait until he or she is using their last appliance before deciding to reorder supplies.

Daily Activities with Ostomies

In returning to a routine of normal daily activities, the patient should wait at least six to eight weeks before resuming his or her previous activities. Very heavy lifting should be avoided, and resuming sports activities will depend on the person's physical condition at that time.

Once the ostomate has fully recovered his or her strength, he or she can enjoy a full range of physical activities just like before having the ostomy placed. The most important thing for the ostomate to remember is that he or she must manage the ostomy properly.

Sports and play activities can be enjoyed just as before. Skiing, horseback riding, golfing, and many more activities can be pursued, and even swimming is not out of the question. The activities that should be avoided are things like weight lifting and contact sports, as these could result in damage to the stoma itself. The patient who has to lift heavy weights for his or her work should get clearance from their physician before doing so.

The same style of clothing can be worn as before the ostomy placement; belts can be worn, pantyhose can be used, and even girdles without the stays can be worn. Clothing shouldn't be too tight, however, or the clothes might rub over the stoma and cause it to bleed.

Bathing for the ostomate is not as bad as one might think. When taking a bath or shower, the person can leave the pouch on or off. Bathing in and of itself will not make the pouch come off. Water will not harm the stoma, and usually all that is needed is a Band-aid to cover the site if the person chooses not to bathe with the pouch on. If the ostomate does choose to bathe without a pouch, he or she should pick a time when the ostomy will not be so active.

The ostomate patient should be able to return to work as soon as the recovery period is over, generally in about six to eight weeks. The only concern, as stated before, is that the person should not do any heavy lifting. If the person has any concerns about returning to work, he or she should consult their physician or enteral stomal therapist.

Traveling Tips

For the ostomy patient who is about to travel, the best advice he or she can receive is to be prepared. When traveling, always pack more supplies than are likely to be needed. If traveling by bus, plane or train, the ostomate should be advised to always take a carry on bag of ostomy supplies with him on board, just in case the other luggage gets lost. So even if the luggage does end up in Brazil and the ostomate is in Austria, the supplies will be there with the patient when they are needed!

When traveling outside the United States, or even just to other areas where the climates are different, the patient should check with their physician or enteral stomal therapist about the local food and water. The general rule for water for irrigation is that if it is good enough for drinking, it is good enough for irrigation of the stoma.

When traveling by car, the lap seat belt should be fastened above or below the stoma, while over the shoulder seat belts are the seat.
belt of choice. When traveling, it is always a good idea to keep the pouches stored in a cool dry place.

**Diet and Nutrition**

While the changes that the ostomy patient may have to make may be small to minimal in areas of play, travel and bathing, the changes in diet and nutrition may be somewhat more substantial.

The diet for the new ostomate postoperatively will include a low fiber diet for at least a few weeks following the operation. Foods that are high in fiber, such as nuts, uncooked vegetables, corn, and beans for example, should be avoided due to the fact that they are hard to digest and may give some discomfort after ingesting. The initial diet for the ileostomy patient may include things like clear soups, cottage cheese, tea, dry cheese, liver and lean meats, while initially excluding foods that are high in fiber and cellulose such as beets, leeks, asparagus, and fruits with seeds.

A few weeks after the postoperative period, the ostomate may start experimenting with new foods to find out which kinds of food the ostomy tolerates or "gets along with." Some patients believe that to keep the bowel from moving, all the person has to do is not eat; this couldn’t be farther from the truth. In fact the empty bowel produces a lot of gas and doesn’t work as well as when the ostomate eats regularly.

When picking and choosing foods, the ostomate should be aware of certain foods that can cause gas, constipate and even irritate the stoma itself. Foods that cause gas include broccoli, Brussels sprouts, cabbage, corn, cucumbers, mushrooms, onions, peas, spinach, string beans, and radishes. Other foods that may cause gas are sourdough bread, avocados, apples, and legumes. Beverages that may be gas forming are beer and any carbonated drink. It must also be said that doing things like chewing gum and drinking beverages through a straw may cause gas.

The ostomate should also be careful of foods that are likely to either cause or increase the odor in the stool. The basic rule for these kinds of foods is that if they go in strong, they are going to come out strong. These foods include eggs, asparagus, certain spices, onions, garlic, fish and mushrooms.

Just as there are foods that cause odor, there are foods that can help decrease odor in the stool. These are things like parsley, buttermilk, cranberry juice, orange juice, and yogurt. In addition, there are commercial products available to help the ostomy patient reduce the odor in their stool. The ostomate should consult his or her enteral stomal therapist for more information on the subject.

Foods that may constipate the ostomate may include things like dry cheese, nuts, chocolate, coconut, celery, corn and raisins.

On the opposite end of the spectrum are the foods that may contribute to or cause diarrhea. These foods include broccoli, spinach, fresh milk, figs, green beans, hot condiments, prunes, raw vegetables, highly seasoned foods, beer and liver. The ostomate can still get diarrhea from the typical viral sources. For the patient that has the diarrhea from a virus, he or she should try eating things like strained bananas, applesauce, tapioca, oatmeal, bran cereal, and peanut butter (not chunky). These foods, especially the applesauce and bananas, will help the stool form from the natural pectin in the fruit. The person should also drink Gatorade to prevent dehydration and electrolyte loss. If the diarrhea persists for twenty-four hours, the person should be evaluated at the hospital.

Certain foods may actually irritate the stoma, including hot spices and citrus fruit juices.

Although the foods mentioned here are many, and overlap in their categories, the ostomy patient should experiment with different foods to see if they agree with them or not. Just because the foods mentioned may cause gas, diarrhea or constipation in some people, that doesn’t mean they will have the same effect in everyone. Every person’s system is different; that is why it is so important to try different foods.

The patient with the ileostomy must also be advised to alert his physician and/or pharmacist about his ostomy status so that they can avoid giving sensitive time-release medications that release themselves in the small intestine, as they will be emptied out the ileostomy and rendered ineffective.

**Sexual Concerns for the Ostomy Patient**

Most often the patient will talk to a nurse about their family, their spouse, concerns about an upcoming surgery, financial concerns and what not. However, patients may or may not be so revealing about issues when it comes to their sex life. This is without even throwing in the sexual concerns specific to having an ostomy. The patient may be even more hesitant if the concerns and questions are only about potential problems. Even though the patient may be hesitant, this is an area that needs to be addressed, with the patient and their partner if possible. The sooner the questions can be answered and problems identified with plausible solutions in mind, the sooner that patients and their loved ones can get back to enjoying a satisfying intimate relationship.

The type of surgery done will determine if there are any perma-
may be that of decreased lubrication, which can lead to painful intercourse for her. Another potential problem may be that of some discomfort the first few times having intercourse due to either the closure of the anus or the shifting of the uterus from the surgery. This may be helped by having the female ostomate use a water-based lubricant for enhanced comfort, and making sure that the first few times of sexual activity are gentle. In addition to the physical problems for the female patient mentioned here, there might be other problems of an emotional nature. The female may have one of two responses from having an ostomy. The first may be that of sexual enhancement, because the surgery and ostomy placement removed the diseased part that was causing the sexual problem in the first place. The other, more common response may be that of feeling that she cannot be loved or touched because of the ostomy being there. She may also feel that the sexual relationship will be lost completely as a result of the surgery.

In dealing with the sexual aspects of ostomy placement, the nurse should let the patient vent feelings and anxieties about the sexual aspect of their relationship once they are discharged from the hospital. Some patients may think that their partner will not want them sexually anymore because of the ostomy, while that very partner may think that they will hurt the stoma from the sexual activity. It is important to let both the patient and partner know that sexual activity by no means will hurt the ostomy. If the nurse is uncomfortable discussing this with the patient, or if the nurse feels that the problems are related to more than just the placement of the ostomy, then the nurse should consult a therapist.

In talking to the patient about sexual activity after discharge, the nurse can give simple suggestions that may make things a little easier for both the ostomate and the partner. These are things like having the ostomate empty the pouch before sexual activity and making sure that the wafer has a good seal. The nurse can also tell the patient to wear a pouch cover. For the men, they can wear a cummerbund. But by far the most important advice that the nurse can give the patient and partner is to have them discuss their feelings with each other about the ostomy.

In addressing the issue of whether the female ostomate can bear children, the answer is yes. But pregnancy and the number of children to plan for should be discussed with the patient’s physician. Recommendations regarding pregnancy will depend on the physical condition of the patient; pregnancy should happen only after enough healing from the original surgery has taken place and with the consent of the patient’s physician. In the area of birth control, the literature suggests that there are no reasons that a female ostomate cannot use birth control pills; even if she has an ileostomy and has concerns about the enteric coating and absorption effects. The pharmacist can answer the patient’s questions about oral contraceptives.

Coping and Support for the Ostomate

Although some people adapt well to having an ostomy, others do not. Having an ostomy placed can be a very frightening, life-changing event. The patient’s response can range anywhere from slight anxiety to anger and resentment at having the ostomy and not wanting anything to do with it. The patient may show fears about odors from the ostomy and about soiling in public. One thing that the nurse can do to
help the patient and family is to let the patient vent his or her fear, anger, concern or whatever they are feeling at that time.

It is important to realize that each patient is different and will react in different ways. One patient may be relieved at having the ostomy because it may mean the end of a bout of painful Crohn's Disease. Another patient may be scared and angry because the ostomy placement was sudden, and the patient didn't have adequate time to prepare himself for it. Whatever the reaction, the nurse should remain empathetic and be ready to give support. In no way should the nurse force the patient to care for their ostomy until they are ready to and have gotten over the grieving process.

Educating the patient about the ostomy will come when the nurse notices signs that the patient is taking an active interest in the ostomy. If the nurse believes that the patient's reaction to the ostomy is not what it should be, then the patient may need counseling by a mental health professional.

One of the best things for the patient may be to have a visit from a member of the United Ostomy Association of America, or UOA for short. This is a support group for people with ostomies that frequently sends its members to visit new ostomy patients in the hospital. The members come and visit with the new ostomates and talk about coping with an ostomy and how people with ostomies can live normal lives. In this way, the patient can be encouraged to believe that they can and will get through this rough time in their lives.

There are a variety of services that the UOA offers. These include local chapters for meetings, visits and local newsletters. Other services are quarterly magazines, written educational publications, advocacy for reimbursement and other issues, as well as a liaison relationship with other organizations like the American Cancer Society, and the Wound, Ostomy, and Continence Nurses Society, just to name a few.

Utilizing Nursing Diagnoses with the Ostomy Patient

In planning nursing care for the patient with an ostomy, there are a number of nursing diagnoses that can be used. A few will be mentioned here along with their interventions.

The first and foremost is for Potential Alteration in Body Image related to loss of control of fecal elimination. The interventions for this include teaching about good odor and flatus control, discussing the normal emotional response to having an ostomy, and giving information on the United Ostomy Association of America support group.

The next nursing diagnosis is Potential for Alteration in Skin Integrity related to skin contact with caustic substances in stool. Possible interventions for this are selection of a pouching system that fits the patient's anatomy so it will ensure a better fit, using and teaching the patient about good ostomy care, and treating any peristomal skin redness as soon as identified.

The next nursing diagnosis is Potential for Infection related to surgical invasion. These interventions would be the same as for any postoperative patient: observing wound for signs and symptoms of infection such as redness, tenderness, swelling or foul odor; monitoring temperature and white blood cell count; observing aseptic technique whenever applicable; and ensuring the administration of ordered antibiotics.

The last nursing diagnosis that will be covered is the Potential for Sexual Dysfunction related to altered body image and/or damage to innervation of the sexual organs from surgery. The interventions here are to discuss with the patient and his or her partner the need to be adaptable and allow them to voice concerns; teach measures to minimize problems with the ostomy during sexual activity; recommend the use of artificial lubrication for female ostomates; discuss alternatives available to male patients with damage to innervation, such as medications and/or penile implant; and discuss alternatives to intercourse to maintain intimacy.

Although all the interventions have been discussed before, it is helpful to consider them in conjunction with a specific nursing diagnosis to better plan the care for the patient.

New Treatments and Alternatives

For the patient who has not yet had an ostomy placed, there are new surgeries that the nurse may want to mention as an option to ostomy. One of these is the ileal reservoir. With this procedure, a part of the small intestine is appropriated to create a reservoir, which is attached to the anal canal so that fecal material can be passed on through the anus. For the ileal reservoir to work, the patient must be very motivated and willing to put forth the effort to make it work. This includes learning to do the Kegel exercises to build muscle control that will assist in keeping the patient continent. These exercises must be done at least twenty times per day. For a few weeks postoperatively, the patient may experience some perineal skin irritation, pouchitis, and brief periods of incontinence. These are common complications and can be treated by the physician. The advantages to this procedure are that the patient will not
require any stoma equipment and can have a normal evacuation of stool. A disadvantage is that this type of alternative requires two procedures and has a higher risk of complications than a regular stoma placement. Other disadvantages include four to eight bowel movements per day. The long-term results from this procedure are as yet unknown.

The second alternative, as discussed earlier, is the continent ileostomy or the Koch pouch. The Koch pouch has been around since the 1960’s and involves creating a pouch and a nipple from the ileum that can be intubated with a plastic tube to evacuate the stool. The patient can empty the pouch with a water soluble lubricated plastic catheter. (The catheter best suited for the patient should be decided by the physician). The advantage to the continent ileostomy is that the ostomate need only wear a small bandage to protect the mucus membrane; therefore, no external appliance is needed. The disadvantages to the Koch are that it has a high rate of complications; surgical revisions may be needed; the ostomate may need to intubate to evacuate stool two to four times a day; and chronic pouchitis is a possibility that may require irrigations and/or medications. The long-term results of this type of diversion are also unknown.

There are always new treatments and surgeries available to the patient with gastrointestinal problems. And there are always new treatments and products available to the ostomy patient. But the treatments and products won’t work without you: the nurse who is there for the patient to help regain, maintain and build his or her health after such an experience.

Selected Readings

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The esophagus is a long muscular tube that extends:
A. 18 inches in length
B. 24 centimeters in length
C. one foot in length
D. 24 inches in length

The first sphincter of the stomach is the:
A. pyloric
B. cardiac
C. sphincter of Oddi
D. oblique

The three main parts of the small intestine are the duodenum, the jejunum and:
A. appendix
B. mecum
C. descending
D. ileum

The liver performs all the following functions except:
A. synthesis of plasma proteins
B. synthesis of vitamins
C. synthesis of red blood cells
D. removal of ammonia from the blood stream

Which of the following is a reason for receiving an ostomy?
A. colon cancer
B. kidney failure
C. incontinence
D. laziness

In the patient with a double barrel colostomy, one stoma is for stool and the other is for:
A. backup in case the other one fails
B. irrigation
C. a mucus fistula
D. none of above

Another name for a loop colostomy is a(n):
A. emergent colostomy
B. temporary colostomy
C. pouching colostomy
D. single stoma colostomy

A patient has just returned to your unit following a colostomy placement. Upon performing your initial assessment you notice the stoma is looking somewhat purple. Your first action should be to:
A. turn the lights on brighter to get a better look
B. check the patient’s vital signs
C. change the pouching system
D. notify the physician

The most common causes of mechanical breakdown of the peristomal skin include all the following except:
A. using alcohol on the peristomal skin
B. removing the pouching system too frequently
C. using adhesive solvents
D. both B & C

Treatment for mechanical skin breakdown includes all the following except:
A. teaching the patient not to change his appliance with every bowel movement
B. using a skin sealant with alcohol on the affected skin
C. applying stoma powder to the affected area
D. ensuring the peristomal skin is dry

The main reason for chemical breakdown of the peristomal skin is:
A. not treating mechanical skin breakdown
B. irritation from the presence of stool on the skin
C. a fungal infection that was left untreated
D. a bacterial infection
13. In treating chemical breakdown it is important to:
   A. evaluate the pouching system and adjust it to prevent leakage of stool
   B. clean the peristomal skin with soap and water
   C. keep the peristomal area clean and dry, using stoma powder if needed
   D. all of the above

14. According to the text, a peristomal skin rash may result from:
   A. an allergic reaction to the stool
   B. an allergic reaction to an ostomy product
   C. a fungus
   D. B & C

15. The initial postoperative diet for the new ostomy patient will likely be:
   A. a low fiber diet
   B. a high fiber diet
   C. a bland diet
   D. a low fiber bland diet

16. Foods that may cause gas in the ostomy patient include all the following except:
   A. broccoli
   B. cabbage
   C. yogurt
   D. sourdough bread

17. Foods that may cause odor in the ostomy patient include:
   A. eggs
   B. cranberry juice
   C. garlic
   D. A & C

18. The foods that are good for the ostomy patient with diarrhea include all of the following except:
   A. bananas
   B. applesauce
   C. prunes
   D. tapioca

19. Complications of ostomy to the male sexual reproductive system may include:
   A. impotence
   B. orgasmic incompetence
   C. sterility
   D. all the above

20. The problems to the female reproductive system include:
   A. decreased lubrication
   B. orgasmic incompetence
   C. sterility
   D. all the above

21. In discussing sexual concerns with ostomy patients and their partners the nurse should:
   A. let the patient vent about their feelings
   B. inform the patient that sexual activity may damage the ostomy
   C. not get involved because it's none of the nurse's business
   D. both A & B.

22. Which of the following may make sexual activity more comfortable for the ostomate?
   A. emptying the pouch before sexual activity
   B. encouraging the ostomate's partner not to look at the ostomy
   C. making sure that the wafer has a good seal
   D. both A & C

23. In giving psychological support for the new ostomy patient, all of the following interventions are appropriate except:
   A. letting the patient vent his feelings
   B. remaining empathetic
   C. training the patient to take care of his ostomy immediately after surgery
   D. getting a consult for counseling services if the patient's reaction is too severe

24. United Ostomy Association of America is a support group that visits and speaks to:
   A. new ostomy patients
   B. new nursing students
   C. surgeons
   D. all of the above

25. Possible nursing diagnoses for the ostomy patient include:
   A. Potential for alteration in Body Image
   B. Hopelessness
   C. Alteration in Thought Process
   D. Potential for Altered Circulation

26. All of the following are interventions for Potential for Infection except:
   A. monitoring temperature
   B. monitoring H&H
   C. observing wound for redness, tenderness or swelling
   D. using aseptic technique whenever applicable
27. Which of the following interventions may be appropriate for alteration in Skin Integrity for peristomal skin breakdown?
   A. assisting the patient to select a pouching system that will work for that patient and get a good seal
   B. teaching the patient about good peristomal skin care
   C. treating any peristomal skin redness as soon as possible
   D. all of the above

28. For the ileoanal reservoir to be successful the patient must be willing to:
   A. do the work needed to achieve success
   B. let others do the care for him
   C. irrigate the stoma daily
   D. both A & C

29. Common problems with an ileoanal reservoir include:
   A. pouchitis
   B. cramping
   C. perineal itching
   D. flatus

30. The person who is best able to answer questions and deal with problems related to an ostomy is the patient's:
   A. physician
   B. enteral stomal therapist
   C. peristomal therapist
   D. both a & B.

End of Independent Analysis