

STANDARD OPERATING PROCEDURE FOR RELATED TO OSTOMY CARE IN VIEW TO IMPROVE SKILL OF ENTEROSTOMAL THERAPIST AND GASTRO SURGEON

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Abstract

Intestinal cancers are most leading cause of cancer-related deaths worldwide. Ostomy surgery is life-saving procedure for intestinal cancers. Enterostomal therapist and gastro surgeon play an important role to provide ostomy care to stoma patients during and after discharge from hospitals. They can help patients to cope with the diagnosis, teach practical skills related to ostomy management and to provide peer group counselling. Most of the stoma patients are facing more complication of ostomy care after being discharged. It has been found that inadequate client education on stoma care and less number of nursing personals with a certification in stoma care adds to the poor post operative management of the patient with a stoma. Standard operating procedure (SOP) is systematic and scientific procedure method yet there are very few structured operating procedure to educate Enterostomal therapist and gastro surgeon for proper systematic care of stoma. Enterostomal therapist nurses can change the life of ostomates with behalf of systematic work on ostomy care. Nurse play an important role in presenting ostomy care intervention on the basis of standard operating procedure and these effects can encourage ostomates confidence. Enterostomal therapist nurse plays a crucial role in defining the life of ostomates. So, our focus was in providing evidence based or systematic basis ostomy care to patients through a standard operating procedure (Table:-1) to the patient so that patient can maintain good quality of life. To fulfill this gap, Standard operating procedure (SOP) (Table:-1) is standard guideline with evidence based and basic knowledge for ostomy care approach to ostomates. Here the author is provide with proper systematic and scientific guidelines (Table:-1) to manage stoma patients.

Keywords: Ostomy Care, Colostomy Care, Ileostomy .Care, Enterostomal Therapist.

INTRODUCTION

It is estimated that the global market of stoma and ostomy care products was approximately USD 3 billion in 2020 and US market has a figure of USD 886.9 million in 2021[1]. Despite having state-of-the-art developments in the field of restorative colorectal surgeries, the number of patients having permanent stoma has substantially increased [1]. In my clinical practice, in an Indian top most tertiary care center, I've encountered on a daily basis that many doctors and nurses who are working in surgery, urinary, pediatrics and gastro surgery department also seemed to have little

education on guidelines and ostomy care knowledge. The available nurses lack skill and confidence in providing a comprehensive care to their client which can ultimately results in decreasing their quality of life.[2-3] These Less trained staff while confronted with an ostomy patient, they fail to assess their client for any complications or exactly what care they are needed. This lack of education and knowledge can effect on ostomy management.[4-5] This standard operating procedure (SOP) (Table:-1) covered all essential topics about removal and application of an ostomy bag. In this article, the description, development purpose and the characteristics of Standard operating procedure (SOP) (Table:-1) has created for those who having stoma along with their attendants, and the health care workers.

ECONOMICAL BURDEN DUE TO LACK OF INADEQUATE STANDARD OPERATING PROCEDURE (SOP)

A study shows that ,in the USA,the number of patients having a stoma is more or less 750000 and about 130000 people among them used to go for a new ostomy every year.[6] There are many ostomy complication but peristomal skin excoriation is more common.[8] Indeed maintenance of the peristomal skin is far more challenging to both caregivers and the patients as there are a lot of pertinent peristomal skin complications (PSC) . The severity of the complications can ranges from a mild erythema to the skin excoriation. The etiology is always complex as there are numerous contributing factors behind the issue. That can be sustained exposure of the surrounding skin to the moisture resulting from the effluent of stoma contents, mechanical injuries from adhesives used, bacterial or fungal infections, pressure injuries, hypersensitivity reactions to the products used and sometimes auto immune response like pyoderma gangrenosum. Incidence rate of PSC after an ostomy has reported as 10 -70 percentage.[9] It is ironic that PSC can be prevented to a great extent as some studies have proved that availability of well trained nursing officers, active participation from client's side and early diagnosis and treatment had led to minimize the complications abundantly.[10-12] For instance, a study illustrated that those who attended educational sessions preoperatively delivered by the nursing staff developed less PSC after their discharge from heath care setting. Also, regular follow up visits with the respective stoma caretaker are crucial as it can help in identifying problems early and can thus avoid ending up with debilitating complications and paying huge sums of money in treating them.

POUCHING SYSTEM

Immediately after the procedure, the therapist should focus on the Ostomy bag should be clear such that caregiver can see the stoma and contents. And then the bag should be designed in such a way that flatus can be expelled without disconnecting from patient. There are two types of ostomy pouch. One piece ostomy bag which means base plate or flange or skin barrier attached with ostomy bag. Two piece ostomy bag means base plate or flange or skin barrier and ostomy bag both are separated. A drainable ostomy bag contains an outlet in the bottom as the effluents can be emptied easily.

The goal of a perfect pouch is to provide predictable and reliable wear time to the client. The bag should be comfortable, odor less, easily removable without causing damage to the surrounding skin. The perfect wear time can varies from 3-7days.And it is not recommended that a bag should not be allowed more than a week (Ostomy Guidelines Task Force, 2010) Overall, the ultimate aim of having a ostomy bag is to provide effective and desirable pouch system so that they can lead a

good quality life in society.

OSTOMY CARE BASED ON STANDARD OPERATING PROCEDURE

Learning to care for your new stoma can seem like a very critical task if you don't use any systematic and scientific approach such as Standard Operating Procedure (SOP) (Table:-1). A successful care outcome can be observed by assessing the health of surrounding skin tissue and integrity of the stoma. Initial choice of enterostomal therapist in a favourable mood of ostomates will be guided by any scientific guidelines available at the hospital where your surgery was performed and by the knowledge of enterostomal therapist who are counselling you. Explain the procedure with the client and get their consent to start. Give always adequate privacy for the patient and as a genuine and compassionate nurse, be empathetic all along with the client (Table:-1) inspite of the bad odour from ostomy. The changing ostomy bag of patients, it is very important to maintain the privacy (BCIT, 2015b; Berman & Snyder, 2016; Perry et al., 2014.). Ostomy bag can be change into a separate room inside the house or can also be changed into a toilet.[13-15] Ostomy bag of any patients is to be changed in the hospital, then privacy is created from the screen around the patients, after that the ostomy bag has to be changed.[13-15] The primary phase of a new ostomy bag changes is explained whole procedure and take permission (Table:-1). To build their confidence, work closely with them, conveying confidence and patience.[16] Hand hygiene should be performed when appropriate any procedure at hospital or hospice[17] (Table:-1). If the patient is bedridden, he can be allowed in lying down position or a sitting position on the bed (Table:-1). And in case of an ambulatory client, they can either sit or stand in the toilet. Faecal content can discard from ostomy bag to bed pan, measuring items or toilet[17] (Table:-1). There are many items require for ostomy bag change (Table:-1). The basic ostomy pouching system require many ostomy accessories for stoma bag change. There are many accessories require for ostomy bag change include Gloves or Plastic Pani, Scissor, cotton, new ostomy bag, remover spray or warm water, barrier cream, ostomy powder, ostomy paste, ostomy belt, drainable bag for effluent, measuring guide etc (Table:-1). These ostomy items are necessary to improve skin barrier adherence if patients have skin folds, flabby abdomen, a flat stoma with leakage (Table:-1). Stoma powder is use under the ostomy base plate for dryness of skin (Table:-1). The ostomy belt, if needed, attaches to hole on both side of ostomy base plate, snugly but comfortably encircles the body, and helps to support to the appliance to prevent leakage of ostomy bag (Table:-1). A measuring tape is necessary to measure the size of the stoma as it can be shrinked over a period of 6 weeks after surgery.[18] Make the hole using a scissors according to the size of stoma in the baseplate so as to get a perfect fitting.

EMPTYING OSTOMY APPLIANCES

The maximum personal hygiene can maintain and to reduce risk of infection, ostomy bag should be changed every 4 to 7 days [19-21] (Table:-1). Generally an ostomy bag need to be emptied when the bag is filled about half way or 1/3rd of it (Table:-1). And in some cases emptying is needed more than a dozen times which depends on type of the ostomy bag and what kind of food or drink the person is having a day (Table:-1). If the person is able to empty the bag by himself then most preferable position to do that would be standing or sitting (Table:-1). The main advantage of doing that is the person will not lose his self-esteem to some extent. And In case of bedridden client, suitable position is lying down as it helps in flattening the stomach and easy to catch up spills. For every person who have an ostomy system, the Emptying procedure will be as follows, yet here we delves into how an ostomy bag is emptied in a bedridden client (Table:-1). To embark on, prepare

the patient by giving good explanation about procedure and privacy, begin with washing your hands and put on gloves.[19] Then spread a waterproof pad or old news paper under the side nearby ostomy so as to prevent the splashing. Next, put a container or disposal bag to which faecal matter need to be collected near ostomy. Then lift the bottom of the pouch and get the closure off either by opening the clip or clamp which depends on the different kinds of bags available in market. After that directly drain all the faecal matter into the bed pan or disposable bag. At times, contents will not flow that easily in such cases it need to be pushed out fully to . Also, sometimes gas also get trapped in bag and which can simply remove by smoothly extorting the ostomy bag from upward to downward direction. Now, once the faecal matter are emptied completely, with a damp cotton ortissue paper clean the tail end of the bag for any residue that are remaining(Table:-1). For that, firmly pinch the bottom end with the damp tissue paper for a while and then using the damp cotton or tissue paper clean inside of the tail end also. So, that no contents will come out while we close the bag. Thereafter, close the tail end by using a clamp or clip (Table:-1).

CHANGING OSTOMY APPLIANCES

Over and above, always choose a time in the morning before breakfast to change the ostomy bag when the gut is least active. Start with washing hands and donning gloves. Spread a water proof pad or old newspaper under the side near by the stoma. To detach the bag easily, sprinkle some warm water or adhesive remover on the ostomy plate.[22] Remove the bag from upward to downward and medial to lateral direction[23-24] (Table:-1). For this, care giver's one hand should be beneath the ostomy plate to lift it and other hand at the same time to push the abdominal skin downwards which helps in easy removal of the appliance[25] (Table:-1). Then discard the old bag appropriately in the trash. Next is to clean peristomal area using a wet cotton.[26] The point to be noted at this time is that try to avoid any kind of soap, lotions, powder, creams or alcohol containing products on or around the stoma as it can cause some irritation. Using the wet cotton clean the surrounding skin of stoma gently from outward to inward direction while making sure that you have taken all residues off from skin[27] (Table:-1). During this, check for any kind of extreme redness or skin excoriations or irritation around the stoma as this may indicate leakage from the bag.[29] If there is minor excoriation, a barrier cream can be applied for 1-2 minutes and wipe it out using a dry cotton[28-29] (Table:-1). In case of minor excoriation along with bleeding,ostomy powder will be helpful[29] and which should be kept around the stoma for 1 min ,then clear it off using a dry cotton. Do not try to remove powder remnants which is tightly sticked to skin. Then clean the stoma using another dry cotton. Always keep in mind, stoma is not painful for the patient. so it can be cleaned thoroughly but firmly until it is fully free of any faecal material. After that, pat the area dry very well and clean the hair by trimmer there as it is needed for perfect adhesion of the bag and to avoid pain while removing the bag after few days(Table:-1). Then remove the gloves and wear a new one after disinfecting hands(Table:-1). A measuring tape is necessary to measure the size of the stoma as it can be shrunked over a period of 6weeks after surgery.[29] Next is measuring the stoma using a card and ensure that always make a hole 1/8inch larger than the actual size of stoma. But it should not be too larger as this can lead to leakage of contents or too small. Best fitting provide the best pouching. A regular measurement is needed as the stoma size can vary with time after measuring stoma size, trace it over the skin barrier and make a round cut on it without leaving any jagged ends as it can injure the stoma. Now, remove the paper barrier around the wafer and apply a thin layer of ostomy paste around the cut edge of the plate and seal this opening with the ostomy bag then apply the pouch to the stoma. In case of bedridden client,

bag should be placed laterally. And in case no bedridden males, bag can either be placed in downward or lateral position. While in case female who is not bedridden, bag should be placed in slightly lateral way (Table:-1). After placement, apply firm pressure using hand for 5-10min over the barrier so as to ensure its proper adhesion.[29] Then apply an outer adhesive tape around flange appropriately and finally close the tail end of the bag using clip or clamp available with the system (Table:-1).

Table:-1 STANDARD OPERATING PROCEDURE FOR OSTOMY CARE	
S.NO	Component
1	location is suitable for ostomy bag change
2	Maintain privacy(close curtain/close room)
3	Explained procedure
4	Perform Hand hygiene
5	Provide comfort position (Sitting position or Lying position or Standing position)
6	Equipment required for ostomy care
	Gloves or Plastic Pani
	Warm Water
	Scissor
	Cotton
	New Ostomy Bag (One pouce or two pouce, if two pouce than base plate and ostomy bag)
	Remover Spray
	Barrier Cream
	Ostomy Powder
	Ostomy Paste
	Ostomy Belt (If two pouch system present)
	Drainable Bag(Disposal Bag) for effluent
	Measuring guide
7	Changing Ostomy Appliances
	Perform Hand hygiene
	Put on Gloves or plastic bag
	Use Warm water or Remover spray surrounding ostomy plate or outer adhesive tape
	Remove outer adhesive tape(First Priority From Upward medial to downward lateral)
	Place one hand finger below ostomy plate and push down abdomen skin by finger and Other Hand lift ostomy base plate slowly
	Discard old ostomy bag in disposal bag
	Clean Peristomal area by wet cotton
	Use Wet cotton from outer to inward direction (Note:- if Ileostomy, Ascending colostomy and transverse colostomy)
	Clean stoma by wet cotton
	Pat the peristomal skin with dry cotton
	If the hair is visible then it has to be cut with a trimmer
	To assess peristomal skin and stoma colour
	If Minor excoriation is present(Use Barrier Cream). Massaging Barrier cream around the stoma for 1 to 2 minutes, smoothing abdominal creases and then wipe it by dry cotton.
	if Minor excoriation with bleeding is present(Use Ostomy Powder). Apply Ostomy powder for 1 minute and then clean it slowly with dry cotton (don't remove ostomy powder if tightly stuck on peristomal skin.
	Measure stoma size and cut the new ostomy bag and then separate plastic film from base plate(1/8 inch larger)
	Apply thin ostomy paste layer surrounding ostomy plate cutting
	Apply ostomy base plate and then fixed ostomy bag on plate(Double piece ostomy appliances)

	Apply ostomy bag on stoma (single piece ostomy appliances)
	if ostomates(Male and Female) is bed ridden position ostomy bag ends should lateral
	if ostomates(Male) is No-bed ridden position ostomy bag ends should downward or medio-lateral
	if ostomates (Female) is No- bed ridden position ostomy bag ends should Medio- lateral
	Apply Warm hand pressure over stoma bag for 5 to 10 Minutes
	Apply Outer Adhesive Tape surrounding ostomy base plate
	Close clip/clamp of ostomy bag
8	Emptying Ostomy appliances
	Ostomy Bag should be emptied when 1/3 or 1/2 full
	Perform Hand hygiene
	Put on Gloves or plastic bag
	Fold upwards the end of ostomy bag
	Open clip or clamp
	Drain effluent in disposal bag
	Close clip/clamp of ostomy bag
	Clean end of ostomy bag by cotton
	Discard Gloves or Plastic bag
	Perform Hand hygiene

DISCUSSION

Patients who are coming to wound and ostomy care unit usually present with a lot of ostomy complications along with less personal hygiene. In this article, author observed many findings, after working in an ostomy care center at a top most hospital or tertiary care center in India that most of the health care workers neglect the ostomy care and very few dedicated nurses provide ostomy care. So, patients feel very poor confidence in hospitalization for stoma care. Top of that, another main issue we found that the number of Nursing speciality is a meagre to work as enterostomal therapy in tertiary care center in India. Nursing specialty is very challenging profession in India. Sometimes it's hard to get medical attention as patient lives in a hilly area, desert area and living in a far-away place from health care center. Lack of ostomy care nurses can lead to many other problems to the client which can be classified in following domains such as psychological, physical, social, and economic. Psychological consequences can be developed as effluents is foul smelling and patient can lose self-esteem. The results of this article indicated that standard operating procedure (Table:-1) provide systematic, scientific and evidence based care for ostomates.

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