

IRRIGATION: Is it an Option?

INTRODUCTION

After talking to many people about colostomy irrigation, it became apparent that not many stomal therapy nurses in South Australia currently teach irrigation. Julia Thompson discovered that in New South Wales less than 8 per cent of people with colostomies during the 1990's ordered irrigation sets on an annual basis¹.

Is the decline in irrigation due to the high standard of ostomy appliances we have at our fingertips? Does the Stoma Appliance Scheme negate the need to irrigate? Is it fear of the unknown that prevents us from offering this option to our clients, or are our clients simply deciding not to irrigate?

We decided to look into this from both the stomal therapy nurse and the clients' perspective. Do South Australian Stomal Therapy Nurses offer irrigation to our patients? What information is imparted and what have our clients found out over the years of irrigating? Would they be able to teach us a thing or two?

The first part of this two-part paper will focus on how to teach your client to irrigate. A search of recent Australian journal articles shows there is a lack of information available locally on irrigation. Textbooks and recent international articles appear to be our only source of information.

The second part of this paper (*to be published in a later issue of The Journal of Stomal Therapy Australia*) will look at the Stomal Therapy Nurses in South Australia, how many teach irrigation, do they teach what is in the literature or have they modified it?

We will also look at our client base. Do they do what they were taught, or have they modified the irrigation procedure over the years? What works, and what doesn't, and any helpful hints.

WHAT IS COLOSTOMY IRRIGATION?

Colostomy irrigation refers to a method of cleansing the bowel by gently instilling water via the stoma to empty the entire contents of the colon².

WHY IRRIGATE?

The following are perceived to be advantages of performing colostomy irrigation as a method of bowel management.

Colostomy irrigation:

- Promotes continence and regularity of defaecation
- Alleviates psychosocial problems associated with wearing an ostomy appliance
- Reduces skin irritation and allergies caused by wearing ostomy appliances
- Results in less gas and odour and the need for dietary restrictions
- Enhances lifestyle and relationships
- May be financially beneficial
- Inability to maintain a leak-proof appliance
- Eliminates the need to maintain a leak proof appliance on a poorly sited stoma

WHO CAN IRRIGATE?

Colostomy irrigation as a method of bowel management is applicable only for those people with a sigmoid or descending end colostomy who have a formed stool. In addition they must²:

- Have adequate dexterity and vision to use the equipment safely
- Be well motivated and eager to succeed
- Have good memory skills
- Have adequate facilities and a suitable lifestyle

WHO CAN'T IRRIGATE?

Colostomy irrigation as a method of bowel management. People with the following conditions²:

- Stomal prolapse
- Advanced para or peristomal hernia
- Strictures or stenosis
- History of irritable bowel and irregular bowel habits
- Poor prognosis
- Inflammatory bowel disease
- Non-compliance with general health care
- Irradiated bowel
- Anxiety
- Mental disorder or poor cognition

In addition, irrigation should be used with caution in the following situations:

- Patients with cardiac or renal disease which may cause a fluid overload².
- The elderly who may become anxious and stressed easily².
- People with busy, erratic households or occupations where a routine may be difficult to maintain².

HOW SOON CAN SOMEONE IRRIGATE AFTER SURGERY?

The intervening time between surgery and commencement of irrigation depends on:

- Post-operative recovery and progress of the client
- Complications associated with surgery
- Surgeons preference
- Adjuvant therapy regimes, such as chemotherapy
- Regular access to a stomal therapy nurse for instruction

It is usually advisable for clients to wait at least 6 weeks post-operatively for the bowel to settle into a routine². Some people wait 2-6 months to allow them to adjust to life with a colostomy and the use of appliances before they learn to irrigate. This will be of benefit later if periods of illness or diarrhoea require the wearing of an appliance again. However, personal preference and financial constraints may dictate a need to irrigate as early as 10 days post-operatively.

It is important to remember, however, that not all people who are taught irrigation will be successful for one reason or another. This can be very traumatic if clients are not physically and emotionally at their best. Hence a decent post-operative recovery period provides a better foundation for coping and learning. In Australia it is not so financially imperative that people irrigate. In some countries where people must buy their appliances, colostomy irrigation is frequently favoured for financial reasons.

WHERE TO START?

Introducing the concept of colostomy irrigation as a method of bowel management should begin either as an inpatient or at first post-operative outpatient session. A brief description and reasoning for irrigation should be given. The patient then has time to think about irrigation as they return to their normal routine, and will have some idea of what is involved when reading of the procedure in the ostomy journals and newsletters.

Consent must be obtained from the surgeon once the decision to irrigate has been made. The surgeon would know of any medical reason why irrigation is not an option. It is also wise to inform the General Practitioner (*GP*) and perhaps provide them with a little information on irrigation, as many would not be aware of the procedure or outcomes. In addition, this will give the GP a contact name and number should they have any further questions.

Once the decision has been made to irrigate, an irrigation set will be needed. It may be more prudent to use an irrigation set from the same company who has produced the appliance the patient has been using. However some companies do not manufacture irrigation sets, and others do not provide instructions written in English. Some manufacturers provide videotapes with their irrigation sets. The Stoma Appliance Scheme allows for one complete irrigation set per year but individual components of the equipment are also available on a more frequent basis. Irrigation sleeves and stoma caps are available monthly.

- The basic irrigation kit contains (*Figure 1*):
- Irrigation bag with regulator
- Irrigation sleeves (*adhesive or clip on*)
- Sleeve closures
- Belt
- Cone tipped irrigator
- Pressure plate
- Stoma cap

It is advisable to contact the various manufacturers for details of different irrigation sets.

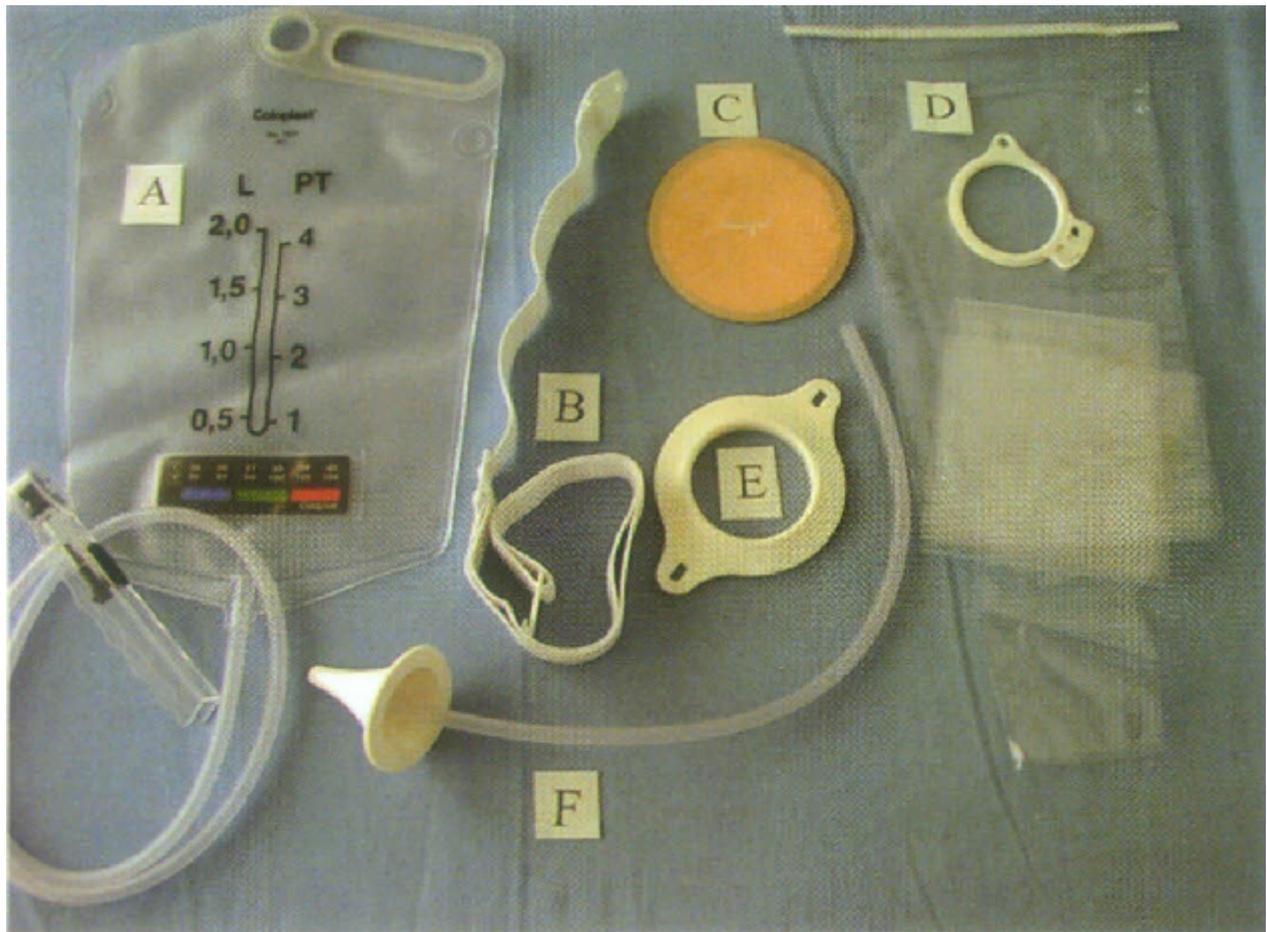


Figure 1: Basic irrigation equipment

A: Irrigation Bag **B:** Belt **C:** Stoma Cap **D:** Irrigation Sleeve **E:** Pressure Plate **F:** Cone

When teaching colostomy irrigation a detailed explanation of the procedure should be provided along with written information. If possible, obtain a video from the manufacturer and allow the patient a few days to study it. This will give the client (*and the family*) time to digest the information and ask any questions.

TEACHING THE PROCEDURE

Some people will require only one education session, but most should have at least 3 structured sessions². After the initial education and demonstration, the stomal therapy nurse should perform the procedure with the ostomate. The second session will involve the ostomate carrying out the procedure themselves with a little help from the stomal therapy nurse. The ostomate may then irrigate by themselves under supervision for the third session. It is good practice to follow the ostomate a week later to review progress.

Points to consider:

- **Venue**

The client's house or Stomal Therapy Office is the preferred venue. Make sure at least one uninterrupted hour is set aside and ensure privacy is guaranteed. It is a good idea to make sure other house members use the toilet or bathroom before you start to avoid interruptions and frustrations. The demand for the bathroom in a busy household may not be so high in the evenings. If the procedure is to be performed in the stomal therapy office, divert your calls and place a "do not disturb" sign on the door.
- **Time**

Any time of the day is satisfactory as long as it is around the same each day. It is difficult to establish a bowel routine if the procedure times are erratic. Personal preference and family consideration will dictate whether a morning or evening time is more applicable, and this will alleviate unnecessary anxiety.
- **Diet**

It is wise to eat before the procedure as it increases gut motility, and prevents rushing the procedure due to hunger pains.
- **Room set-up**

Preparation involves collecting all necessary equipment for irrigation. Some may find it desirable to have reading material available to pass the time or music to encourage relaxation and a glass of water at hand. A comfortable room temperature is an additional consideration and warm and comfortable clothing is a good idea.

THE PROCEDURE

Connect the cone to the irrigation set. Turn the regulator to the "off" position and fill the reservoir with just over 1000mls (*1 litre*) of tepid tap water. Bottled water may be used in areas where tap water is questionable². Cold water should be avoided as it can cause cramps. If the irrigation is unsuccessful an increased volume of water can be tried the next time. Smaller volumes may be necessary if cramp is a problem or water does not flow into the bowel easily. Some people can successfully irrigate with as little as 500ml and others need as much as 1500ml. Make changes to volume gradually in order to determine the amount required for a successful procedure. It is advisable not to exceed 1500ml.

- Hang the reservoir with the base of the bag at shoulder height
- This will prevent water flowing into the colon too quickly. Hooks can be hung over the shower rail or a hook inserted into an adjacent wall
- Flush the irrigation tubing to expel the air
- Remove current appliance, clean around the stoma
- Apply selected irrigation sleeve over stoma. A two-piece non adhesive system may require the use of a belt
- Seat the client on the toilet and place the bottom of the irrigation sleeve in the toilet bowl. Some people may find it more comfortable or convenient to sit on a chair adjacent to the toilet

- At the initial irrigation procedure, insert a lubricated gloved finger through the top opening of the irrigation sleeve and gently insert it into the stoma to determine the internal angle and direction of the colon. This will determine the angle at which the cone must be placed in order to facilitate the water flow. If able, it is a good idea to assist the client to perform a gentle digital examination as it aids their comprehension
- The lubricated irrigation cone is inserted into the stoma via the top opening of the irrigation sleeve. The cone is positioned to reflect the angle of the colon and facilitate water flow.
- Commence a slow flow into the stoma as the cone is inserted
- Hold the cone firmly in place to prevent leakage. Make sure the top of the sleeve is in a suitable position to encourage any water leakage to flow into the toilet and not out onto the floor
- Regulate the water flow so that the required amount can be instilled within 10 minutes². However the time taken to instill water will vary between individuals, the amount of water used and experience of the ostomate.
- Stop the water flow if discomfort occurs. Continue at a slower rate once the discomfort eases
- Remove the cone when all the water is instilled
- Fold over the top of the sleeve and secure with clamps provided. Clothes pegs are an alternative. This will prevent any explosive evacuation of stool escaping
- Normally, evacuation occurs within 15 minutes so it is best if the sleeve remains in the toilet at this stage. Encourage the patient to read or listen to music whilst waiting
- On completion of the initial evacuation, flush the irrigation sleeve with any water remaining in the irrigation bag or use a separate container. Clamp the distal end of the sleeve. It may be necessary to fold the long sleeve several times before clamping. This will allow for movement around the house whilst waiting for further evacuation of stool. Initially new irrigators should remain seated for the first few times until entire procedure is completed in case of complications
- Some people find that massaging the abdomen in the direction of the colon will help expel the fluid. Others prefer a hot drink or deep breathing to speed things up
- Once the evacuation is completed, the irrigation sleeve is removed, the stoma cleaned or the client showers and a stoma cap or appliance is applied
- Clean all equipment as instructed. Cleaning in cold water prevents the odours being sealed in

The time between irrigations will vary between individuals. Irrigation is commonly performed daily until there is no leakage between irrigations, the length of time between irrigations may be increased. However, subject to their normal bowel pattern, some people may successfully irrigate every second day from the beginning. Others may extend their irrigations to every 3rd day, but any changes to routine must be made gradually. Once a routine has been established irrigator may wear a pad or cap over their stoma. Until then however, the patient should wear their normal pouch in case of leakage.

POTENTIAL COMPLICATIONS

Abdominal Cramps

Abdominal cramps can be caused from rapid water flow or the water being too cold². If this occurs stop irrigation until cramps ease then resume at a slower rate. Ensure the water is tepid. Excessive cramps or pain should be reported to the surgeon.

Fluid return difficulties

The failure to return the instilled volume of fluid could be due to dehydration, insufficient fluid instilled, or constipation or febrile illness². The irrigator is advised to wear a normal sized pouch until the next irrigation in case of a sudden expelling of fluid.

Vasovagal response

Distension of the colon can over-stimulate the vagal nerve in some people. This may result in bradycardia, hypotension and fainting². Stay with the ostomate for the first 2 or 3 irrigation sessions. Encourage the ostomate to remain seated throughout the procedure for the first week and be aware that some bathrooms can become very hot and stifling, so ensure good ventilation. The recording of a baseline blood pressure and pulse rate before and after the procedure will assist in determining any problems.

POTENTIAL IRRIGATION PROBLEMS

Common problems may include³:

- Slow water flow into the bowel. The following points need to be taken into consideration:
 - Direction of the cone may need adjusting
 - The irrigator may need to use less water next time
 - The irrigator is anxious and tense so promote calmness
 - The cone or tubing may be blocked by faecal matter
 - The height of the reservoir may need to be increased to promote flow
- The bowel is slow to empty:
 - Try massaging the abdomen, moving around, or having a glass of water
 - The patient may be dehydrated and the bowel could have absorbed some of the water
 - Anxiety can retard evacuation
- Stools between irrigations:
 - If irrigating less than daily the time may be too long between irrigations
 - Not waiting long enough during the procedure for the colon to empty
 - Diet related
 - Too much water
- Abdominal pain:
 - Flow of water is too fast
 - Water temperature is too cold
- Bleeding from the stoma:
 - Trauma from the cone may occur if too much pressure is applied or the cone poorly positioned

IRRIGATION FAILURE

If unsuccessful a number of causes need to be considered. These include^{2 3}:

- Over eating
- Eating between meals
- High fibre diets
- Spicy foods
- Alcohol consumption
- Excess fresh fruit
- Old age or poor cognition
- Irritable bowel syndrome
- Anxiety
- Poor irrigation technique (*irregular times, incorrect volumes, frequency of procedure*)
- Gastrointestinal infection

If irrigation is deemed unsuitable then the client can revert to the use of ostomy appliances as the preferred means of bowel management. People who irrigate every two or three days may need to revert to daily irrigations from time to time subject to changes in diet or routine. Generally, trial and error dictates what works best.

CONCLUSION:

The colostomy irrigation procedure is easy to teach. Most textbooks have step-by-step procedures to follow, with the manufacturing companies providing simple instructions. Generally people have no trouble settling into a routine. The key to successful and confident irrigation is to allow ample time and privacy for teaching your client. Keep in mind that most clients feel some anxiety at inserting something foreign into their body. Do not push the issue.

Give them the information necessary, perhaps introduce them to someone who already irrigates, and let them make up their own mind.

ADJUNCT:

In 2004, to ensure ostomates are taught the correct irrigation procedure, the Australian Association of Stomal Therapy Nurses in conjunction with ACSA developed a certificate to commence irrigation. The certificate must be completed by the stomal therapy nurse teaching the procedure and presented to the ostomy association to obtain the first irrigation set. This ensures the client's surgeon has been informed and agrees to the procedure and the client has consented to receive formal education on irrigating rather than attempting to teach themselves.

REFERENCES

- ¹ Thompson J. (2002) A qualitative study of reasons for rejecting or selecting irrigation as a method of long-term colostomy management. *The journal of Stomal Therapy Australia* 22 (1) p.16-23
- ² Blackley P. (1998) *Practical Stoma Wound and Continence Management*. Victoria, Australia Research Publications Pty Ltd, p.165-169

- ³ Davis K. (1996). Irrigation Technique in C. Myers *Stoma Care Nursing a patient centred approach* London. Arnold (member of the Hodder Headline Group), p.136-142

Further reading

Coloplast A/S (undated): Irrigation (video). Denmark.

Coloplast A/S (undated): Alterna. Irrigation: Directions for use.

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Article by Fiona Bolton RN STN (cred) Clinical Nursing Specialist Services, Adelaide S.A. and Sharmaine Peterson RN STN cred Clinical Nurse St. Andrews Private Hospital Adelaide S.A.