

# Irrigation Notes

## ***Introduction***

There must be a large number of people with colostomies who deplore the need continuously to wear a bag (I don't like the word pouch, although I know some prefer it), but who have fought shy of the route to a release from it in the form of irrigation. This is perhaps partly due to the "Carry On" connotations of colonic irrigation, but put that behind you, and consider the advantages of (typically) wearing a bag, if at all, for no more than a couple of hours in every 48 hours.

These notes represent the results of trials and experiments, and my own personal experiences, over the past fourteen years of irrigating. While I would not suggest that every detail is directly applicable to every reader, it should provide a useful starting point for those who wish to give the technique a try. One must remember, however, that all people are different, and each will need ultimately to establish what works best for him or her. Readers who are already irrigating may well be able to use this as a self-help manual, but those who have not tried irrigation would be better advised to regard it a collection of ideas and experiences to discuss with a stoma nurse.

Before embarking on irrigation it is desirable to check with one's consultant that there are no contra-indications. In particular, a heart problem could rule out irrigation, because the introduction of liquid into the colon stimulates the vagus nerve, which slows the heart rate. Irrigation is also only possible with a healthy colon, and is not normally advised for those with a hernia.

How long after surgery should one wait before starting irrigation? There can be a variety of opinions on this question, but my own suggestion is that the time to start is when normal appetite has returned, the digestion no longer feels fragile, and a more or less normal diet has been resumed. Note the words "more or less normal" – they reflect my own experience that although I eat almost all the foods I ever used to, I still avoid even mild curries, which seem to have an adverse effect on my stoma performance.

## ***Equipment***

Of the simple and basic designs, based on water fed from a plastic bag hanging up, the best irrigation set, in my own experience, is undoubtedly Coloplast Code 1511. This has a liquid crystal temperature indicator, a good flow control, and a well shaped tip (Code 1110). Users of an electric irrigation pump (Irrimatic) made by B Braun all speak highly of it, despite the disadvantage that it is not available on the NHS, and is quite expensive to purchase. I am currently carrying out a detailed evaluation of it, and will ensure that my report is made available when completed.

I believe that a position squatting on the WC is conducive to evacuation, but is wrong for introducing liquid into the colon. Accordingly I sit beside the WC on a kitchen stool about 590mm (23") high, so that my hips are only slightly flexed. When away from home I take a lightweight two piece shooting stick, which I can assemble to the same height as the stool. The actual height is not critical, and for anyone else the aim should perhaps be for an angle at the hips around 135° rather than near 90°.

I use a Coloplast flange (Code 1120), secured by an elastic belt (Code 0420), and irrigation sleeves (Code 1560). Although those who sit on the WC shorten them, the sleeves are an ideal length for use with a stool. I offset the sleeve about 30° to my left so that it passes comfortably over my leg. This is easily achieved when fitting the sleeve to the flange, before you put it on, by setting the projecting tab at the "eleven o'clock" position. It is desirable to make sure that the sleeve passes over the leg and down into the WC pan without any form of "loop" or horizontal portion; if this precaution is neglected, the weight of any material discharged from the stoma will

pull the sleeve out of the WC pan and cause it to discharge on the floor. Anyone who makes this mistake will probably only do it once!

Before using a sleeve I check that the polythene of the sleeve is firmly attached to the flange, since I have had a couple of failures when the two partially parted company. If this happens while you are running the water in, then you may be able to change sleeves and continue. If it happens subsequently, when the stoma is discharging, if you are sitting on the WC you can shift your position so that the output finds its way into the pan, but if you are sitting on a stool you have only one course of action: to spot it quickly, and immediately to stand up and lean over the WC pan. It will probably be somewhat messy, but not so messy as ignoring the problem! This leads on to another catastrophe situation: when you are spending a night away, and find in the morning that you have the irrigation kit but no sleeve. I can assure you from personal experience that it is possible to perform an irrigation without a sleeve, by kneeling in front of the WC and pressing the abdomen against the rim of the pan. Nothing need go on the floor, but you should expect to need a shower afterwards!

### ***Bags, Etc.***

Quite often I can feel confident that about half an hour after introducing the water, everything that is going to come out has come out, and I can fit a cap. If I have slight doubts, I fit a small bag to catch any "afterthoughts" - a Convatec Colodress Plus Mini (Code S903 for a 32mm hole) is ideal. If I am not convinced that it has finished, or I have to go out immediately after irrigating I used to fit a toilet disposable bag, such as the Welland Freestyle (Code FFM529 for a 29mm) to avoid the disposal problem. (Note: not now in France, owing to the prevalence of septic tank drainage.) Since the stoma remains clean, there is no necessity for the hole in the bag to be a precise fit, and the next size up pre-cut hole is perfectly acceptable. Freedom from skin soreness problems is an additional benefit of irrigation. After an hour or two, or often more conveniently at lunch time, I remove the "afterthought" bag and replace it by a stoma cap. Stoma caps are relatively small, and since they have very little volume, need good filters to cope with the maximum flow of wind likely to occur. One of the smallest, with the best filter, is the Braun Petite (Code F00015E), which is only a little larger than a credit card, and looks just like the sort of plaster which one might stick on a grazed knee. Having originally bought swimming trunks large enough to cover a stoma bag, I never use them: I prefer the more conventional briefs, and let the stoma cap show. Very few people ever notice: they probably wonder what I was up to, to graze my abdomen in that spot! On holiday, I am happy to go on "clothes optional" beaches, and wear just a stoma cap. If you've got it, flaunt it! The Braun Petite needs no cover over the filter when in water, and it has performed well at the bottom of a swimming pool to make training videos of swimmers, and inside a wet suit when scuba diving. It used to have just one shortcoming: it floated off in sea water, and while the makers strenuously denied the fact, they appear now to have changed it so that even that problem no longer exists.

### ***Organization***

The normal recommendation is for the reservoir to be hung so that its lower end is at shoulder level, although I prefer to have it 150mm (6") higher in order to speed up the procedure. It also saves time if one can judge the temperature of the water accurately. I run water into a jug from the hot tap, letting it overflow as the water warms up, and stopping when it feels correct. I have found that with all four fingers in the water, if it is too cold it feels cool around the bases of the fingers, and if too hot it stings the nail beds; when just right there is no particular sensation around the bases of the fingers, but a gentle tingling from the nail beds. I can normally judge it to within 1°C this way.

Obviously, the water cools while you are running it in, so it is desirable to start with the temperature at the top of the acceptable range: I set it so that the 38°C and 39°C bars are showing equally. I have heard it said that a slightly higher temperature gives better results, but I have not attempted to verify this.

An alternative way of achieving the correct temperature, if a thermostatic shower control is available which has a safety temperature limit stop, is to set that limit to 39°C and fill the reservoir from the shower head. Note, however, that these settings can be affected by the flow rate, so one's own judgement might possibly be better. Another alternative, if available, is to take advantage of the temperature limiting valve fitted to hot water supplies used by elderly people, and which can normally be set to a temperature around 39°C.

In many holiday resorts around the world the visitor is warned not to drink water from the tap, and some people feel that they should even use bottled water for irrigating. I don't consider that this is necessary, and in such a resort I just use boiled tap water. This requires that the night before I need to irrigate, I boil a kettle of water and pour it into a jug. In the morning I boil another kettle, which provides me with hot water to mix with the now cold water in the jug to produce water of the correct temperature for irrigation.

Another problem when away from home is how to hang up the reservoir bag. One of the solutions when there is no available hook, or any projection which will serve as a hook, is to make an "S" hook out of a wire coat hanger, which will hook over the shower rail or a cupboard door. However, in a bathroom there is usually a mirror or glazed tiles, and my normal practice is to use a "vacuum hook" - a suction cup fitted with a hook. It is as well to be aware, however, that such hooks cannot be relied upon for prolonged periods; used just once they are no problem, but if you are staying in the same place for a week or two it is sensible to take precautions, since few events are less conducive to successful irrigation than the reservoir falling off the wall. Before each use I check the integrity of the support by pulling on the hook, and I also use two hooks, so that I never rely on just one. The Coloplast reservoir has a slot as well as a suspension hole, and I arrange to have a second vacuum hook engaging with this slot. There are some smooth surfaces on which, although the suction is maintained, the hook slides under load, and if this is the case you are back to the coat hanger. Another useful aid is a Velcro strip, which can be looped over a convenient rail.

### ***Technique***

The quantity of water required will depend on the length of colon remaining. Mine has only been shortened by the amount required to enable it to be "plumbed in" to the stoma, so that the recommended quantity would normally be from 1.0 litre to a maximum of about 1.5 litres. Beginners are usually advised to start with between 0.7 litre and 1.0 litre, and to increase the amount as and when they feel comfortable doing so. I have found over time that in my case a marginal increase in the volume to 1.6 litres seems to improve the reliability of complete elimination. The reservoir should initially be overfilled, so that running the excess water out will eliminate air from the tube and the flow control.

Actually putting the water into the reservoir can be awkward. I have found that if I hold it with the scale facing me, put my thumb in the hole in the nearer side and my forefinger in the hole in the far side, I can then spread it open with the other three fingers inside, and pouring the water in becomes easy.

I lubricate the tip with Aquagel, and also rub a little around the stoma, although this may well be an unnecessary "belt and braces" procedure. If for any reason you are unable to obtain Aquagel, then K-Y Jelly is a good alternative. I introduce the tip into the stoma with the fingers of the left hand on

either side of the tube, and pressing gently on the flange, which I find gives good control over the entry and the angle at which it is positioned.

Often the colon will initially not accept a high flow rate, and to avoid excessive leakage round the tip it may be found helpful to restrict the flow rate until it is found that the flow rate increases smoothly as the flow control valve is opened. Unless the user feels uncomfortable with the maximum flow, the flow control can be left at its maximum setting so long as the water is flowing freely into the stoma. If the flow slows very considerably, or stops altogether, then it is often helpful to take a deep breath and let it out rapidly; it is suggested that this serves to relax the colon, although I suspect that the effect is more one of "nudging" the colon with the diaphragm. On occasions that the flow slows or stops repeatedly, I find it advantageous to pull the abdomen in (using the *transversus abdominis* muscle) and lift the rib cage to achieve a more upright posture. (Springboard divers will know this as the "stance".) In the event that the flow reverses momentarily, then the flow control should be closed for a short while to avoid forcing contaminated water into the reservoir. When the reservoir is empty, I find it useful to wait a few seconds for the water level in the tube to the flow control to stabilize, which it usually does just about at nipple level. Sometimes the water will almost immediately be forced back towards the reservoir, and it is then desirable to close the flow control for a few seconds to prevent water being ejected prematurely from the stoma when the tip is removed. Typically it takes me between five and ten minutes to introduce the water, although some may find that it takes up to fifteen minutes.

After sealing the top opening of the sleeve, I allow about twenty minutes for the colon to empty while reading a "put-downable" book, then unseal the sleeve, wash it out with a jug of water (warm is more comfortable), flush the WC while rinsing the end of the sleeve in the clean water entering, and then loop the sleeve up, tucking the end into the top opening, and rolling it a few turns round the sealing strip. It is then very important to fold both ends of the sealing strip inwards, **making sure that the folds come within the width of the tucked in lower end of the sleeve**. If this is not done, and there is a further discharge from the stoma, it is perfectly possible for the end of the sleeve to pull out and dump the contents on the floor, an occurrence which doesn't bear thinking about! (Another mistake that is only made once!) It is by no means essential to spend time with the sleeve looped up, and if the user has developed enough experience to be reasonably confident that there is nothing more to come, then it is practicable to shower, and apply an "afterthought" bag, or if very confident, a cap. "Afterthoughts" are usually fairly liquid, and are easily washed away if they occur in the shower. One indication that emptying has finished can often be the emission of wind which was driven back up the colon as the water was introduced. I usually find it convenient to spend twenty minutes or so with the sleeve looped up, checking emails and looking at my bank account on the computer, and find that on about 30% of occasions further emptying takes place during that period; however, if I am in a hurry, I omit that stage.

### ***Effectiveness of Irrigation***

Most of the time, I find that irrigation is so effective that nothing is emitted from the stoma for a period of 48 hours, and any bag or stoma cap remains perfectly clean, except for a slight trace of mucus. From time to time, the effect of irrigation does not last for the full 48 hours, and it is evident that the colon is not emptying as well as it usually does. This effect usually lasts for several irrigations, and possibly is due to some disturbance of the bacteria of the gut. One must remember that a colon is a live thing, with its own likes and dislikes, and idiosyncrasies. The situation may sometimes be improved by restricting the rate at which water is run into the colon, but in due course it will correct itself. More drastic disturbance results from taking oral antibiotics, and this

can be helped by eating live yogurt. It has to be accepted that no two ostomates are the same, and only personal experiment will determine how long one can remain continent after an irrigation, and the optimum quantity of water require to achieve it.

### **Diet**

I have always enjoyed a high fibre diet, and I continue to do so, having found that it is beneficial for effective irrigation, and I assist it with more than the recommended five servings of fruit and vegetables each day. My preference is for granary bread, and a typical day's fruit intake would include a whole grapefruit, two apples, and two or three (small) oranges, in addition to green vegetables at one or two meals. Another useful contribution is the regular consumption of Omega 3 fatty acids in the form of fish oil capsules. Consistency of dietary habits certainly seems helpful. I have never enjoyed strong curries, but now even avoid mild ones, since they tend to stimulate the stoma into action. Any food containing chillies is also best avoided.

Provided a reasonably normal diet can be maintained, travelling of itself does not present problems, and I have never had any difficulty with flying. During holidays in hot climates where it was difficult to get granary bread, I had often found that almost every irrigation was a partial failure, and I had wondered whether the problem was the bread or the quality of fruit available: often not quite what one would buy at Tesco, there is a temptation to reduce the quantity consumed. However, when hot weather in the UK, with my diet remaining totally normal, had also thrown up problems with the completeness of irrigation, I came to the conclusion that the more fundamental problem could well be dehydration. Athletes are taught that by the time they feel thirsty, they are already dehydrated, which is why they try to keep their water bottles handy, and if practicable will aim to drink some water every fifteen or twenty minutes. How many of us do the same? Avoid drinking water which is very cold: it is slow to be absorbed, and stays in your stomach giving you the impression that you are no longer thirsty, even though your body still needs it. If you find room temperature water unpalatable, try adding a little lemon juice (PLJ in the UK, or *Pulco citron vert* in France, for example).

It is often said that we should all drink about 2 litres of water a day, and at the risk of over-simplification, it may be regarded that what we fail to drink has to be extracted from the contents of the colon, causing harder faeces which will respond less well to irrigation. While I would hesitate to claim any proof, my own recent experience has been that a water intake of about 2 litres a day seems to result in softer and more liquid faeces output, and a rapid and more complete irrigation, typically with no "afterthoughts". In hot climates a greater water intake would be desirable. To sum it up, if you become dehydrated, your colon will try to make up for the deficiency, in the same way that a camel economises on water. Remember, camels can't irrigate: don't be a camel!

Following a course of oral antibiotics, I took 100g of Danone Actimel every morning to restore irrigation performance, and was so pleased with the result that I have since continued it, about every third day. Admittedly one can argue that it is not necessary, but while I am able to enjoy my present irrigation performance, I feel little inclination to experiment. On irrigation days I drink a glass of water after the Actimel and before irrigating, and usually another one while irrigating, which may possibly assist completeness by stimulating flow from the small intestine.

### **Other Considerations**

Hair growth on the skin round the stoma can be a problem in two ways: it makes bags and caps painful to remove, and it can lead to leakage. It is usually desirable to shave about once a week, and I shave in the shower using a BIC *Sensitive Skin* disposable razor; one of these lasts me for

several months. With irrigation, the skin round the stoma is seldom in contact with faeces and soreness is unlikely to be a problem, so I use the shower gel (Sanex) on the skin when shaving. I use an adhesive remover (Lift - Code 5500 for wipes or Appeel – Code 3500 for liquid or Code 3505 for wipes) if necessary to remove traces of adhesive from the skin so that I can shave without it gumming up the razor. For much of the time washing removes the adhesive traces on the skin, but doesn't remove them from the irrigation flange, which itself benefits from cleaning with adhesive remover; slight traces of adhesive on it are not detrimental to performance, but any more substantial build-up can lead to leakage. Adhesive deposits also make it more difficult to wash clean after use.

I was told that the irrigation set should be replaced every three months, but I have never done this. So long as the flow control valve is working properly (they used to give trouble, but the material appears since to have been changed), every couple of months, or when I detect discolouration, I fill the reservoir with warm water, put a capful of Milton in it, and put the tip also into the solution, and leave it for a few hours. In this way I can use the same set for eighteen months without detriment; the need for change is usually determined by the control valve failing to shut off completely. On the other hand, while it was suggested that I could wash the irrigation sleeves and reuse them, I never do it, because the polythene picks up odours, and for what little it must cost I don't particularly want a smelly sleeve hanging around for two days at a time.

As a consequence of normal olfactory fatigue, I don't find (personally) that odour arising from the irrigation procedure causes a problem, but if for other people it does, Naturcare Spray (Code 1100) provides a solution. It is one of the few "air fresheners" which introduces no smell of its own, and it even works well to eliminate the smell of tobacco smoke, a property which has sometimes proved useful if I have visitors who insist on smoking. More recently, I have used AuriCare Faecal Odour Eliminator (Code ACD125), and this also appears very effective. I have not been able to obtain enough opinions to offer a performance comparison between the two, however.

### **Conclusion**

I hope that these notes may have proved useful, but if anyone finds them misleading or unclear, or would like to contribute from their own experience, please advise me. I can be contacted by email at [adrian@adrianmarch.com](mailto:adrian@adrianmarch.com), by snailmail at 783 Chemin du Plateau, 83550 Vidauban, France, on 0033 494 50 11 36, or on Skype as Adrian March.

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