NHS
Oxford University Hospitals
NHS Foundation Trust

# Koch pouch operation

## Information for patients

Colorectal Surgery

# What is a Koch pouch operation?

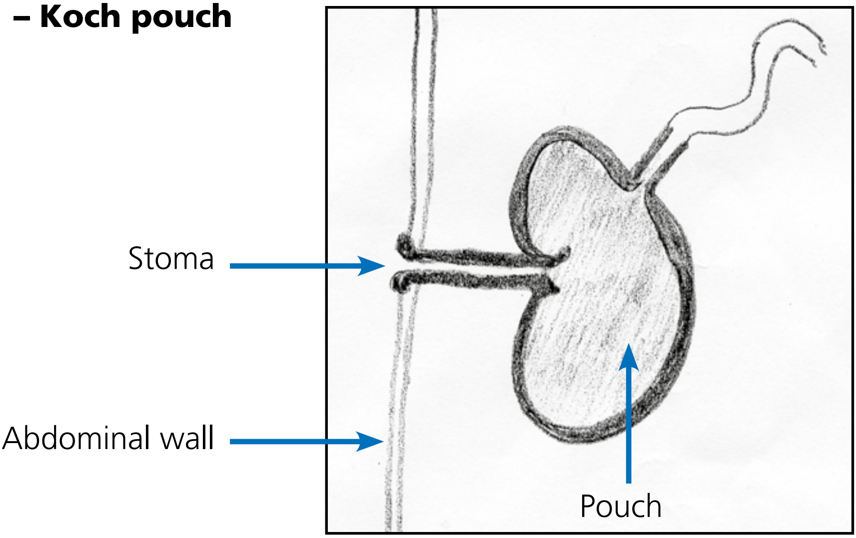
Your consultant has discussed with you an operation called a Koch pouch. The Koch pouch is also known as a "Continent Ileostomy". This operation was first introduced in 1969 and was largely superseded by the ileo-anal pouch. It is a very rare operation in the UK, but started being performed again in 2007 at the Oxford Radcliffe Hospitals NHS Trust due to patient demand. It is used in patients with Ulcerative Colitis or Familial Adeno Polyposis who have had the colon, rectum and anus removed.

In this operation the small intestine is connected to an internal

S shaped pouch (reservoir) made out of a piece of small intestine. A one-way valve, also constructed from the small intestine, is attached to the reservoir to prevent the flow of waste to the outside. The pouch is emptied by inserting a special catheter through the valve approx 2-4 times per day once everything has settled down (which can take a few weeks) . This removes the need to wear a bag to deal with the faecal waste. A stoma cap or gauze square is worn over the stoma.

This operation usually involves a 10-14 days' stay in hospital.

**Fig 1 – Koch pouch**



## Fig 2 – Continent ileostomy

## Fig 3 – Shows suitable appliance

# Who is suitable for this operation?

- Patients who are unsuitable for an ileal-anal pouch procedure (perhaps they have had a proctectomy so have no anal opening) or have poor anal tone (poor sphincter control).
- For patients in whom the ileal-anal pouch has failed.
- For those patients who are unhappy with a conventional spouted permanent end ileostomy.

Before your operation you will be thoroughly assessed by the colorectal surgeon and stoma care nurse to make sure that this operation is the best option for you.

A Koch pouch is not suitable for everyone! It is strongly recommended that you have a consultation with your stoma care nurse specialist at the colorectal (surgeon) outpatient appointment. Alternatively, you can arrange to see a stoma care nurse in the Oxford stoma clinic for a consultation to determine whether it would be "right" for you, considering your lifestyle and health.

**Contact numbers:**

| | | |
|---|---|---|
| John Radcliffe Hospital site | (Oxford): | **01865 221839** |
| Churchill Hospital site | (Oxford): | **01865 235367** |

Our team of nurse specialists in stoma care is spread across two major hospital sites in Oxford.

# What are the possible risks of this operation?

- Pouchitis – an inflammation of the pouch which results in fever, abdominal pain, bloating and a need to empty the pouch more frequently. Pouchitis would be treated with a course of antibiotics.
- Slippage of valve sometimes occurs in the first 3 months after the operation. This usually requires an operation to correct it.
- Fistula.
- Intestinal obstruction.

- Valve stenosis (narrowing).
- Dilated valve resulting in incontinence.

There is also the risk of other complications associated with major surgery such as deep vein thrombosis, pulmonary embolism, wound infection, wound leaks.

# What does the operation involve?

## Preparation for surgery:

The day before surgery it is likely that you will be advised to drink “clear fluids” (water/ squash/ Bovril drinks/ clear soups etc. – nothing with “bits” in it). This will help to prepare your bowel. If you have already had your colon (large bowel) removed, you will not require any extra “bowel preparation” (laxative). You will be required to be nil-by-mouth (nothing to eat or drink) for 4 hours before surgery. You will be having a general anaesthetic for this operation.

## Day of surgery:

Most people come in for the operation at a specified time on the day of surgery. You will have already been to the “Pre-assessment clinic” approximately 1-3 weeks before the operation to make sure that you have had blood samples taken and fully understand what will happen during your stay in hospital.

You will be in the operating theatre for several hours. You will then go to the recovery room and then to the ward to recover from the operation. It is likely that you will be very tired after the operation, so the nursing staff will monitor you closely and make sure that any pain is controlled.

# After your operation

When you return from the operating theatre there will be a Medena catheter in the pouch to keep it draining. Care must be taken to make sure that the catheter is not dislodged.

The nurses will regularly check your stoma and make sure that the catheter is draining correctly. This catheter will need to stay in place for approximately 14 days after the operation.

You will also have a “drip” (intravenous fluids) and a separate catheter (urinary catheter) which drains off the urine from your bladder. You may also have several wound drains. The urinary catheter and wound drains are usually removed on the ward approximately 5 days after the operation.

The day after surgery, the nurses will help you to get out of bed for a short period in order for your bedding to be changed and to see to your hygiene needs. You will feel very tired. You will also see a physiotherapist, who will give you guidance on moving about and also encourage you to do some breathing exercises to help clear your lungs after the anaesthetic.

The nurses will be monitoring your blood pressure, pulse and temperature regularly. They will also be checking your wound and ensuring that the Medena catheter into the pouch is well secured and draining freely. They will start to flush this pouch catheter with some saline (salt water) twice a day to keep it draining. This is usually started approximately two days after the operation. After about five days, warm tap water can be used for the flush rather than saline. During the week, your stoma care nurse will visit you most days making sure that everything is satisfactory with the Medena catheter.

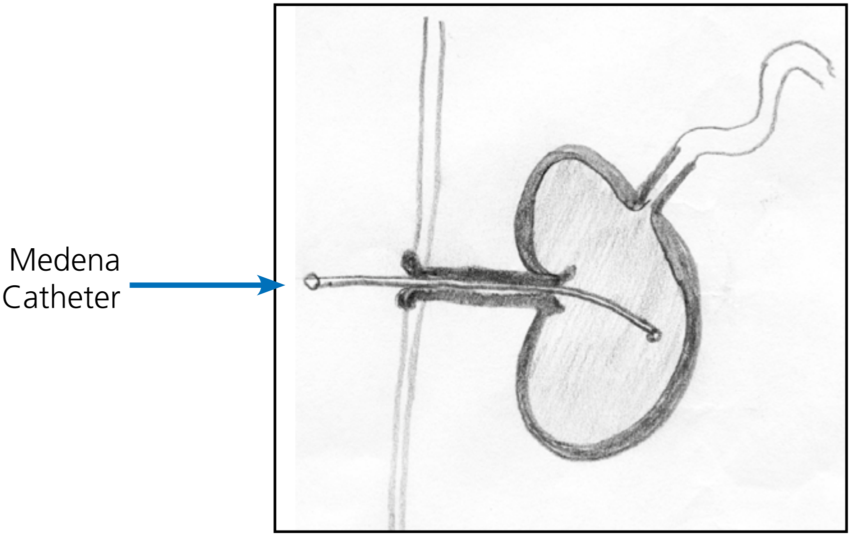
When you are feeling well enough, the nursing staff will teach you how to flush the catheter yourself. This involves a syringe with a nozzle and 20ml saline or warm tap water. It is very easy to do.

By the time you are discharged you must be able to do this yourself twice a day. You will be given plenty of time to master the technique.

Approximately 2-4 weeks after the operation you will be taught how to catheterise the Koch pouch with a Medena catheter about 4-8 times a day. After the pouch has settled (which

takes several weeks), it only needs to catheterised approximately 2-4 times a day.

**Fig 4 – Koch pouch with Medena catheter in situ**



# Eating and drinking

While you are in hospital you will gradually resume eating and drinking. Immediately after the operation you will start to drink sips of water and as your body settles down you will be allowed to eat a light diet.

The dietician may visit you on the ward and to advise you on eating and drinking. You will need to chew your food very thoroughly as the waste will need to come through the Medena catheter. It is wise to avoid fibre, as this may block the catheter. It is a good idea to drink grape or prune juice (approximately 210ml daily) to keep the stool thin enough to drain easily. You will be given a list of foods that are best to avoid (such as sweetcorn / mushrooms / skins / nuts) as these can block the catheter and make it difficult to drain. You should peel your fruit and vegetables.

# Preparing for discharge

You will usually be able to go home 10-14 days after your operation. The Medena catheter stays in place until you come back to the clinic to see the surgeon and stoma care nurse (if you are discharged less than two weeks after the operation). If you are still an inpatient after two weeks, then we can take the catheter out on the ward, and your stoma care nurse can teach you how to catheterise the stoma.

Before you go home you must be able to flush the Medena catheter twice daily with 20ml warm water and change the gauze around the tube as necessary. If the Medena catheter has been removed, you should have learnt how to do the catheterisation procedure yourself and feel confidential doing so.

# Equipment to take home

The equipment we give you will vary depending on whether you still have the Medena catheter in place. If you do, we send you home with:

- 10 bladder syringes.
- 5 incontinence sheets – to be used in the early days to set equipment on.
- Leg bags / night drainage bags – these can be washed and re-used. If the stool becomes too thick to empty, the bags may need to be thrown away.
- 2 rolls of "Sleek" or similar tape.
- 2 spare Medena catheters.
- Two boxes of Hollister Vertical Tube Attachment Device code 9782

If you have had the Medena catheter removed before your discharge, we will send you home with plenty of stoma caps (to cover the continent Ileostomy), lubricating jelly and syringes and make sure that you have learnt the catheterisation technique.

You will also be given the contact number for your local stoma care nurse and district nurse. Your hospital stoma care nurse will contact your local stoma care nurse and inform them of the details of your operation before your discharge.

# Catheterisation of Koch pouch

You will return to the clinic approximately 2-4 weeks after the operation to have the Medena catheter removed and learn how to intubate / catheterise the stoma (unless the Medena catheter was removed while you were still in hospital). You will need to do this 2-4 times a day for life. (Williams 2002)

If you live at a distance, it is advisable to be prepared to stay all day in Oxford. This will give you the opportunity to meet with the stoma care nurse twice to make sure you are competent in the catheterisation technique. We can usually complete the training on the same day.

# Removal of the "post-operative" Medena catheter

**(which should be carried out by the Stoma Care Nurse or Surgeon):**

1. Gently remove the Hollister Vertical tube Attachment Device. Care is taken not to dislodge the Medena catheter at this stage.
2. Mark with a pen the entry point of the Medena catheter to record the length it was inserted in theatre.
3. Flush catheter with 30mls warm tap water to allow ease of removal.
4. Ensure any stitches securing the Medena catheter to the stoma are cut.
5. Remove the catheter very gently.
6. Measure the insertion length (you will be told what this is).

# To catheterise Koch pouch

First, wash hands thoroughly.

## Assemble equipment:

1. Incontinence pad (to place equipment on).
2. Medena catheter. (Mark on the new catheter the length at which the operative catheter was inserted so that you do not insert the new catheter beyond this point. This also serves to give a sense of reassurance).
3. Lubricating jelly.
4. Jug or bowl to empty the pouch contents into.
5. “Bladder” syringe with 30mls warm tap water.
6. A cover for the stoma (required for use after the procedure – some patients use a “one piece” or “two-piece” stoma cap system).

## Method

- Firstly, lubricate the Medena catheter well with the lubricating jelly. The first time the new stoma is catheterised, it is advisable for the stoma care nurse to examine the stoma and the direction of the valve by gently inserting a gloved finger. Gently insert the Medena catheter through the stoma as far as the line marked by the stoma care nurse.
- Irrigate Medena catheter – gently insert 20-30mls warm tap water into the pouch. Drain the contents of the Koch pouch along with the water you have administered.
- Do not withdraw the contents of the pouch into the syringe.
  - If the tube becomes blocked, it may be necessary to remove and rinse the tube to unblock it and then re-insert.
  - Do not insert more than 60ml water into the pouch without draining it.
- When the pouch contents have drained, gently remove the catheter. If there is any difficulty/resistance in removing the

catheter, it may be necessary to gently flush with 10mls of water as it is withdrawn.

- Apply pouch dressing (cap or gauze).
- Wash the equipment thoroughly with soapy water and allow to air-dry if possible.
- N.B. After a month, the Medena catheter must be discarded and a new one used, as cracks can occur in the tubing which could traumatize the valve.

## Schedule for when the Medena catheter is first removed

1. Catheterise the pouch every 2 hours during the day and once at night, for which an alarm clock will probably have to be set.
2. Each week, increase the intervals between the catheterisations by one hour.
3. After a few months, most patients need to catheterise just 2-4 times in a 24 hour period (Williams 2002). Generally the pouch should be washed out once a day with warm water of drinking quality – so be careful when travelling abroad that the water is fit for consumption.

# Medic Alert Bracelet

We strongly advise you to get a Medic Alert bracelet. This shows that you have a Koch pouch in case of an emergency. It should contain the following information:

- Internal pouch / Continent ileostomy / Koch pouch.
- Medena catheter to be inserted 4-6 hourly into pouch.

e.g. “Medic Alert”: www.medicalert.org.uk

(NB The Medical Alert Foundation may be able to provide a bracelet free of charge for those on low incomes, but would need to apply for this). There is a yearly fee to belong to the Foundation.

# Follow up

**You will be followed up:**

1. Approximately 2 weeks after your operation and then at 6 months.
2. Yearly out-patient check with surgeon or nurse-led pouch clinic.
3. Annual blood tests for:
   - Full blood count
   - Urea and Electrolytes
   - Liver Function tests
   - Ferritin and Folate
   - Vitamin B12
4. Sometimes it may be necessary to perform a Pouchoscopy to look into the pouch with a scope if you are having problems, or if the surgeon wishes for a biospy to be taken.

   You may contact the surgeon or stoma care nurse at any time between your check-ups if you have any questions or concerns.

# Obtaining supplies once home

All the equipment for the Koch pouch is available on prescription from your doctor. This can then be obtained from your chemist or a delivery service.

# Pregnancy and childbirth

A pregnant mother-to-be may find it slightly more difficult to catheterise the continent ileostomy during the third trimester, depending on the size of the baby and its position. If this happens it may be necessary to leave the catheter in on free drainage during the third trimester. In this case we can advise you on securing the catheter if this necessary.

# What if I get problems once I am at home?

Because the operation is performed rarely in the United Kingdom, you may need to return to Oxford depending on the nature of the problem. Contact your GP or local hospital for advice – they may need to refer you back to a colorectal consultant/ specialist registrar in Oxford.

Tel: **(01865) 741166**
Ask switchboard to bleep the Colorectal Specialist Registrar on call.

**During office hours Mon- Fri (except bank holidays) you can also reach an Oxford stoma care nurse specialist by bleep on this number: 1865 741166 Ask for bleep 1765)**

# References:

Cleveland Clinic Health Information Pack – For Patients and the Community – Continent Ileostomy – Home Going Instructions (no date).

Hull, T.L., Erwin-Toth, P (1996)

Pouch Procedure and continent Ostomies. "Overview and Controversies". Journal of WOCN. Vol 23, No. 3, pp.156-165

Medic Alert Bracelet http://www.medicalalert.org.uk.

Perrin, A. 2008 Nurse-Led Pouch clinic protocol.

Williams J (2002) The Essentials of Pouch Care Nursing. London: Whurr.

With grateful thanks to Paula Erwin-Toth, Director WOC/ET Nursing Education, The Cleveland Clinic Foundation, USA.

## Further information

If you would like an interpreter, please speak to the department where you are being seen.

Please also tell them if you would like this information in another format, such as:

- Easy Read
- large print
- braille
- audio
- electronic
- another language.

We have tried to make the information in this leaflet meet your needs. If it does not meet your individual needs or situation, please speak to your healthcare team. They are happy to help.

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