

Percutaneous Endoscopic Colostomy (for patients)



Percutaneous Endoscopic Colostomy (PEC) is an operation to place a plastic tube from the inside of the large bowel (colon) out through the skin of the abdomen. Although PEC is a new technique it is in fact a modification of the well established procedure of Percutaneous Endoscopic Gastrostomy. PEC has been approved by the National Institute for Clinical Excellence. Its role, safety and efficacy are being prospectively evaluated.

Who might benefit from a PEC tube?

PEC may benefit people with various disorders of the bowel.

- a) **Recurrent Sigmoid Volvulus (RSV).** RSV is a condition in which part of the large bowel, the sigmoid colon, twists around on itself causing pain and obstruction. After repeated episodes some people may be advised to have two tubes inserted into the sigmoid colon to anchor it and prevent further twisting.
- b) **Constipation, diarrhoea and incontinence.** Some people with intractable constipation, diarrhoea or incontinence which has defied all the usual treatments may be thinking of having a permanent colostomy bag. Some of these people may be helped by a PEC tube which allows them to irrigate the bowel to empty it in a controlled manner thus avoiding further problems.

- c) **Megacolon.** A few people suffer from a dilated colon full of gas which is not properly evacuated. Such people may benefit from a PEC tube to decompress the colon as and when necessary.

Technique

PEC is done without a general anaesthetic. An intravenous injection of sedative may be given to make you drowsy. Local anaesthetic is used where the tube comes through. A colonoscope (a flexible fiberoptic endoscope) is inserted through the anus up into the left side of the colon. A hollow needle is passed through the skin into the colon and a thin wire passed through the needle into the colon where it is grasped by the colonoscope and drawn out through the anus. It is then attached to the PEC tube which is pulled gently up the colon and out through the skin where it is held in place by a plastic flange. Following the procedure you may eat, drink and walk around

normally. The tube is connected to a bag for 24 hours to decompress the colon after which it may be plugged. Irrigation may be started 24 hours after the procedure. Some pain may be felt for a few days where the tube comes through the skin. Paracetamol (2 tablets every 4 hours, up to 8 tablets per day) is a suitable pain killer. About 6 weeks after the procedure, the tube should be replaced by a smaller device like a large button on the outside of the skin. This is held in place by a small water filled balloon inside the colon. Changing the button device only takes a minute or so and should be painless. This device is changed every six months; sometimes it is changed using a short scope to inspect the bowel from the inside to check that the internal balloon is still in the right place..

Care of the tube

A light gauze dressing may be placed around the tube after the procedure to absorb any blood from the incision but this should be removed within 24 hours. After this, do not apply a dressing unless there is a discharge round the tube. The area should be cleaned with soap and water daily with gentle but thorough drying.

What are the possible complications?

- a) **Infection.** Antibiotics are given at the time of PEC insertion to reduce the risk of infection. Some minor infection and discharge around the tube is quite common and needs no treatment. Serious infection is rare and may cause severe abdominal pain or spreading, painful redness in the skin around the tube. If this occurs you should consult your specialist or doctor for antibiotics, observation and possible admission to hospital.
- b) **Dislodgement.** If the PEC tube falls out in the first few days you may need an open abdominal operation to repair the hole in the colon. Therefore it is very important that the tube is firmly attached with adhesive plaster and you should be careful not to pull on it by mistake. Once the original tube has been replaced by the flat button tube dislodgement is unusual. If this should happen another tube should be inserted within a few hours otherwise the hole will close. If this occurs you should contact your specialist or ask your GP to insert a 14 French Foley Urinary Catheter as a temporary measure.

Using the tube

If PEC tubes have been inserted for Recurrent Sigmoid Volvulus, then the tubes are simply left in place to stop the bowel twisting and you do not have to do anything with them.

If your PEC tube has been placed for colonic irrigation then you may start irrigating 24 hours after the procedure. You will be supplied with a plastic reservoir and tube which connects to your PEC tube. Fill the reservoir with about 500ml of tap water which should be warm but not hotter than body temperature (37.0 C/ 98.4 F). Make yourself comfortable on the toilet or commode and then run the water into the tube over 5-10 minutes or more slowly if you feel discomfort. You should start to evacuate within a few minutes and should feel that your bowel has emptied completely in 20 minutes or so. Most people irrigate every other day but some need to irrigate daily if they suffer leakage in less than 2 days. You may reduce your dietary fibre and stop your laxatives with advice from your specialist.

What happens if the PEC tube does not work?

If PEC irrigation does not suit you, the PEC tube may be easily and painlessly removed though it should be left in for a minimum of one month after insertion to allow the colon to stick to the abdominal wall. The PEC tube is simply cut off with a pair of scissors at skin level and the inner flange is then passed with your motion. The hole in the skin will discharge for a day or two before closing naturally.