The ROYAL MARSDEN

NHS Foundation Trust

Patient information

Intra-rectal formalin treatment

Why am I bleeding from the rectum?

Bleeding from the rectum (lower bowel) happens at some stage in about half of all people who have been treated with radiotherapy for a tumour in the pelvis. In most people the bleeding is something that they notice occasionally rather than it being a nuisance. However, up to 5% of people (5 in 100) who have had radiotherapy will develop troublesome bleeding.

Bleeding caused by radiotherapy comes from new fragile blood vessels (called telangiectasias) which develop on the surface of the bowel as a result of radiotherapy. People usually start to notice bleeding a few months after the end of radiotherapy. It is usually at its worst one to two years after the end of radiotherapy and then gradually starts to become less frequent and severe.

Straining, hard stool, frequent bowel movements and blood thinners including aspirin, dipyridamole, clopidogrel, dabigatran, rivaroxaban, apixaban and warfarin or painkillers such as Nurofen increase the risk of bleeding, but sometimes these fragile blood vessels bleed without any obvious reason. When bleeding is very heavy or causes anaemia, then treatment to reduce the bleeding needs to be considered. Intra-rectal formalin is one of the possible treatments used. The team looking after you will have explained other alternatives to you.

What is formalin?

Formalin is a chemical which is sometimes used to preserve tissues. It is inserted into the rectum during flexible sigmoidoscopy or colonoscopy for a short and carefully controlled time and it slowly works to destroy telangiectasia caused by radiotherapy. It may not stop the bleeding entirely, but it reduces it in about two thirds of patients treated (2 in 3 people). Some patients may need more than one session of formalin instillation. Formalin is inserted into the rectum during a flexible sigmoidoscopy or colonoscopy for a short and carefully controlled time.

What will happen before my formalin treatment?

The Endoscopy Suite will provide instructions. Your bowel must be empty and clean so you will be given or sent laxatives with instructions on when and how to take them. Read the instructions carefully and phone the Endoscopy Suite if you have any questions. You will need to turn around on the bed during the procedure, but you can choose whether to have light sedation or not. If you choose to have sedation you will need an escort to take you home, as you will not be able to drive or travel by yourself.

What will happen when I arrive at the Endoscopy Suite?



GI Unit Page 1 of 3 Revised: July 2023 Planned review: July 2026 © The Royal Marsden NHS Foundation Trust GI-1478-03



When you arrive for your formalin treatment, a nurse will ask you questions about your health and the medication you take. You will have your blood pressure and pulse taken and will be given a gown to change in to. If you have any final questions you should feel free to ask them. You will be seen by the doctor who will explain again about the procedure and will be happy to answer any questions. The doctor will ask you to sign a consent form allowing the procedure.

What does the procedure involve?

The procedure takes about 15 minutes from beginning to end and is done in the endoscopy procedure room. Your bed is wheeled into the room and you lie first on your left side. The doctor gently inserts a flexible endoscope into your bottom to check the inside of your rectum and the bleeding area. If the rectum is not completely clean, it may be washed with some water through the endoscope.

You will then usually be asked to roll onto your stomach, face down. A nurse will put some wet cloths onto your bottom around your anus and will press firmly on your bottom throughout the procedure to prevent any of the formalin leaking out onto your skin.

Once you are comfortable and the nurse is pressing firmly, the formalin solution will be sprayed into your rectum through the telescope in such a way that it covers as many as possible of the telangiectasia. The formalin will be left to do its work for exactly three minutes. After three minutes, the doctor will remove the formalin through the telescope and then rinse out the rectum with lots of water through the endoscope. The nurse and the doctor will be talking to you throughout the procedure.

What will I feel?

As the formalin is sprayed on the lining of the rectum, most people feel a warm or hot feeling inside the rectum. Some people describe it as 'stinging inside'. It can be quite unpleasant but the feeling disappears almost immediately when the formalin is washed out. Some say there is also a strong pushing feeling inside the rectum while the formalin is in place.

It is vital that you lie still during the procedure and try as hard as you can not to pass wind. If you want the doctor to remove the formalin before the three minutes is up, the doctor will do that but then the procedure may be less effective.

What happens after the procedure?

Immediately after the formalin is removed you will feel much more comfortable. The formalin often does not make much difference to the amount of bleeding for a couple of weeks. If you can manage it, we sometimes suggest that you use twice daily sucralfate enemas for two to three weeks after the procedure to help the formalin do its work better. We will teach you how to do this after the procedure if we think it is necessary. We may also suggest you take some other medicines to help the healing process. These will be discussed with you before the treatment and you will be given separate written information about any additional treatments.

How effective is the treatment?

Our experience has been that about one in four people (25%) treated with formalin need only one treatment to reduce the bleeding to a level where it is no longer a nuisance. About half of the people we treat need two treatments with formalin and one in four (25%) need three treatments. A very small number of patients have required four treatments.



We schedule repeat treatments with formalin six to ten weeks apart to get enough benefit so the bleeding is no longer a problem. **If you think there has been a very big improvement**



and you might not need another treatment, please call the endoscopy unit for advice before taking the laxatives. If you feel the treatment has helped and we cancel the next treatment but then the bleeding starts up again later, we are always happy to reassess things with you and retreat you, if necessary, at a later time.

What are the possible complications?

There are several possible complications from formalin treatment which have been described. They are rare, however as they can be very serious we always advise not to have any formalin treatment unless the bleeding is troublesome. The possible complications are outlined below:

- If formalin gets on to the skin it can burn. This is why the nurse will apply pressure around the anus with moist cloths during the treatment.
- If formalin is absorbed into the body from the rectum during treatment, it might make you feel unwell with a temperature and shakes for about 24 hours. This is very uncommon.
- Formalin treatment has been described as causing severe inflammation and narrowing (fibrosis) in the rectum. This is also very uncommon. It may be more likely to occur if there is a pre-existing ulcer in the bowel lining, therefore we always need to make sure that there is no ulcer present in the lower bowel before we start putting in the formalin.
- Formalin can cause ulcers to develop in the rectum. They seem to heal over six to eight weeks if left alone but repeat treatment needs to be postponed until the ulcers have healed.

Contact details

If you have any questions, please contact: The Endoscopy Suite 020 7811 8320 GI and Nutrition Team 020 7811 8216 or 8106 Alternatively, please call **The Royal Marsden Macmillan Hotline:** 020 8915 6899 (available 24 hours a day, 7 days a week)



