



British Society of GI and Abdominal Radiology

CT Enteroclysis

Patient Information Leaflet

Introduction

This leaflet tells you about CT Enteroclysis, a test to look at your small bowel. It explains how the test is done, what to expect, and the risks involved. It is not meant to replace informed discussion between you and your doctor, but can act as a starting point for such a discussion.

What is CT Enteroclysis?

CT Enteroclysis is a way of looking inside your small bowel and abdomen. A CT (computed tomography) scanner uses special x-ray equipment and computers to produce images of multiple “slices” of the body. These images of the inside of the body can then be examined on a computer monitor.

For CT Enteroclysis, fluid is introduced directly into the small bowel via a tube passed through the nose and beyond the stomach. The fluid distends the small bowel so that it can be well seen on the CT images.

Are there alternatives to CT Enteroclysis?

There are alternative ways of looking at the small bowel:

Small bowel barium studies use barium contrast to fill or coat the small bowel and allow it to be seen on X-rays. The barium may either be taken orally (*small bowel meal or follow through*) or introduced directly into the small bowel via a tube passed through the nose and beyond the stomach (*Small bowel enema or Barium enteroclysis*)

Endoscopy is a way of examining the large bowel using a thin tube with a camera on the end (endoscope) which is passed through the oesophagus and stomach and moved around the small bowel. The procedure is invasive and usually requires sedation. Visualisation of the entire small bowel by endoscopy is a specialized technique and is not widely available. However, it does allow tissue to be removed for testing (biopsy) if needed.

Video capsule endoscopy uses a ‘capsule camera’ which is swallowed by the patient. This sends real time pictures as it passes through the small bowel to a recording device worn on the patient’s waist. This technology is not widely available at the moment.

These examinations give a view of the small bowel only and, unlike CT enteroclysis, do not give information about the other structures inside your abdomen.

MRI of the Small Bowel uses an MRI scanner to obtain cross-sectional images of the small bowel after it has been distended with a special solution taken orally (*MR Enterography*) or introduced directly into the small bowel via a tube passed through the nose and beyond the stomach (*MR enteroclysis*). Like CT Enteroclysis, this technique also provides information about the other structures inside your abdomen.

What do I have to do before my CT Enteroclysis?

Bowel preparation.

It is very important for the stomach and small bowel to be empty before the test is performed so that the small bowel can be clearly seen. You will be given a leaflet explaining this bowel preparation in more detail. The leaflet gives dietary instructions about what you should and should not eat or drink before your test. Sometimes a mild laxative is prescribed to clear the small bowel prior to the test. It is very important that you follow the instructions you are given.

Taking tablets and medicines

You should continue to take all your normal medication unless you are diabetic taking insulin.

If you are diabetic using insulin, please contact the Radiology department for advice.

If you take Metformin (Glucophage) tablets for diabetes, please let us know on the day of your test. We sometimes ask patients to stop these tablets for two days after their test.

Females

Females are asked to contact the Radiology department if you suspect that you may be pregnant OR if the appointment is more than 10 days after the *start* of your last period.

This test uses radiation and there is a risk to the unborn baby if we were to do the X-rays when you are pregnant. When you arrive for your test, you will be asked when your last period started. If it is more than 10 days earlier, your appointment will be postponed.

If you are taking the oral contraceptive pill, diarrhoea can make it less effective. Continue taking the pill but use other precautions for the rest of that cycle.

Where do I go when I arrive at the hospital?

Please report to the reception desk in the Radiology department with your appointment letter.

You will be shown to a private cubicle and asked to change into a clean gown. If you need help with changing or translation you may bring someone with you to help you. If you need an interpreter please tell us when you receive your appointment so that we can arrange this.

Please let us know when you arrive for your test if you have any of the following

- Diabetes
- Asthma
- Kidney disease
- Prostate problems
- Angina
- Glaucoma

or if

- You have had a heart attack in the last six months
- You are waiting for heart surgery
- You are waiting for a coronary angioplasty
- You have any allergies
- You have had a reaction to iodine or any intravenous contrast medium (if you are not sure about this, please ask us).

What happens during CT Enteroclysis?

- A member of the team will explain the test and answer any questions. Please let them know if you had any problems with your bowel preparation.
- A small tube will be passed through the nose into the stomach and manipulated under fluoroscopic (X-ray) guidance into the small bowel just beyond the stomach.
- 1.5-2 litres of fluid is introduced into the small bowel through this tube, either in the fluoroscopy suite or on the CT scanner.
- If it is not possible to pass a tube into your small bowel, we may continue with the CT scan using oral fluid to fill the small bowel. You will be asked to drink about 1.5 -2 litres of liquid, which passes through your oesophagus and stomach before going into your small bowel. You should drink this steadily over approximately 40 -60 minutes.
- You may have a small tube, called a cannula, inserted into one of the veins in your arm
- You will be asked to lie down on the scanner table on your back.

- A muscle relaxant will normally be injected to stop the bowel from moving during the scan. This may make your eyesight blurred, but it soon wears off. However, you should not drive for 30 minutes after the injection.
- You may be given an iodine-based intravenous contrast medium via the cannula prior to the scan.
- You will also be asked to hold your breath and will feel the table move in and out of the scanner and whilst the scans are taken.
- The scan will take 10-20 seconds (one breath hold)
- You will be alone in the CT room during the scan but the Radiographer will be able to see, hear and speak with you at all times.
- Sometimes the radiographer may need to take extra scans to ensure we can fully see your entire bowel.

What happens after the test?

The liquid you are given through the tube may cause some short lived diarrhoea, so you may wish to spend a short time in the department near to a toilet before you go home. You may eat and drink as normal as soon as the examination is finished.

Are there any risks?

CT Enteroclysis is generally regarded as a very safe test. Problems can occur, but they are rare. Problems which might occur are similar to those which can happen with other methods of examining the large bowel.

These include:

- Transient discomfort in the nose or throat as the nasojejunal tube is being introduced into the small bowel.
- Nausea or Abdominal discomfort
- The liquid you drink may cause some short-lived diarrhoea
- Reaction to the injected contrast

Like any x-ray examination, this test uses radiation. We will keep the radiation dose as low as we possibly can.

How do I get my results?

A specialist radiologist will review the images from your CT Enteroclysis and send a report to your doctor. Your GP or hospital Consultant who referred you for the test will see you to discuss the results.

Any further questions?

We will do our best to make your visit as comfortable and stress free as possible. If you have any further questions, or suggestions for us, please let us know.

If you would prefer information and advice in another language, please contact the Radiology department.

Further Information

For general information about Radiology departments, visit The Royal College of Radiologists' website: www.goingfora.com

For information about the effects of x-rays read the National Radiological Protection Board (NRPB)

publication: 'X-rays how safe are they?' on the website:

http://www.hpa.org.uk/webc/HPAwebFile/HPAweb_C/1194947388410

For health advice or information you can call NHS Direct on 0845 4647 or visit the website: www.nhsdirect.nhs.uk

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