

## Colonic Transit Studies: Paediatric (1-16 years)

This leaflet provides information about having a colonic transit study in paediatric patients aged 1-16 years. It explains what a colonic transit study is, why it has been requested, the preparation needed before the examination, what to expect on the day of the examination, and how you will receive the results. We hope it will answer any questions you may have, however if there are further concerns, please talk with your doctor.

### What is a colonic transit study?

A colonic transit study is an examination, which assesses the function of your large bowel (colon). It requires the patient to swallow 3 radiopaque capsules at specific times over the course of 3 days, and then an X-ray image of the abdomen (tummy) is taken. The capsules will show up on the X-ray film and this will help the doctor (radiologist) to assess how quickly or slowly food passes from the stomach to the bowel.

Please read the section [‘What should I do before I come into hospital?’](#) carefully before taking the tablets before the examination.

### Why would I need this procedure?

This examination is usually requested by a paediatric doctor / consultant within the hospital. Children are usually invited to have this examination due to having symptoms of a slow digestive system.

### What are the symptoms that have led to me having this procedure?

The doctor may request this examination due to your child experiencing chronic constipation which they maybe treating with laxatives.

### What are the alternatives?

Currently there are no imaging tests that can replace the information this test provides. If there are any concerns, then the carer / patient must have a discussion with their doctor / consultant. The doctor may be able to assess them clinically and not perform the examination; however, an accurate diagnosis may not be able to be achieved.

### What are the potential risks and side effects?

#### X-rays

This test uses X-rays to take usually one X-ray film of the patient's abdomen (tummy). All X-ray procedures involve exposure to radiation in varying amounts. The dose you get from a medical X-ray is very low and your doctor has determined that the benefits of having the colonic transit study outweigh the potential risks.

The radiographer is present throughout the examination and will be taking the picture. They will make sure that the dose is kept as low as reasonably practicable, keeping the dose of radiation to a minimum.

## Radiopaque Capsules:

The capsules needed to be taken for this examination contain **gelatine** and **barium sulphate**, and usually have no side effects; they pass naturally through the digestive system. Do not take the capsules if you are allergic to them, and inform your doctor / consultant. Please note: these capsules are 100% vegan.

If however, your child develops any side effects from taking these tablets including: rash, itchiness, redness please call your GP. In very rare cases a reaction may occur including: swelling of the face, lip, tongue and throat. If this occurs go straight to your local Accident and Emergency (A&E) department.

## **What are the expected benefits of treatment?**

The benefit of having this examination is getting an accurate diagnosis. This will help the doctor to understand what maybe causing your child's bowel symptoms, from there they can then discuss any appropriate treatment options.

## **What should I do before I come into hospital?**

The consultant requesting this examination for your child will instruct you on whether any laxatives your child may currently be taking need to be stopped during the process of this study. If laxative medications need to be stopped, you will usually be asked to restart the medication after the study. Your child can also eat and drink normally throughout the study.

The X-ray department will contact you by letter with an appointment time to attend the department for the X-ray. The appointments team will also phone you to arrange a convenient collection time for the marker capsules that need to be taken before the X-ray appointment – please see below.

## The markers need to be taken as follows:

Sunday (Day 1) – Take one capsule labelled 1 in the morning between 09:00 – 12:00

Monday (Day 2) - Take one capsule labelled 2 at the same times as day one.

Tuesday (Day 3) – Take one capsule labelled 3 at the same time as day one.

Thursday (Day 5) – Bring your child to the X-ray department as stated on the appointment letter.

It is important that this timeline is strictly kept to as it can prevent the examination from taking place!

Your child should swallow the marker capsules with water, however if your child cannot swallow them then you can break the capsule and mix the contents into some easy to swallow food, e.g. yoghurt, custard.

For girls over the age of 12, who have started their menstrual cycle it is routine practice for the X-ray to be taken within 28 days of 'day 1' of their last cycle.

If appointments need to be changed because of this, please call the appointment line on: 0300 131 5853.

## **What happens during the X-ray appointment?**

Upon arrival for the appointment, please report to the Radiology Reception desk. Ensure your child is wearing light fitting clothing without any metal adornments.

The Radiographer will call your child in for their appointment, you can attend with your child if you wish to do so. The radiographer will verbally check some identification, confirm the examination, and check with you and the child as to when the tablets were taken.

Please be aware that female patients over the age of 12 will be asked as to whether they have started their periods, and if so this needs to be confirmed that they are not pregnant, and are within 28 days of 'day one' of their last cycle.

For the examination your child will lie on their back on the X-ray table and the radiographer will position them for an X-ray of their abdomen. Depending on your child's age and ability the radiographer may ask them to breathe in and hold their breath.

## **How long will it take to receive the results?**

The X-ray will be reported on by a doctor / radiologist and the results will be made available to your child's consultant within 10 days.

The consultant will arrange another outpatient appointment to discuss these results, or, the consultant or their secretary will contact you directly.

## **How will I feel afterwards?**

After the examination there are no side effects and can resume normal daily activities.

## **How long will I be in hospital?**

This test may take up to 45 minutes; this is dependent on how busy the X-ray department is. The department tries to keep to appointment times as best as possible.

## **How soon will I be able to resume normal activities?**

Normal daily activities can resume before and after the procedure.

## **Will I have to come back to hospital?**

You will not routinely need to come back to the X-ray department. Your consultant may arrange a follow up appointment for the results which may need you to attend the hospital.

## **Consent**

Although you consent for this treatment, you may at any time after that withdraw such consent. Please discuss this with your medical team.

## **Sources of information**

For appointment enquiries and general enquiries about the marker study please contact the X-ray appointment line on: 0300 131 5853.

Any enquiries about the results or stopping the child's medication please contact the referring doctor / consultant's secretary, (contact details are usually found on the letters sent by the outpatient clinics).

## Important information

The information in this leaflet is for guidance purposes only and is not provided to replace professional clinical advice from a qualified practitioner.

## Your comments

We are always interested to hear your views about our leaflets. If you have any comments, please contact the patient experience team on 0300 131 4784 or [esh-tr.patientexperience@nhs.net](mailto:esh-tr.patientexperience@nhs.net).

## Hand hygiene

We are committed to maintaining a clean, safe environment. Hand hygiene is very important in controlling infection. Alcohol gel is widely available at the patient bedside for staff use and at the entrance of each clinical area for visitors to clean their hands before and after entering.

## Other formats

**If you require any of our leaflets in alternative formats, such as large print or alternative languages, please contact the Equality and Human Rights Department on 0300 131 4434 or [esh-tr.AccessibleInformation@nhs.net](mailto:esh-tr.AccessibleInformation@nhs.net)**

After reading this information are there any questions you would like to ask? Please list below and ask your nurse or doctor.

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## Reference

The following clinicians have been consulted and agreed this patient information:  
Enter names and job titles (at least one from each site if appropriate)

The directorate group that have agreed this patient information leaflet:  
Enter name here, if appropriate

Next review date:	March 2026
Responsible clinician/author:	Sarah Day Deputy Clinical Manager- General Radiographer / Mammographer

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