birmingham bowel clinic

Enquiries: 0845 241 7762
email: enquiries@birminghambowelclinic.co.uk
www.birminghambowelclinic.co.uk

Barium Enema Examination

The Radiology Department

The Radiology Department, sometimes called the x-ray, is the facility in the hospital that carries out the radiological examinations of patients, using a range of equipment, including x ray, CT scanning, ultrasound and magnetic resonance imaging (MRI).The radiologists are doctors specially trained to interpret the results and carry out some of the more complex examinations. They are supported by radiographers who are highly trained to carry out many of the x-ray and other imaging procedures.

What is a Barium Enema?

A barium enema is an examination of the lower gastrointestinal tract, also called the large intestine or colon, using x-ray. This includes the right or ascending colon, the transverse colon, the left or descending colon and the rectum. The appendix and a portion of the small intestine may also be included.

An x-ray (radiograph) is a painless medical test that helps your doctor diagnose and treat medical conditions. Radiography involves exposing a part of the body to a small dose of ionizing radiation to produce pictures of the inside of the body. X-rays are the oldest and most frequently used form of medical imaging. A barium enema uses a special form of x-ray called fluoroscopy and a contrast material called barium.

Fluoroscopy makes it possible to see internal organs in motion. When the lower gastrointestinal tract is filled with barium, the radiologist is able to view and assess the anatomy and function of the rectum, colon and part of the lower small intestine.

What are some common uses of the procedure?

A doctor may order a barium enema examination to detect:

- Cancer and benign tumours (such as polyps)
- Ulcers
- Inflammatory bowel diseases e.g. Crohn’s disease & Ulcerative colitis
- Signs of other intestinal illnesses

The procedure is frequently performed to help diagnose symptoms such as:

- Chronic diarrhoea and constipation
- Blood in stools or anaemia
- Irritable bowel syndrome
- Unexplained weight loss
- A change in bowel habits

birmingham bowel clinic

Enquiries: 0845 241 7762
email: enquiries@birminghambowelclinic.co.uk
www.birminghambowelclinic.co.uk

How should I prepare for the procedure?

Dr Ian McCafferty will arrange for the radiology department (x ray) to give you detailed instructions on how to prepare for your barium enema.

You should inform Dr Ian McCafferty of any medications you are taking and if you have any allergies, especially to contrast material. Also if you have had any recent illnesses or have any other medical conditions.

On the day before the procedure you will likely be asked not to eat, and to drink only clear liquids like water, black tea & coffee, cola and to avoid dairy products. After midnight, you should not eat or drink anything. You will be given 2 sachets of laxative (usually picolax) to be taken the day before the procedure. Just follow the detailed instructions from radiology.

You can take your usual prescribed oral medications with limited amounts of water.
You may be asked to remove some or all of your clothes and to wear a gown during the exam. You may also be asked to remove jewellery, eye glasses and any metal objects or clothing that might interfere with the x-ray images.

If you do take insulin or tablets you need to make sure you have enough to eat on the day before your appointment to prevent low blood sugars and you should follow the advice given by the Radiology Department (usually in a special accompanying leaflet).
Women should always inform if there is any possibility that you could be pregnant. Many imaging tests are not performed during pregnancy because radiation can be harmful to the baby.

What does the X ray equipment look like?

The equipment typically used for this examination consists of a box-like structure containing the x-ray tube and fluoroscopic equipment that sends the x-ray images to a television-like monitor for viewing that is located in the examining room. This structure is suspended over a table on which you lie. A drawer under the table holds the x-ray film or image recording plate that captures the images.

How is the procedure performed?

A barium enema exam is usually done on an outpatient basis. Dr Ian McCafferty is a consultant radiologist specially trained in lower gastrointestinal tract imaging and will perform the examination and interpret the pictures.

You will be positioned on the examination table, a small tube will be placed into the rectum and mixture of barium and water will be pumped into the colon. Air will also be pumped through the tube to help the barium thoroughly coat the lining of the colon. A small injection of Buscopan will be administered (if safe to do so), this will relax the bowel and reduce any discomfort you have and allow better pictures to be obtained. A series of x rays are then taken in a number of different positions, the radiographer may take some of these.

When the examination is complete, you will be asked to wait until Dr Ian McCafferty determines that the images are of high enough quality. Once the x-ray images are

Enquiries: 0845 241 7762
email: enquiries@birminghambowelclinic.co.uk
www.birminghambowelclinic.co.uk

completed, most of the barium will be withdrawn through the tube. You will then expel the remaining barium and air in the toilet.
The examination takes about 30 to 60 minutes.

What will I experience during and after the procedure?

As the barium fills your colon, you will feel the need to move your bowel. You may feel abdominal pressure or even minor cramping. Most people tolerate the mild discomfort easily. The tip of the enema tube is specially designed to help you hold in the barium.

During the imaging process, you will be asked to turn from side to side and to hold several different positions. At times, pressure may be applied to your abdomen.
After the examination you can resume a regular diet and fluid intake. We recommend drinking additional water for 24 hours after the examination to help expel the barium.

Your stools may appear white for a day or so as your body clears the barium liquid from your system. This is normal.

Who interprets the results and how do I get them?

Dr Ian McCafferty, a radiologist, specifically trained to supervise and interpret the examination, will analyze the images and send a signed report to your GP or referring doctor, who will share the results with you.

What are the benefits vs. risks?

Benefits

- X-ray imaging of the large intestine (colon) is a minimally invasive procedure with rare complications
- Barium enema examinations can often provide enough information to avoid more invasive procedures such as colonoscopy
- Because barium is not absorbed into the blood, allergic reactions are rare
- No radiation remains in a patient's body after an x-ray examination
- X-rays usually have no side effects

Risks

- The radiation risk is very low compared with the potential benefits
- The effective radiation dose from this procedure is about 4-6 mSv, which is about the same as the average person receives from background radiation in 16 months
- In rare cases, the barium could leak through an undetected hole in the large intestine producing inflammation in surrounding tissues

birmingham bowel clinic

Enquiries: 0845 241 7762
email: enquiries@birminghambowelclinic.co.uk
www.birminghambowelclinic.co.uk

Minimizing Radiation Exposure

Special care is taken during x-ray examinations to use the lowest radiation dose possible while producing the best images for evaluation. National and international radiology protection councils continually review and update the technique standards used by radiology professionals.

State-of-the-art x-ray systems have tightly controlled x-ray beams with significant filtration and dose control methods to minimize stray or scatter radiation. This ensures those parts of a patient's body not being imaged receive minimal radiation exposure.

If you have a query?

If you have a query about having the barium enema, please ring the Radiology Department between 9am and 5pm, Monday to Friday & 9am and 12pm Saturday.