What is a barium enema examination?

A Barium Enema is an X-ray study of the large bowel (intestine). The bowel does not show in an X-ray image so barium is needed. Barium is a chalky liquid that coats the bowel so that it shows up on X-ray images. The barium is given as an enema.

How is it done?

- This test is done in the Radiology Department.
- Your child lies on the X-ray table.
- The doctor (a radiologist) inserts a tube into your child’s rectum (bottom).
- The barium passes through the tube into the bowel.
- The radiologist watches the bowel fill up on the X-ray screen.
- He/she takes images to study later.
- The camera makes a slight noise as it takes a picture.
- Your child empties his/her bowel into the toilet, a bedpan or diaper.
- More x-ray images are taken.

How does this feel?

Your child will feel pressure as the bowel fills up with Barium. This feeling comes with an urge to empty the bowel (“go to the bathroom”). When the bowel is very full, your child may have cramps. The barium enema is more uncomfortable than painful. The real issue is the embarrassment that your child or young person may feel. S/he may also be a little scared.

How does the child prepare for the Barium Enema?

You can really help your child if you explain what will happen in ways he/she will understand. Talk about how the doctors and nurses do lots of these tests. Try to help your child learn some ways of keeping his or her mind on other things during the test. For instance, singing a song inside his/her head or saying a rhyme. Offer to stay and help with this if your child wants you to.

Are special preparations needed?

Hirschsprung’s disease, chronic constipation or emergency problems do not need any preparation before the Barium Enema. For other illnesses it is best to clean the bowel first. A clean bowel gives better x-ray images.

Cleaning the bowel has two parts:

1. Fasting so that no food or drink goes into the bowel. Here are some rules for fasting. Please make sure to follow them or this procedure may be delayed. Ask questions if you do not understand.

Infants 13 months of age and under:

On the day of the Barium Enema:

- no solid or pureed foods, formula or even breast milk
- clear fluids only (i.e. drinks that you can see through like water, apple juice) until 3 hours before the enema, and then
- NOTHING to eat or drink for 3 hours before the Barium Enema
Children 14 months and older:

*The day before the Barium Enema:*
- offer a light evening meal of soft foods, e.g.
  - soup,
  - scrambled eggs,
  - fish,
  - rice,
  - yogurt,
  - jello.

*On the day of the Barium Enema:*
- no solid foods, purees, breast or other milk, dairy foods
- clear fluids only (i.e. drinks you can see through like water, apple juice), until 4 hours before the enema, and then
- NOTHING to eat or drink for 4 hours before the enema.

2. Taking laxatives to remove what is in the bowel.

Give your child a laxative called Dulcolax, at noon the day before the Barium Enema.
- Children 4 years to 6 years - give 5 mg. Dulcolax
- Children 7 years and older - give 10 mg. Dulcolax

Do not crush the tablet. Explain to your child that he/she must not chew it. He/she must swallow it whole. You can buy Dulcolax at a pharmacy/drugstore. Your child must not have milk or antacid medicine for 1 hour before taking the Dulcolax.

Children 3 years old or younger - do not give any laxative medicine.

Air Contrast Enema

*What is an air contrast enema?*

**Examination:**
An air contrast enema is used when we need to distend (expand) the walls of your child’s intestine more fully. It allows us to examine certain features more clearly. Barium is still used in the same way as the barium enema described above. The tube that delivers the barium is the same tube that is used to deliver air to your child’s intestine. This is seldom performed on children under 3 years of age. This examination needs more preparation and cleansing of the large bowel.

**Additional special preparations:**
Children 3 years and older should not have solid foods, dairy foods or pureed foods for 24 hours before the examination. If the large bowel is not adequately cleansed, an enema may be performed in the Radiology Department prior to the study.

**How will you hear the results?**

After the radiologist looks at the X-rays he/she writes a report to your doctor. Your doctor should have the report in a day or two. You can call your doctor to get the results of the X-rays. In the case of an emergency the radiologist calls your doctor with the results. If the X-rays show your child needs medical treatment quickly, your doctor arranges it right away.

Outpatients

The hospital is a busy place. There is pay parking at BC Children’s Hospital, but the parking lots are always busy.

You need to register at the Admitting Department before you come to the Radiology Department for the procedure.

Please make sure you allow enough time for all these possible delays. Allow plenty of time to get to your appointment.

The Admitting Department and the Radiology Department are on the main floor of B.C.’s Children’s Hospital.