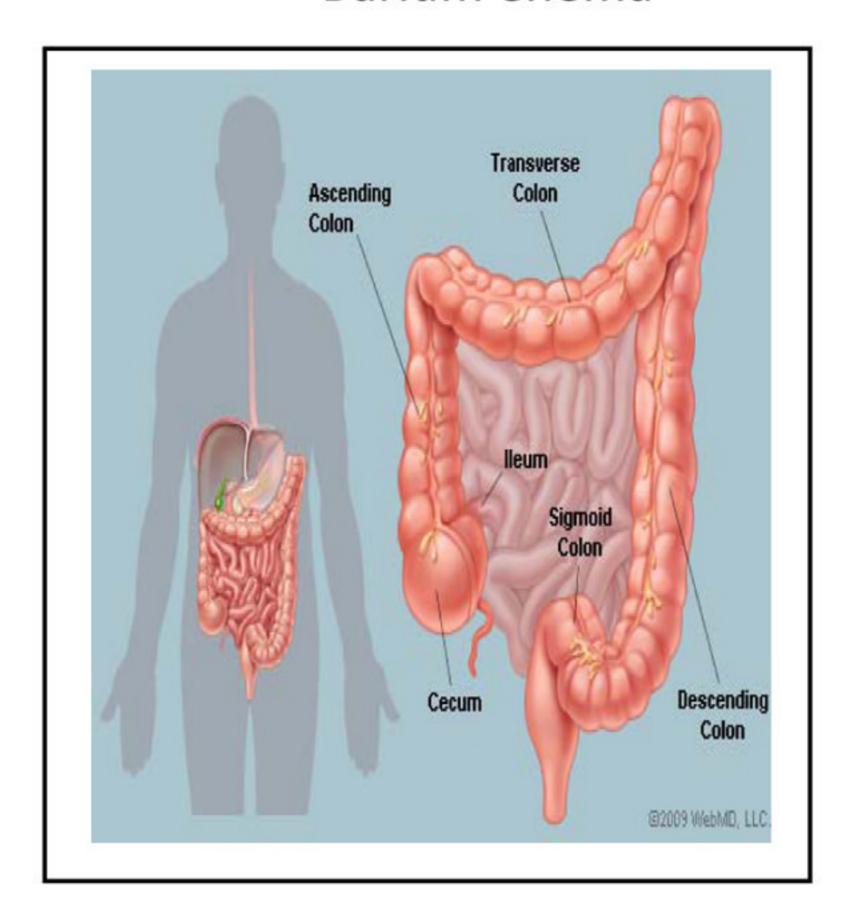


Kingdom of Saudi Arabia National Guard Health Affairs King Abdulaziz Medical city Medical Imaging Department

# Diagnostic Imaging Section Barium enema

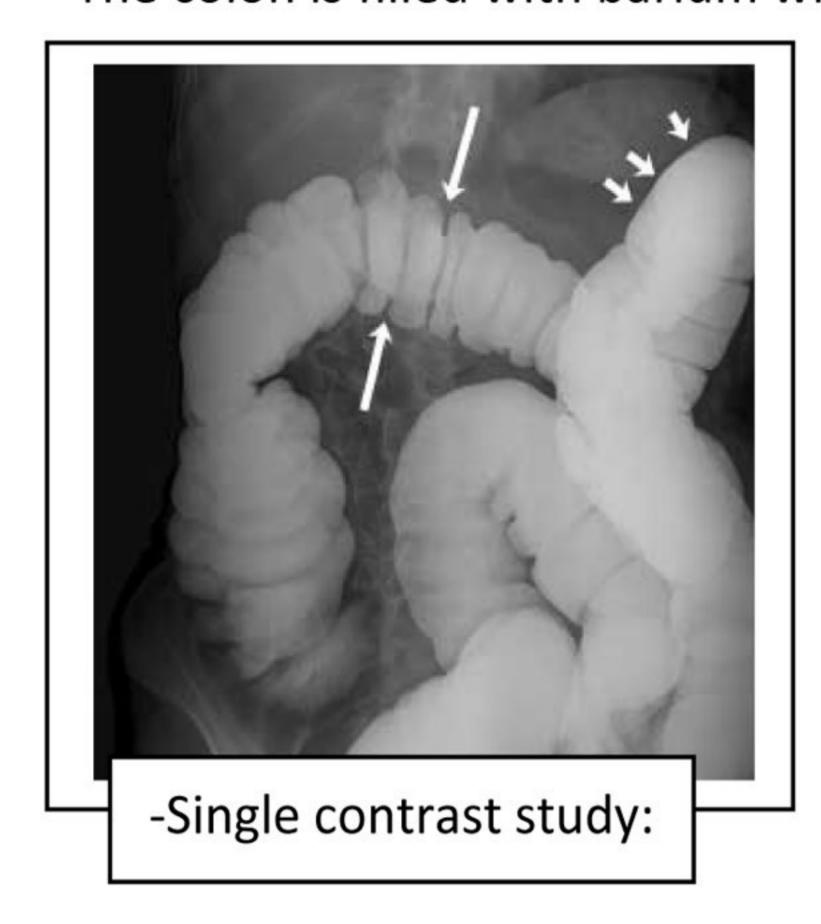


A barium enema or lower gastrointestinal examination is an X-ray of large intestine (colon and rectum). the test is used to diagnose diseases and other problems that affect the large intestine. This is done by pouring the contrast material through tube inserted into the anus.

There are two types of barium enemas:

## 1-Single contrast study:

The colon is filled with barium which outlines the intestine and reveals large abnormalities.





2-Double-contrast or air- contrast study

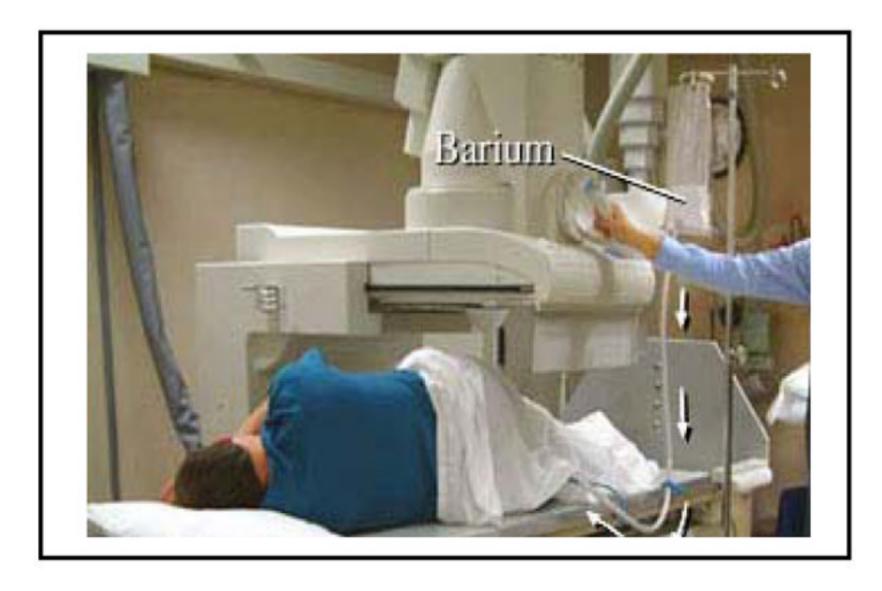
## 2-Double-contrast or air-contrast study:

The colon is first filled with barium and then the barium is drained out leaving only the thin layer
of barium on the wall of the colon .the colon is then filled with air. This provides a detailed view
of the inner surface of the colon. In some cases the single-contrast Study may be preferred for

- A small balloon on the Enema tip may be inflated To help you hold in the Barium
- You will be asked to turn to different positions and the table may be tilted slightly to help the barium flow through your colon.
- Occasionally you may be given an injection of medicine to relieve the cramping.
- We may also press gently on your abdomen to help move the barium through your intestine.
- End of the exam:
- The enema tube is removed.
- You will be given a bedpan or be taken to the toilet to get rid of the barium.
- One or tow additional X-ray pictures (post evacuation films) will then be taken.

#### Patient concerns.

- You may be embarrassed by the test. You may worry that wont be able to hold the barium. The
  doctor and the technologist who perform this procedure are accustomed to this and will be able
  to help you.
- The X-ray table is hard and sometimes its cold because of A/C to keep the equipment cool.
   When the barium flows into your colon it may feel a bit cool, you may feel fullness, moderate cramping and gas pain from having gas pumped into your colon. Taking a deep breath from your mouth will help you to relax.
- This test is exhausting. You may feel tired for a day or after the test.



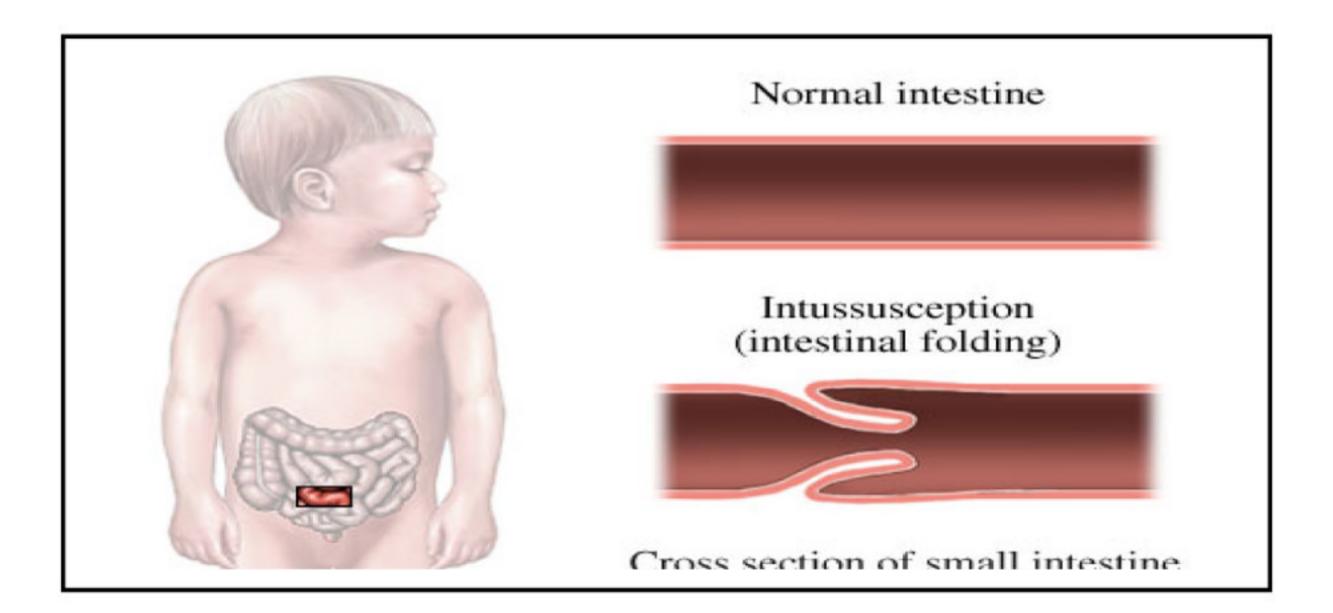
# Risk

- Occasionally the barium remaining in the colon hardens causing constipation or obstruction. To
  decrease this risk is by drinking a lots of fluids and if the doctor recommended to take enema or
  mild laxative after the test.
- In rare cases barium can cause inflamed areas in the colon called barium granuloms.

specific Medical reasons or for older people who may not be able to tolerate the Timeconsuming and somewhat more uncomfortable.

## Why it's done?

- Identify inflammation of the intestin that occurs in inflammatory bowel diseases such as ulcerative colitis or Crohn's disease.
- Find problems with the structure of the large intestine such as narrowed areas (stricture) or pockets or sacs (diverticula) in the intestinal wall.
- Evaluate abdominal symptoms such as pain, blood in stool or altered bowel habits.
- Evaluate other problems such as anemia or un
- Help correct a condition called ileocolic intussusception, in which the ends of a child's small intestine protrude into the large intestine.



# **Preparation:**

- For 1 to 3 days before the test you will usually be on a clear liquid diet.
- The day before the test :
- > You should drink very large amounts of nonecarbonated clear liquids.
- You will then take a combination of laxative to empty your intestine.
- In the day of the test you may need to repeat the water enema until the liquid that passes is free of any stool particles. A Rectal suppository or fleet enema is used instead of tap water enema.

### How it's done

- You will lie on the x-ray table while a preliminary x-ray is taken.
- While you are lying on your side a well lubricated enema tube will be inserted gently into your rectum. The barium contrast material is then allowed to flow slowly into your colon.

Perforation of the bowel is more serious but very rare complication. It may occur in people
whose bowel wall has been weakened by intestinal problems such as inflammatory bowel
diseases, ulcerative colitis or Crohn's disease.

## Reasons you may not be able to have the test or why the results may not be helpful:

- Stool or gas in the colon (in adequate or bad preparation for the exam)
- Muscle spasms in the colon wall.
- A rapid, irregular heartbeat (tachycardia).
- Sever ulcerative colitis, toxic mega colon, acute diverticulitis, or suspected perforation of the intestine.
- Inability to remain still or to cooperative during the test.
- Extreme obesity.
- Barium residue seen in the abdomen from a previous barium study.

For more information please contact diagnostic imaging section

01 8011111 ex 12992 or 11318