BARIUM ENEMA

Contrast is passed into the rectum to enhance X-ray pictures of the bowel

WHAT IS IT?
- A barium enema is an X-ray procedure used to examine the rectum and colon, often used as a complement to lower gastrointestinal (GI) endoscopy.
- It is a diagnostic tool for patients with, for example, lower GI bleeding, altered bowel habit or abdominal pain, or to screen for polyps and colorectal cancer.
- Contraindications include: acute colitis/diverticulitis, recent polypectomy or colonic biopsy, older patients (>70 years old), pregnancy.

HOW DOES IT WORK?
- Contrast is passed into the rectum to enhance X-ray pictures of the bowel. Barium enemas may use a single contrast (barium only) or double contrast (barium and air). Double-contrast studies are more common and successful.

PATIENT PREPARATION
- Bowel preparation: this varies, but often involves a period of low-residue diet and oral/laxative washout. Preparation is vital for good views of the bowel: the patient should receive full instructions on preparation and the procedure.
- The radiologist should be supplied with a full patient history.

THE PROCEDURE
- The patient is cannulated and may be given intravenous antispasmodic medication (for example hyoscine butylbromide) to make the procedure more comfortable and to aid the passage of barium.
- The patient is positioned in a left lateral position on an X-ray table.
- A digital rectal examination is then performed.
- A rectal catheter is lubricated and inserted into the rectum. This has two connectors. One connector is for passing barium and the other is for insufflating air.
- The patient is placed prone.
- Liquid barium is passed via a giving set into the catheter. It is passed slowly to prevent the patient experiencing discomfort or an urge to defecate.
- X-ray screening takes place as the barium is passed so the radiologist can observe filling. The amount instilled depends on the patient. The radiologist stops once the rectum is filled and the barium continues to pass around the colon. The radiologist may change the patient’s position as necessary in order to aid filling.
- Once the contrast reaches the splenic flexure, the patient returns to the prone position and air is insufflated. As air enters, the colon inflates and the images of the mucosa become clearer.
- Radiography staff may assist in moving the patient to aid filling and to provide reassurance.
- Screening continues until the radiologist identifies the caecum, by seeing the appendix or by seeing barium entering the small bowel.
- Once the entire colon is filled further pictures are taken in individual positions to obtain complete views.
- The radiographer ensures all pictures are valid.
- The radiologist may change the patient’s position as necessary in order to aid filling.
- The radiologist ensures all pictures are valid.
- The rectum is emptied of barium and the catheter removed.
- The patient passes barium for several hours after the procedure.

MINOR COMPLICATIONS
- Constipation.
- Abdominal discomfort.
- Rectal bleeding.
- Flatus.

REFERENCES

The information given serves as a general reference. Nurses should consult their individual trust policies on clinical procedures.