

# The purpose of barium swallow health and social care essay

[Health & Medicine](#)



**ASSIGN  
BUSTER**

The most common positive or radiopaque, contrast medium used to visualise the GI system is barium sulfate which is normally referred to as barium sulfate.

There are contraindications to barium sulfate. These mixtures are contraindicated and might hold possible opportunity to get away into the peritoneal pit. If a big sum of barium sulfate flight into the peritoneal pit, this can take to enteric infarcts or peritoneal inflammation. This flight may happen through a pierced syrupy or during surgery that follow the radiographic process.

Pathologic indicant for Ba sup

This process is done to bespeak when the patient have anemia, mechanical hurting on swallowing, reflux, Preoperative anatomical presentation, appraisal of trachea-esophageal fistulous withers and besides the appraisal of the side of perforation and besides indigestion.

The diseased indicant for the Ba swallow scrutiny is achalasia, anatomic anomalousness, barrette 's gorge, carcinoma gorge, dyspigia and esophageal varices. Achalasia is a motor upset of the gorge in which vermiculation is reduced along the gorge. Next is anatomic anomalousness which caused by disease, such as malignant neoplastic disease of the gorge or possibly. Patients who suffer a shot frequently develop impaired get downing mechanism. Certain nutrients and contrast agents are administrated during the scrutiny for rating of the swelling forms. Dysphagia is trouble in get downing this may due to a congenital or acquired status, a at bay bolus of nutrient or redness. Narrowing and enlarged, flaccid visual

aspect of the gorge may be seen during the Ba sup, depending on the cause of the dysphagia.

The other indicant for Ba sup is, to bespeak carcinoma of the gorge includes one of the most common malignant of the gorge is ardeno carcinoma. The one of the symptoms of this pathology include dysphagia ( trouble in get downing ) . Last, foreign organic structure are besides can be detect by utilizing this process to the patient that ingest assortment of nutrient including a bolus of nutrient, metallic object and other stuff that will lodge the gorge.

#### Contraindications

Nonspecific, nevertheless low solar H<sub>2</sub>O soluble contrast agents are best used in probes where aspiration may happen.

#### Preparation

Patient readying.

### **Before Patient readying**

No readying for Ba swallow scrutiny needed because gorge is empty most of the clip unless an upper GI series is to follow. If the patient is have oning anything metallic from the most to the waist must be removed. Ask the patient to alter to hospital gown. Before the fluoroscopic process is perform, a patients history should be taken and the scrutiny carefully explained to the patient.

## **After readying**

When the process is done, the patient can go on their regular diet as usual. Take orally administered medicines unless the physician asks non to make so. In 48 to 72 hours after the process, patient stool possibly in grey or white coloring material. Patient may see irregularity and normally been treated by eating laxative. Ask the patient to imbibe a batch of H<sub>2</sub>O for several years to avoid irregularity excessively. If the patient experienced any unable intestine motion or undergo important alterations after the process, inquire them to reach their doctor.

## Equipment readying

Before making this process, the radiographer should fix some equipment such as fluoroscopy table with 90/20 jousts, rapid consecutive skiagraphy ( to border per second ) or video entering possibly required for appraisal if the laryngopharynx and upper gorge during swallow. Some extra equipment besides should necessitate such as disposable cup, little cup for sparkling agent, tissue and besides a straw possibly required for consumption of Ba when the tabular array is horizontal and besides injection disposal equipment.

## Contrast agent readying

In this process, 250 % w/v Ba sulfate suspensions of 100 milliliters are required. Gastrografin ( should non be used for the probe of a trachea-esophageal fistulous withers or when aspiration is possible ) . An sparkling agent will be required for illustration a combination of Na hydrogen

carbonate and citric acid, to bring forth CO<sub>2</sub> to dilate the tummy. This will besides move as dual contrast agent against the Ba to heighten the visual image of the mucous membrane. Last, LOCM for about around 350mg/ml is besides required in this process.

### Procedure

The patient will be placed behind the roentgenoscope equipment for the x-ray beam exposure. The process begins with the patient in the vertical or upright place and the cup of thin Ba is placed in the patient's left hand closed to the left shoulder. Then, the patient is asked to get down the liquid in the cup utilizing a straw. The patient is so inquiring to take the effervescent granules ( either dry or assorted with a little sum of H<sub>2</sub>O if dry granule is excessively hard ) or other effervescent assistance, followed by citric acid. It is of import to affect on the patient that this will bring forth gas in the tummy and may give them the make fulling that they need to burp. To avoid this, the best manner is to state them to maintain swallowing.

The enteric piece of land of the next gorge, tummy and duodenum are seeable when the Ba fills and coats it. The radiotherapist observes the flow of the Ba with the roentgenoscope. Swallowing of the thin Ba is observed with the patient in assorted places. The patient will inquire to revolve true 360° at their anatomic point. This will guarantee all the surfacing facet of the stomachic mucous membrane is ready for the appraisal of the tummy. The patient is inquiring to turn to their left ( LPO ) where a topographic point image is taken. Then, patient will turn their organic structure back to the supine ( AP ) place and bend to their right ( RPO ) . Last, the patient is return

to the vertical place, turn somewhat to their left and erect ( LPO ) . Film is taken to demo the distal gorge and the fundus of the tummy.

The similar place will be used when the patient get down the thick Ba. The used of the thick Ba allows better visual image of mucosal forms and any lesions within the gorge. The type of Ba used is determined by the radiotherapist. After the vertical survey has been complete, horizontal and trendelenburg places with midst and thin Ba may follow.

The x beam radiation is directing by the ten beam machine ( fluoroscopy ) through the patient 's tissue organic structure and to a movie on the opposite side of the patient 's organic structure. Different organic structure tissue will absorbed different sum of radiation that penetrates the organic structure tissue. The abnormalcies, different organ, and some conditions all become seeable on the x beam movie due to difference in the composing since the incursion of the x beam beam is block by them.

### Radiation Protection

Radiation protection is used to except clinically unhelpful scrutinies. They are many ways to cut down unserviceable radiation like minimise the fluoroscopy clip and current so that merely the exact radiation is given to the patient. Use collimation during the process to minimise the field size. Give screening to the sensitive organ of the patient when possible. Introduce QA coder to optimise staff and equipment public presentation and to do regular cheques on. Use video recording equipment alternatively of utilizing cine camera during fluoroscopy. Install modern image intensives with digital

image processing possible and sensitive ( e. g. CsI ) photocathodes. Use modern image intensive and topographic point movie photofluoroscopy with 100mm camera alternatively of skiagraphy whenever appropriate.

### Benefit

Upper GI piece of land scrutiny is really safe and noninvasive process. This scrutiny besides leads to an accurate analysis of the gorge, tummy and duodenum. This is because, Ba is non absorbed by the blood the organic structure and allergic reaction due this scrutiny is really rare. No radiation will stay in patient 's organic structure after the process is done n X beam has really less side consequence in thediagnosticscope.

### Hazards

Some patient may see allergic to the flavorer that is added in the Ba. The patient must state the physician if they are allergic to chocolate, citrus fruit or certain berries before the process. There is merely little opportunity that some Ba will stay in the organic structure, taking to a obstruction of the digestive system. So, patient who have an obstructor in the GI piece of land they are non allow undergoing this scrutiny. The effectual radiation dosage for this process is 6mSv which is the same as the mean individual receives from the background radiation in two old ages.

### Precaution

Barium is not be used if perforation is suspected. Pregnant adult females are advised to avoid this process because the radiation exposure may impact the foetus.

### Role of radiographer

#### Before

Arrange the assignment and state the patient about the clip, the day of the month and the topographic point where the scrutiny will be held. As the radiographer, gave the radiation protection to the patient is really of import. Give the patient a shielding to protect them from the radiation that can harm them. The room must be set up decently before the scrutiny took topographic point. Make certain the room is clean and ready to be used. All the equipment 's like cassette 24x30 centimeter, little cup and straw and contrast media ( Ba sulfate/gastrografi ) must be prepared before the scrutiny started. Make certain that fluoroscopy unit is in good status. State the patient what they should make and do certain they are all prepared. When the radiographer fix the list for the scrutiny, do certain that the diabetic patient is on the first list. This is because, they have to take their medicine on clip and if the diabetic patient are being ignored, this will do injury to them.

#### During

#### Patient placement

#### Focus oning



Collimation

Radiologists penchant

Adequate supply of cassettes

Identity of exposed and unexposed cassettes

Exposure factor choice

Table position- patient comfort and safety

Hand clasps, pes remainder, pillow, reassurance

Drip if any

Drumhead