

Answer No:01

Best Imaging Procedure:

- The best imaging procedure for a patient suffering from dysphagia is Fluoroscopy.
- It is a type of medical imaging which shows a continuous X-ray image on a monitor.
- X-ray beam is passed through the body during this procedure.

Standard Protocols:

- ❖ A proper imaging practitioner is required.
- ❖ A person should know the performance monitoring of the equipment.
- ❖ The person doing the procedure should have a registered radiologic degree or certificate.
- ❖ All the needed materials should be there on time.
- ❖ A supervisor should be present there for any issues regarding the process.
- ❖ In pregnant patients the radiologic assistant should counsel the patient properly, as it can lead to damage to the embryo, so that the procedure may be avoided on time.
- ❖ Materials should be properly sterilized.
- ❖ Awareness of the needed tasks to do during examination of each system of the body like; GIT, CVS, Respiratory System etc.
- ❖ Proper documentation of the patient for his/her next visit to the same or any other place.
- ❖ The patient should be in comfort position.
- ❖ All reliabilities have to be provided.
- ❖ Asking the patient each time operating with his/her new body part.
- ❖ At the last thanking the patient for his patience.

Answer No:02

Barium Meal:

- It is a white liquid which shows up clearly on X-ray.
- Once it is inside the body it coats the body cavities and shows the outlines of the bowel, stomach and esophagus etc.
- If any abnormal tumor etc. is present it shows irregularity in the outlines.

Positions used for Barium Meal:

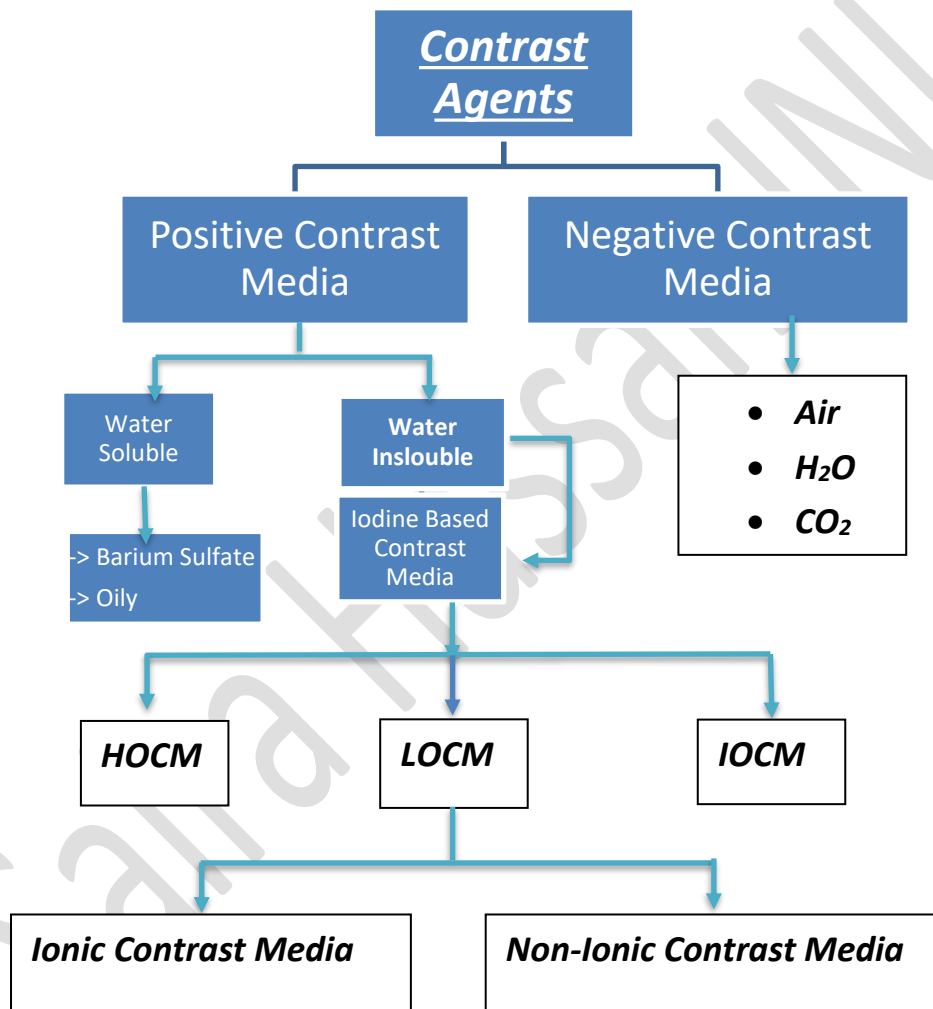
- The Positions used for barium meal to take X-ray images includes: -
 - i. Lying on Stomach (Prone)
 - ii. Lying on Back (Supine)
 - iii. Lying on side (left and right).

Answer No: 03**Contrast Agents:**

- Contrast agents are the dyes used to enhance the pictures of the organs produced by imaging devices.

Classification of contrast agents:

- It has several types or classes as follow: -



Contrast Media In X-Ray and CT: -

<u>Positive Contrast</u>	<u>Negative Contrast</u>
Radio-opaque	Radio-latent
High atomic number	Low atomic Number
White	Black
<i>Example</i>	<i>Example</i>
Barium Sulfate	H ₂ O Air CO ₂
<i>Uses</i>	<i>Uses</i>
GIT	For double contrast studies

Iodine Based Contrasts: -

- The contrasts having iodine chemical in their structure are called iodine-based agents.
- They can be injected into veins and arteries and into other body cavities.
- They are further as ***Ionic*** and ***Non-ionic*** Iodine Based contrasts.
 - **HOCM**: - Ionic monomer: Diatrizoate:
 - **LOCM**: - Non-Ionic monomer: iohexole 240
 - **IOCM**: - Non-Ionic diamer: Iodixanole 320

Barium Sulfate Based Agents: -

- It is the most common contrast used for imaging procedures.
- Taken by mouth or orally and can be given rectally.
- Available in several forms like; powder, paste, tablets and liquid.
 - Further more other substances are also used as contrast agents like; ***Saline Water, Gases*** and ***Gadolinium*** etc.