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MODULE : 4rth
PAPER : CRP AND CP
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QUESTION No # 1:

ANSWER :

- **Barium swallow test :**
- For patients complaining of dysphagia the best imaging procedure is barium swallow.
- A barium swallow test (Esophagography) is a special type of imaging test that uses barium and xrays to create images of your upper gastrointestinal (GI) tract.
- Upper GI tract includes the back of your mouth and throat (pharynx) and your esophagus.

- **Standard protocols :**
- For best image quality, stomach must be empty of food.
- Do not take any medication by mouth especially antacids.
- Refrain from chewing gum and smoking after midnight on the day of examination.
- Remove jewelry.
- Asked about pregnancy.

QUESTION No # 2:

ANSWER :

Positions :

- **Right Anterior Oblique Position :**
- It gives the best image of the pyloric canal and duodenal bulb.
- Position the patient in the prone and slightly RAO position.
- **Left Anterior oblique position :**
- To demonstrate the lesser curve en face.
- **Left posterior oblique position : (for stomach and duodenum)**
- Demonstrate the fundus portion of the stomach.
- Position the patient in the supine position.
- **Right lateral position : (for stomach and duodenum)**
- Shows anterior and posterior aspects of the stomach, pyloric canal and duodenal bulb.
- Position the patient in the right lateral position.

QUESTION No # 3:

ANSWER :

Classification of contrast media :

1. **Xray and CT**
2. **Ultrasound**

3. MRI

Xray and CT:

- **Positive contrast media :**
- High atomic number (Z).
- High absorption of Xrays.
- Radio opaque.
- Positive contrast media are as iodine, bromine and barium.
- It is divided into non water soluble and water soluble contrast media.
- Non water soluble contrast media **Example** BaSO₄.
- **Iodinated contrast media :**
- It is a form of intravenous radiocontrast agent (radiographic dye) containing iodine.
- Enhances the visibility of vascular structures and organ during radiographic procedures.
- Cancer improved visible with iodinated contrast.
- It is further divided into non water soluble iodinated contrast media and water soluble iodinated contrast media.
- Water soluble CM further divided into **hepatic excretion and renal excretion.**
- **Hepatic excretion :**
- Some iopanoic acid is excreted into the urine, but most enters the biliary system and is eventually concentrated in the normal gall bladder within 12 to 14 hours after ingestion.
- **Renal excretion :**
- Irreversible transfer of drug or drug metabolites from the plasma into the urine.
- Further divided into:
- HOICM
- LOICM
- IOICM
- **USES PCM:**
- Angiography
- Hysterosalpingography
- Sialography
- **High osmolar :**
- Oldest agents.
- Limited utility.
- Single benzene ring monomers.
- Their cation is either sodium or meglumine.
- Diatrizoate or iothalamate are common iodinated anions.
- **Low osmolar :**
- Lower osmolality and increased solubility in water lowers low osmolar contrast media toxicity.
- **Negative contrast media :**
- Low atomic number.
- Radio lucent appear black on radiograph.
- Use for double contrast studies.
- **Example :** water, air and carbon dioxide.

THE END