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BS.RADIOLOGY

SUB.CRP AND CP

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QUESTION 1........

A PATIENT CAME WITH COMPLAINT OF DIFFICULTY IN SWALLOWING , WHICH IMAGING PROCEDURES IS BEST FOR ITS DIAGNOSIS AND WHAT ARE THE STANDARD PROTOCOLS FOR THE PROCEDURE ?

ANSWER.........

Patients with difficulty in swallowing is related to the disease of esophagus when there problem in the esophagus it will lead to difficulty in swallowing or dysphagia so to rule out disease of esophagus the best radiological procedures is barium swallow . The barium swallow is diagnostic radiology examination using x.ray to examine the esophagus .

STANDARD PROTOCOLS FOR BARIUM SWALLOW

Barium swallow is a examination of esophagus using barium is coat the walls of esophagus so that it may be examined x.rays barium swallow is used to identify any abnormalities such as tumors . Usually , the test can be performed or an outpatient basis patient may be advised not to eat or drink after midnight on the night before the examination.

THE PROCEDURE FOLLOWS THIS PROCESS

1. The patient will be asked to drink the barium liquid and to swallow baking soda crystals it is important not to used . As the gas assists the radiologist in evaluation
2. The patient will stand behind a machine called a flucroscope (a device used for the immediate showing of an x.ray image)
3. The patient may be asked to move in different position and to hold on breath while the x.ray are taken
4. Following the examination barium may cause constration.

QUESTION. 2.........

EXPLAIN THE DIFFERENT POSITION USED TO TAKE FILM FOR BARIUM MEAL ?

A barium meal is a diagnostic test used to detect abnormalities of the esophagus , stomach and small bowel using x.rays imaging . X.rays can only highlight bone and other radio opaque tissue , and would not usually enable visualization of soft tissue .

 FILMS....

1. SPOT FILM OF THE STOMACH
	1. RAO POSITION... to demonstrate the antrum and greater curve
	2. SUPIN...... to demonstrate the antrum and body
	3. LAO.....to demonstrate the lesser curve an face
	4. LEFT LATERAL- ..... to demonstrate the fundus
2. SPOT FILM OF THE DUODENAL LOOP
	1. PRONE POSITION
	2. RAO POSITION
3. SPOT FILM OF THE DUODENAL CAP
	1. PRONE position
	2. RAO position
	3. SUPINE position
	4. AO position
4. Spot FILM of the oesophagus are taken ,while barium is being swallowed , to complete the examination .

QUESTION 3........

WRITE THE GENERAL CLASSIFICATION OF CONTRAST AGENT USED IN CONVENTIONAL RADIOLOGICAL PROCEDURES ALSO EXPLAIN EACH CLASSIFICATION ?

ANSWE..........

Contrast media are of TWO types

1. Negative contrast
2. Positive contrast

 Are of TWO types

* 1. Non water soluble contrast media

 And

* 1. Water soluble contrast media

 Water soluble contrast media are further types

.. IODINATED contrast agent

 IODINATED are further there types

1. HOCM
2. LOCM
3. IOCM

LOCM ARE FURTHER MORE TWO TYPES

* 1. IONIC
	2. NON IONIC

First of all contrast agent

* + - A contrast agent or contrast media is a substance used to increase the contrast of structure or fluid with in the body in medical imaging.

Two types

1. Positive contrast
2. Negative contrast

Positive contrast agent.......

Positive contrast agent have a high atomic number , either barium sulphate or iodine and appear more radio opaque than the surrounding tissue .

. More TWO types

1. Water soluble
2. Non water soluble

Water soluble .....

Their use in the diagnosis of obstructive gastrointestinal disease .

\*IODINATED CONTRAST AGENT

IODINATED contrast agent is a formot intravenous radio contrast agent (radio graphic dye) containing iodine, which enhances the visibility of vascular structures and organs during radio graphic procedures.

 . More there types

1. HOCM
2. LOCM
3. IOCM

\*High osmolality contrast media (HOCM)

The osmolality of HOCM rang from approximately 1,300 to 2,140 mosm/kg or about 4 to 7 times that of human blood .

Used for gastrointestinal and cystourethral

 EXAMPI.....

Gastro graffin and conray

\*LOW osmolality contrast media (LOCM)

2 to 3 time osmolality as blood

 EXAMPIE......

Omni paqe and ultravist

Osmolality of blood

275 to 299

\*ISO OSMOLALITY CONTRAST MEDIA (IOCM)

As same osmolality of blood

EXAMPIE....

Visipaque

1. . LOCM ARE FURTHER MORE TWO Types
	1. IONIC
	2. Non IONIC

\*IONIC......

IONIC contrast media typically, but not always, have higher osmolality and more side effects .

Non ionic.......

Non IONIC contrast media have lower osmolality and tend to have fewer side effects .

1. NON WATER SOLUBLE CONTRAST

EXAMPIE......

\*BASO4

\*OIL BASED CONTRAST MEDIA

SECOND PART...

. NEGATIVE CONTRAST

Negative contrast media are gases of low density (air , oxygen, carbon dioxide )

Which appears radio lucent.

EXAMPI.......

1. Air
2. Oil based contrast media