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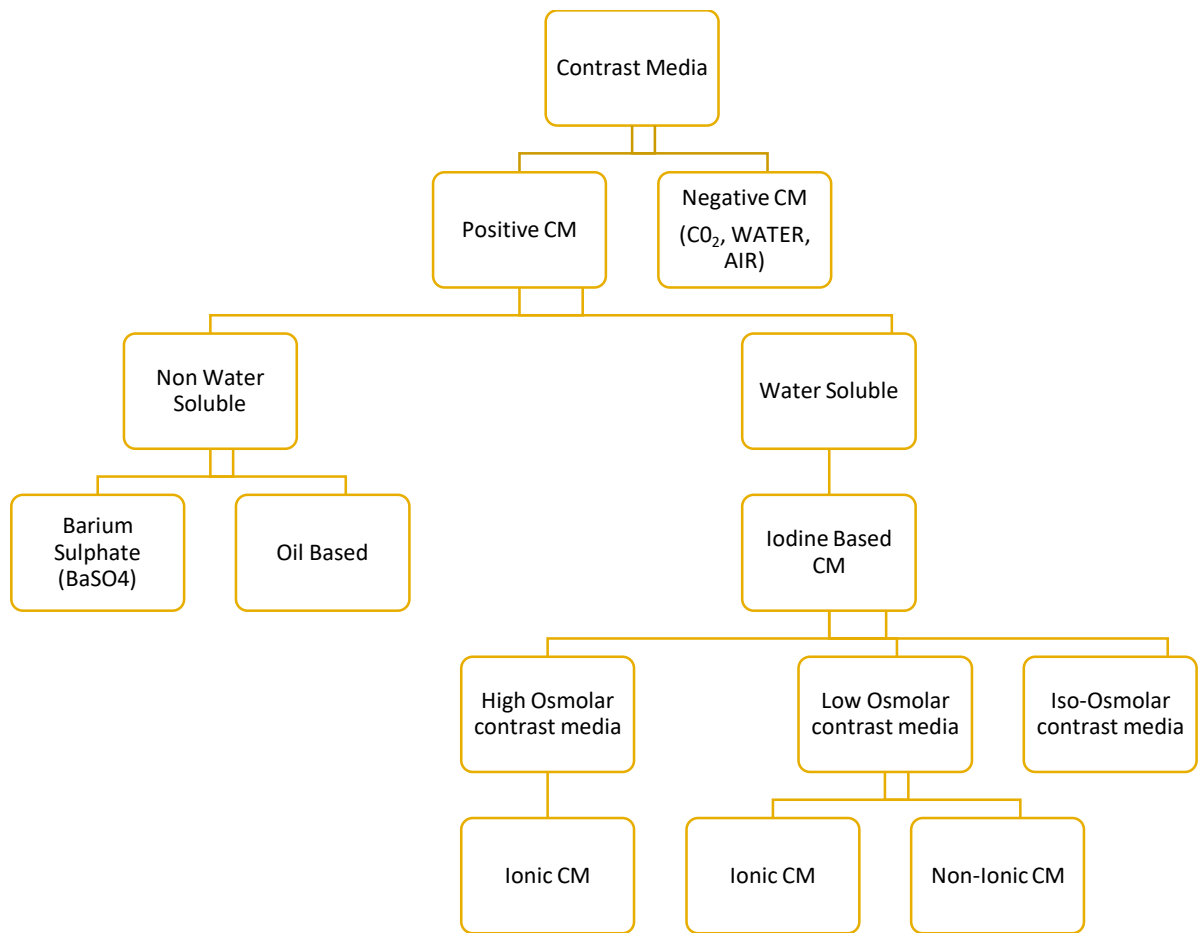
Q3: Write the general classification of contrast agents used in conventional radiological procedures also explain each classification.

Ans: Contrast is the substance which makes the internal structure visible.

OR

It is the substance which shows the internal structures of the body during radiography.

CLASSIFICATION:



1:Positive Contrast:

Contrast material is a radiopaque.

That have the high atomic mass.

White.

EXAMPLE:

Barium sulphate.

USES:

GI studies.

2: Negative Contrast:

Contrast material that is not radiopaque.

That have the low atomic mass.

Black.

EXAMPLE:

water and carbon dioxide.

USE:

Used for double contrast studies.

Barium Sulphate:

Water insoluble suspensions.

Non-ionic medium

Nearly insoluble solid.

Radioactive shield.

Barium sulphate is the inorganic compounds.

It is insoluble in water.

They are can be used for double contrast studies.

Atomic number 56.

USE:

Barium sulphate is widely used for the radio opaque or X-ray contrast agent to diagnose.

It is also used in the oil for well drilling fluid,s.

Barium meal.

Barium enema.

Advantages of barium sulphate:

High density.

Eliminated from the body.

Radiopaque material.

Disadvantages of barium sulphate:

High morbidity associated with barium the peritoneal cavity.

Subsequent CT and US are the rendered of a difficult.

Iodine :

Iodine is a chemical element.

Iodine atomic number is 53.

Atomic weight 127.

The high atomic number of attachment to organic compounds.

It has also found the radio of atomic number a non-toxic radiocontrast materials.

The specificity of the human body.

Iodine is also used as a catalyst in the industrial production of polymers.

High contrast density due to the high atomic number.

NON WATER SOLUBLE IODINATED CM:

It is a fatty acid.

It is insoluble in water.

Radiographs show up as white.

Example:

Myodil.

Eythodel.

Complication:

Embolism and thrombus are made of.

Use:

Sialography.

Myelography.

Water soluble iodinated CM:

There are two types.

1: Hepatic excretion.

2: Renal excretion.

Renal excretion further more divided into two steps.

1: high osmolar contrast media(HOCCM)

2: low osmolar contrast media(LOCCM)

High osmolar contrast media (HOCCM):

The osmolarities of contrast media range is 1300, to 2140 mOsm/kg water 4 to 7 times the osmolarity of the blood in the human body.

Low osmolar contrast media (LOCCM):

The low osmolarities of contrast media are 2 to 3 the osmolarity of the blood in the human body.

Low osmolar contrast media have not completely replaced contrasts with the high osmolarity.

The low osmolar contrast media is the non-ionic dimer.

Q2: Explain the different positions used to take film for barium meal.

Ans: Position used to take film for barium meal:

There are five different types of positions.

1: Spot of the stomach.

2: Spot of the duodenal loop.

3: spot of duodenal cap.

4: spot of the fundus.

5: spot of the oesophagus.

These have five positions

1: Spot of the stomach:

Spot of the stomach have four position.

They have take four position.

A: Right Anterior Oblique (RAO):

They have the stomach greater curve and antrum are find it.

B: *Supine:*

The patient are lying they have the stomach antrum and body are find it.

C: *Left Anterior Oblique:*

They have the stomach lesser curve and face are find it.

D: *Left lateral tilted:*

They have the patient are scroll down are the right side and they have the fundus are the determination.

2: Spot of the duodenal loop:

These are the one position we are used.

A: *Prone position:*

The patient are lying in the table we have the duodenal loop find it. But we have additional view to demonstrate the anterior wall we take to return the RAO position.

3: Spot of the duodenal cap:

These are four different type position use it.

A: *Prone*

B: *Right anterior oblique*

C: *Supine*

D: *Left anterior oblique*

4: Spot of the fundus:

Additional view of the erect position taken by this stage suspicion of the fundal lesion.

5: Spot of the esophagus:

The examination are start to to complete examination are image of the esophagus taken the barium being swallowed.

Q1: A patient came with complain difficult in swallowing; which image producer is best for its diagnosis and what are the standard protocol for this producer?

Ans: The patient which is difficulty in solving the best procedure is barium swallow for its diagnosis.

A barium swallow can help the identity of the problem with the swallowing and diagnosing the abnormalities of upper GI tract and oesophagus.

Protocol:

Ensures Pt. Safety

Permit Standardization Of Exam

Allow Comparison To Other Pt. Groups, Normals

Allow Better Communication Between Clinicals

The protocol for the study being with recording a position.

This entails asking the patient to place the bolus into the oral cavity it there. The patient does not swallow until giving the command to swallow. The position measurement and phyrngeal area before the swallow.

The patient then will liquid swallow in the following of barium. The barium liquid should be to the standerized and viscosity.

After the liquid swallow are completed and additional two swallows will paste then cokie.

This part of the protocol is complete. The clinical may choose to introduce difficult food, and strategies the observation made during the first part of the study.

The patient is then turned for the AP views. The disk of known diameter is placed on the patient left sternocleidomastoid muscle.

The entire study should be save in the avi formet. The file can then be transferred to a desktop computer for further analysis.