

①

Q NO: 1

Answer;

The non-ionic contrast are mostly administered for intravenous.

The non-ionic dimer is actually belong to iodine family and it's having low toxicity and greater radiopacity.

They are low to 150-350 mOsmol/L contrast media.

Iodinated contrast media are differentiated in:-

Ionic contrast agents:

②

1 = ionic dimer

2 = ionic monomer.

Non ionic contrast agents

1 = Non ionic dimer

2 = Non ionic monomer

Characteristics:

It is intravenously because having following favourable characteristics which are:-

It enhance the blood vessels visualization.

It clearly depicted the vascular tissue.

It is easily circulates in whole body vascular system

③

and diffuses very easily.

They are having high clinical benefits.

They are widely available at commercial range.

There is no barrier against iodinated contrast in the body and easily propagated through it.

(4)



Q NO: 2:

venography performed:

venography (also called phlebography or ascending phlebography) is a procedure in which an x-ray of the vein, a venogram, is taken after a special dye is injected into the bone marrow or veins. The dye has to be injected constantly via a catheter, making it an invasive procedure. Normally the catheter is

(5)

inserted by the groin and moved to the appropriate site by navigating through the vascular system.

venography can also be used to distinguish blood clots from obstructions in the veins, to evaluate congenital vein problems, to see how the deep leg vein valves are working or to identify a vein for arterial bypass grafting.

(6)

Specific venographic procedures:

venography can be divided into following sections.

peripheral venography

⇒ lower limb venography

⇒ upper limb venography

⇒ peripheral vasculography

central venography

⇒ inferior vena cavography

⇒ superior vena cavography

selective visceral venography

⇒ Renal venography

⇒ Hepatic venography

⑦

⇒ portal venography

Contraindications

common contraindications for venography include.

- ⇒ contrast media allergy
- ⇒ Impaired renal function
- ⇒ blood-clotting disorders
- ⇒ Anti coagulant medication
- ⇒ unstable cardiopulmonary
- ⇒ Non-consent by patient to procedure.

8

Q NO: 3

Loopogram:

A loopogram is a radiographic exam that will visualize the loop of bowel that has been surgically connected to substitute for your urinary bladder.

Contrast (x-ray dye) is introduced into your stoma through a small catheter in order to visualize the small bowel extending to the stoma.

(9)

A loopogram is ordered whenever there is a large amount of bladder removed, the ureters can be connected to a loop of small bowel which drains through an ostomy (also called an ilea) into an external drainage bag.

patient preparation

No preparation is necessary. please bring an extra stoma bag and any dressings

(10)

you may re-quire because your drainage bag will be removed for the procedure. Report 15 minutes before your scheduled appointment time.

why would someone need a loopogram.

In cases of surgical intervention to treat bladder cancer, a laproscopic radical cystectomy or a cystoprostatectomy can be performed. During these

11

procedures, the bladder is removed. To restore urinary flow to patients, surgeons then have a number of options to divert the flow of urine.

A loopogram tests the ileal conduit to see if it is functioning as it should.

Loopogram procedure

⇒ Fluoroscopic imaging is done with a contrast called x-ray dye.

(12)

- ⇒ The contrast dye shows up on the images and allows the radiologist to clearly see and check the internal organs.
- ⇒ patients lies supine on the examination table.
- ⇒ The stoma bag will be removed.
- ⇒ The radiologist will clean the urostomy stoma and insert a catheter.
- ⇒ This exam usually takes about 30 minutes to 1 hour.

(13)

what does a loopogram examination show

The examination shows;

1= Kidneys

2= Ureters

3= ileum

4= stoma

Q NO: 4:

Role of Radiologic Technologists in performing fluoroscopic procedures.

The radiologic technologist who use fluoroscopy should properly trained in its use.

Following recommendation can be applied to all fluoroscopy procedures by the radiologic technologist they include-

(15)

Assuring that all operators of the system radio technologists are trained so that they understand the operating of the fluoroscopy system including the implications for radiation exposure from each mode of operation.

The radio technologist reviewing the patient clinical history to ensure the proper imaging procedure has been ordered.

(16)

preparing the patient
for the procedure.

selecting the proper imaging
equipment ~~used~~ and
associated accessories.

positioning patients to
best demonstration of
the anatomy of interest.

immobilizing patient as
necessary

proper administering medications
such as contrast agent
prescribed by a licensed
practitioner.

(17)

Determining the radiographic exposure technique, while applying principles of radiation protection to the patient and safety.

At the end the radiotechnologists discuss the procedure with the doctor to take further steps.

Q NO: 5:

Catheter:

In medicine, a catheter is a thin tube made from medical grade materials serving a broad range of functions. Catheters are medical devices that can be inserted in the body to treat diseases or perform a surgical procedure.

Why catheter are used:

Urinary catheters are used to drain the bladder.

(19)

your health care provider may recommend that you use a catheter if you have: Urinary incontinence (leaking urine or being unable to control when you urinate) Urinary retention (being unable to empty your bladder when you need to).

How catheters are used

Most often, the catheter is inserted through the urethra. This is the tube that carries urine

(20)

from the bladder to the outside of the body.

sometimes, the provider will insert a catheter into your bladder through a small hole in your belly. This is done at a hospital or provider office.

Types of catheter

These are three main types of catheters;

- 1= indwelling catheters
- 2= external catheters
- 3= short-term catheters.

(21)

Guide wires:

They are the stainless steel metallic structure that guides the catheter through the blood vessels for placement.

Guidewire are used for both cardiology and radiology angiographic procedures.

USED:

Tiny guidewire are designed to navigate vessels to reach a lesion or vessel segment.

once the tip of the device arrives at 180° destination, it acts as a

guide that larger catheter can rapidly follow for easier delivery to the treatment site.

Types:

There are three types of guide wires:

1= Solid core wire:

The central wire is encased by a metal 'spring' coil.

2= Mandrel wire:

The outer spring coil is at one end.

3= Ribbon wire:

The spring coil encases both the core wire

(23)

and a ribbon wise.