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Q3 Paper :- CRP & CP.

Q3 I D :- 16822.

Q.2 intra venous pyelography :-

(I-V-P)

∴ it is also called intravenous urography (IVU) or (EU)

∴ it is a radiological procedure.

To visualize the abnormalities of urinary system including kidney, ureters, & bladder.

# indication :-

∴ Check for normal function of kidney.

∴ Congenital anomalies.

∴ Check the ureters.



∴ Detect the location of ureteric obstruction.

∴ Assess the cell carcinoma.

## # Contraindications :-

∴ Allergy from contrast.

∴ Hepato-renal syndrome.

∴ ~~an~~ increase serum creatinine.

∴ Thyrotoxicosis.

## # Contrast Media :-

• HOcm or 10cm.

10cm :-

∴ Small children.

∴ Renal / Cardiac failure.

∴ Diabetes or sickle cell anaemia.

(P-I-O)

(3)

• Adult Dose: - 50ml

• infant / paediatric :- 1ml/kg.

## # patient preparation :-

∴ Before the examination

No Food 5 hr.

∴ patient should walk

2 hr to reduce gas Bowel

∴ During the examination to

patient previously severe

Contrast media reaction.

give methyl prednisolone 32 mg

orally in 2 hr.

(P-T-4)



(4)

use Locm.

## # preliminary Film:-

(1) ⊖ Supine, full length <sup>AP</sup> abdomen in inspiration.

⊖ The lower Borders of the

Cassette at the level of

Symphysis pubis

⊖ X-ray Beam Centered at the

level iliac crease.

The patient overlying for further determination.

(a) Supine AP of the renal

area in expiration.

(P-I-G) →

(5)

⊖ X-ray Beam is mid line

at the level of lower

Costal margin.

(3) Tomography of the kidney

at the level of 3rd of

the AP diameter of the patient

(8-11 cm) angle 25-40°.

# Technique :-

∴ The site of injection

median antecubital vein.

∴ use 19 G needle to

minimize the density of the

nephrogram.



(b)

⊖ when the upper arm is

Shoulder pain due to Contrast

media - To relieve the pain

The Abduction of the arm.

## # FILMS :-

"Take 5" different films.

(i) immediated film :-

⊖ AP of Renal area. After

10-14 s of the injection.

⊖ To Show the Nephrogram.

(ii) 5-min film :-

⊖ AP of the renal area. To

(P-I-O)

(7)  
Determine if excretion is

Symmetrical & invaluable

more need to contrast.

⊖ The aims is to produce

Better pelvical distension.

(iii) 15 min film:

⊖ AP of the renal area.

⊖ These is usually adequate

distension of the pelvical

system with opaque urine

By this time.

⊖ Compression is released when  
satisfactory demonstration<sup>ach</sup>

CONTINUED



(8)

(iv) Release Film..

⊖ Supine AP Abdomen.

⊖ This film - is show to whole urinary system

⊖ if it Satisfactory - then

patient asked to empty their

Bladder.

(iv) After micturition Film..

⊖ Base on clinical &

Radiological finding on the

exposed film - This will be

full length Abdomen of

(10-10)

Ca,  
Coned view of the Bladder.

With tube angle  $15^\circ$  Cuded

& Centered 5 cm above the

Symphysis pubis.

⊖ The principal value of

This film to assess Bladder

emptying to demonstrate to

detected normal of dilated

upper tracts. ~~with~~ with

relief of the Bladder pressure

⊖ Diagnosis Bladder Tumours,

(D-T-U) →



(10)

## # Additional Films:

(1)  $35^\circ$  posterior oblique of the kidney (Useful of Bladder).

(2) Tomography when there are confusing overlapping shadows.

(3)  $30^\circ$  caudad angulation of the tube of the renal area.

(4) prone. Abdomen - may provide better visualization of the ureters.

(P-T-O)

#

## Complication :-

⊖ Due to contrast media.

⊖ Due to technique

Applied on Abdomen

Compression.

Q: 5 :-

## Procedure :-

(Q) ~~App~~ Arthrography :-

## Method :-

⊙ Single Contrast.

⊙ Double Contrast (air)

(O-R-O)



## # indication :-

- joint injury
- Synovial membrane.
- ligament
- tendons
- ~~for~~ loose of Body joint.

## # Equipment ::

- Fluoroscope with spot film devices.

## # preliminary film ::

- Routine plain film radiography.
- AP & true lateral of the joint
- Axial in Shoulder &
- oblique view / inversion /

eversion in ankle

→ Radial & ulnar deviation  
wrist joint.

# Atlas Case :-

→ Two days Avoid driving.

→ joint pain may occur.

# Complication :-

→ Allergic reaction.

→ Pain Capsular rupture

→ Synovitis.

(P-I-O)



(17)

# Knee Joint :-

→ The patient is laying  
Supine.

→ give anesthetised posterior

To the mid point of the  
Patella.

→ Then full volume Contrast

media (4ml) - & air 40ml

Q:4 Hystero Salpinhography:-

(HSG):

This is the fluoroscopic

examination of uterus & fallopian tube.

# Indication :-

→ infertility

→ following tubal surgery.

→ Recurrent miscarriage.

# Contra indication:-

→ Not in pregnancy.

(P-T-O)



→ Contrast Sensitivity.

→ inspection of cervix.

→ Diagnosed PID in

preceding 6 month.

## # Contrast Media :-

- Oil Base Contrast Media.
- HOCM or LOCM 300 volume  
10-20 ml.

## # Equipment :-

- Fluoroscopy with Spot film device.

- Vulsellum forcep.

- Vaginal Speculum.  
(P-T-O) →

(17)

- uterine cannula
- leech
- 8-F pediatric catheter.

## # patient preparation:-

- The patient should abstain

from intercourse - when  
Booking the appointment.

- patient may need  
premedication

- Book the examination b/w

the 4th to 10th days regular

cycle 28 day.

## # preliminary film:-

- ~~PA~~ PA view of the pelvis.  
(P-I-O) →



## # Technique :-

- The patient lie on Supin with flexed knee.
- Abducted legs & heels together.
- Insert a Speculum and

clean the vagina & Cervix.

- The interior lip of Cervix

Steaded with vulsellum forceps

- Insert the Cannula with

Cervical Canal.

- All the air & Bubble go out

from the Syringe & Cannula.

## # After Care :-

- Have Bleeding from vagina 1-2
- Have pain 1 week.

## # Complication :-

- ∴ Pain may occur using  
Vulsellum forceps.
- ∴ pain due to insert cannula
- ∴ Pain occur with of the  
uterus if there is spasm
- ∴ pain when trauma of  
uterus or Cervix.
- ∴ may occur headache  
Nausea, Vomiting.
- ∴ pain due to Contrast  
media.



Q.3:

(ERCP)

• The combine technique

is use of endoscopy &

fluoroscopy to diagnose

extrahepatic biliary obstruction

# indication:

• investigation of extra

hepatic biliary obstruction

• pancreatic disease.

• biliary disease.

(P-T-U)

## # Contraindication:

- previous gastric Surgery
- Acute Pancreatic
- oesophageal ~~ob~~ obstruction

## # Contrast media:

- pancreas :- 200m 240.
- Bile duct :- 200m 120.

## # Equipment:

- Fluoroscopy unit with Spot film.
- polythene Catheteris.
- endoscopy Side view.

(P-T-U)



(21)

## # Preliminary Film:-

- Plan AP & IAO of ILE upper Abdomen.

## # Technique:-

→ Anesthetized ILE pharynx  
4% xylocain spray.

→

→ The patient lies on the

left side endoscopy introduced

→ The ampulla of Vater located

The patient turn prone.

→ Fill ILE Catheter with

contrast media.

(D-T-O)

# Film :-

Pancrease :- (using focal spot)

Plane  $\rightarrow$  Both posterior oblique

Bill Duet :-

Plane :- posterior oblique

Supine  $\Rightarrow$  Straight Both

oblique.

(P-T-O)



Q :- 7 :-

(R PUG)

This test is performed in

hospital Radiology department

and also urologist under

general anesthesia.

# indication :-

1) Determine the site, length,

obstruction lesion.

2) Better characterization of

ureteral or pelvic cysts

To see IUC &amp; CTU.

(17-18)

(24)

→ Mid Stent Placent

# Contra indication :-

• pregnancy

• U-T-I

# Contrast media :-

• HOCm or LOCm

# Equipment :-

• Fluoroscopy unit.

(P-T-O) →



(25)

# # Technique :-

• patient position :-

Dorsal lithotomy position.

• Anesthetized the patient

• Cystoscopy perform left

& Right ostices.

• Radiograph take proper

placement of the

Catheter.

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