



**SNS COLLEGE OF ALLIED HEALTH SCIENCES**

SNS Kalvi Nagar, Coimbatore - 35

Affiliated to Dr MGR Medical University, Chennai



**DEPARTMENT OF RADIOGRAPHY AND IMAGING TECHNOLOGY**

**COURSE NAME : Modern Imaging techniques and recent trends in imaging.**

**UNIT : 3**

**TOPIC : CT ROUTINE ABDOMEN PROTOCOL**



# INTRODUCTION



Computed Tomography(CT) of abdomen is a study of abdominal regions from the level of diaphragm to the pelvic inlet. Computed Tomography of abdomen is used to identify and diagnose different types of diseases and abnormalities in that particular region of interest.





# ROUTINE ABDOMEN PROTOCOL



## □ INDICATIONS:

- General screening
- Tumour
- Trauma
- Various infective etiologies including abscess, pyelonephritis, tuberculosis etc.,
- Various inflammatory etiologies including appendicitis etc.,
- Urinary tract calculi
- Follow up



## ❑ PATIENT POSITIONING:

Head first or feet first - Supine with both arms elevated above the head.

## ❑ TOPOGRAM DIRECTION:

Craniocaudal.

## ❑ SCAN TYPE:

Helical.



**❑ POSITION/LANDMARK:**

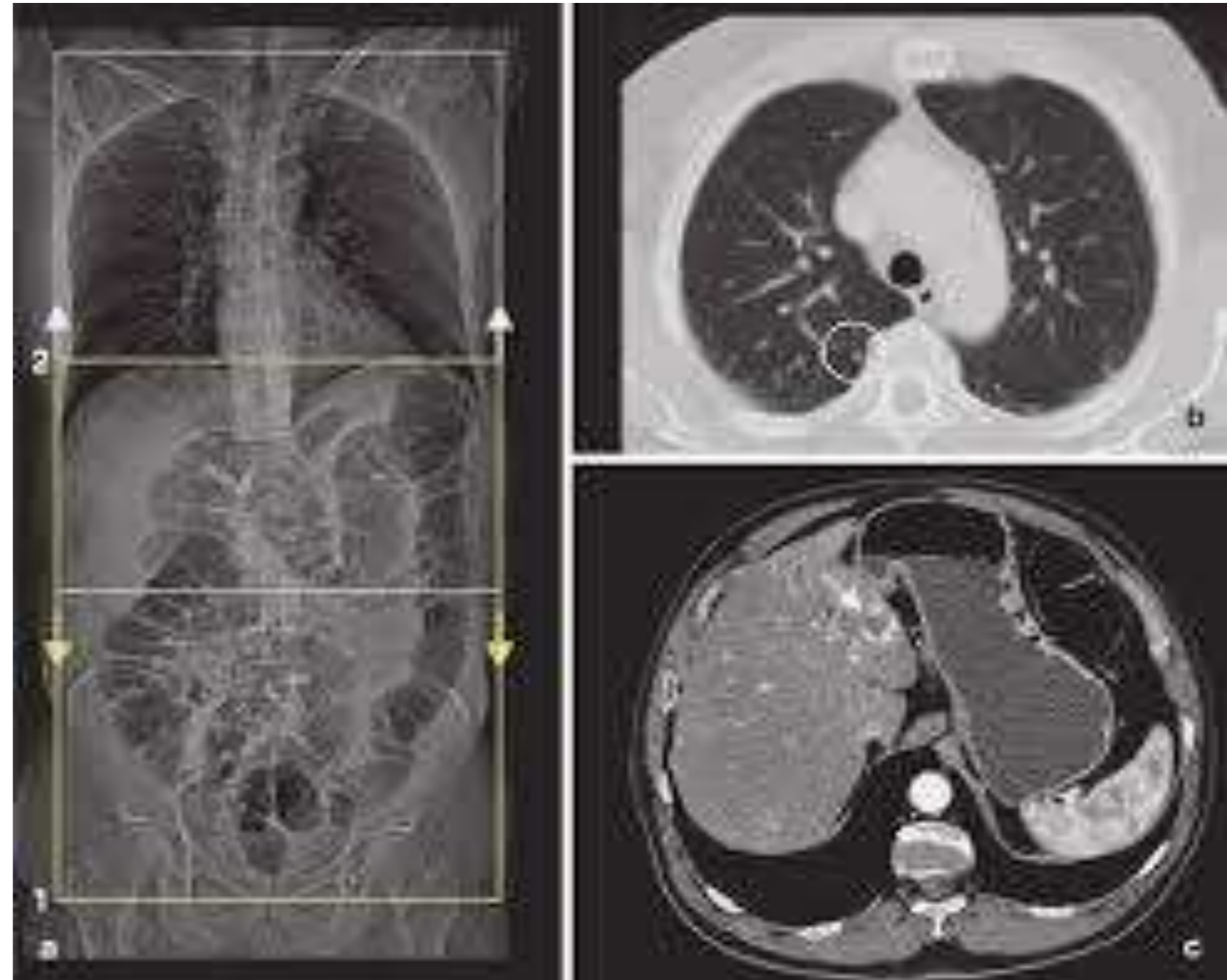
Xyphoid.

**❑ START LOCATION:**

1cm superior to diaphragm.

**❑ END LOCATION:**

Lesser trochanters.





GANTRY TILT:

Nil.

BREATH HOLD:

Inspiration.

DFOV:

38cm.



## SCAN FIELD OF VIEW:

40cm.

## CONTRAST:

Non-ionic low osmolar Iodinated contrast media.

## CONTRAST ADMINISTRATION:

Intravenous(IV),Oral,Rectal.



## ❑ VOLUME:

80-100ml IV, 600-800ml positive contrast Rectally, 20-40ml positive contrast with 800-1200ml water or neutral contrast media mixed with 1000ml water.

## ❑ RATE OF INJECTION:

2-3 ml/s.

## ❑ ALGORITHM:

Standard.





## RECONS AND REFORMATIONS:

MRP and MIP.

## SCAN DELAY:

35-55 sec.

## SLICE THICKNESS:

3-5 mm.



TUBE VOLTAGE (Kv):

120-180.

TUBE CURRENT (mAs):

250-450.

ROTATION TIME (s):

0.5

IMAGE FORMAT:

DICOM.

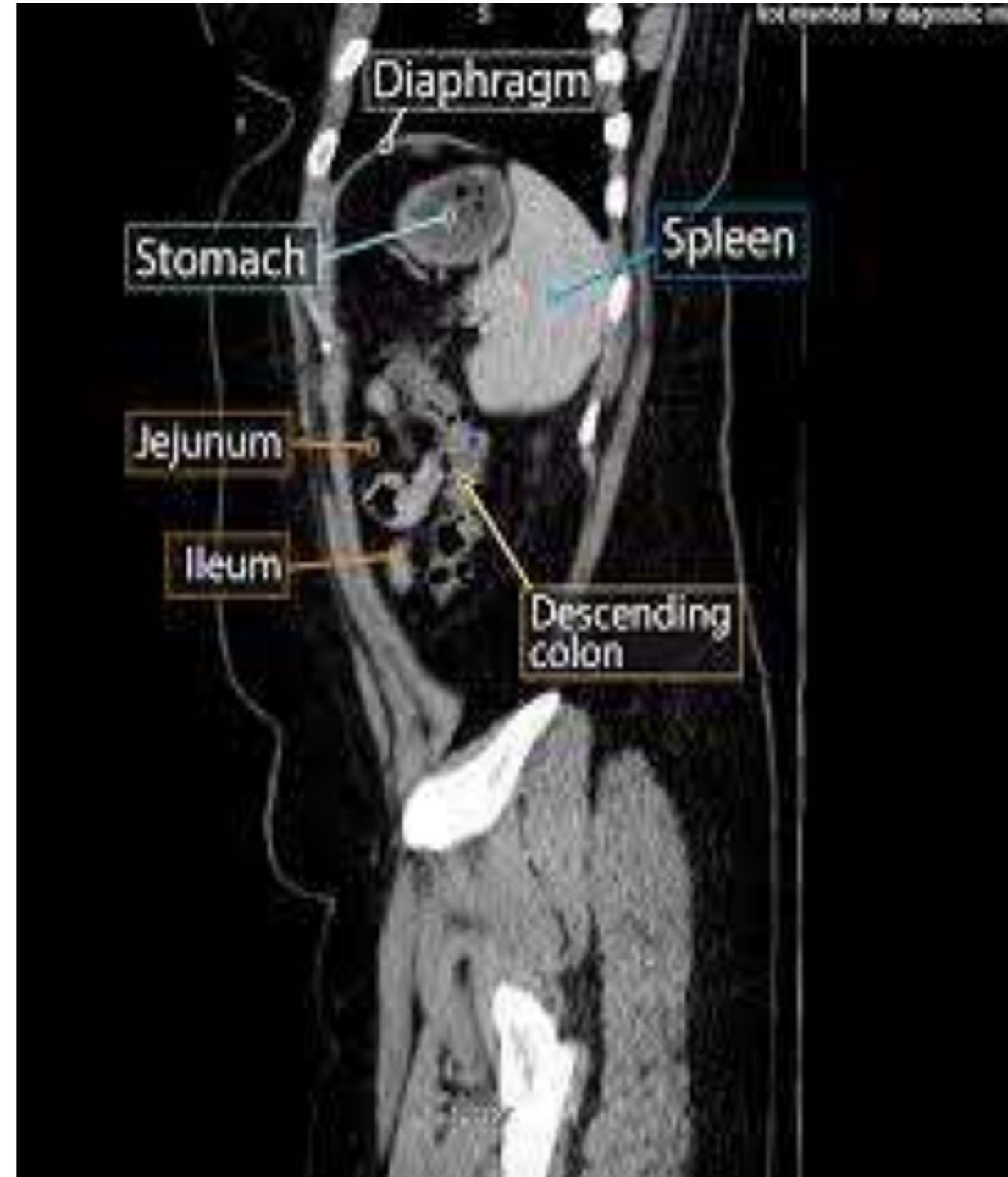


# TOPOGRAM OF CT ABDOMEN



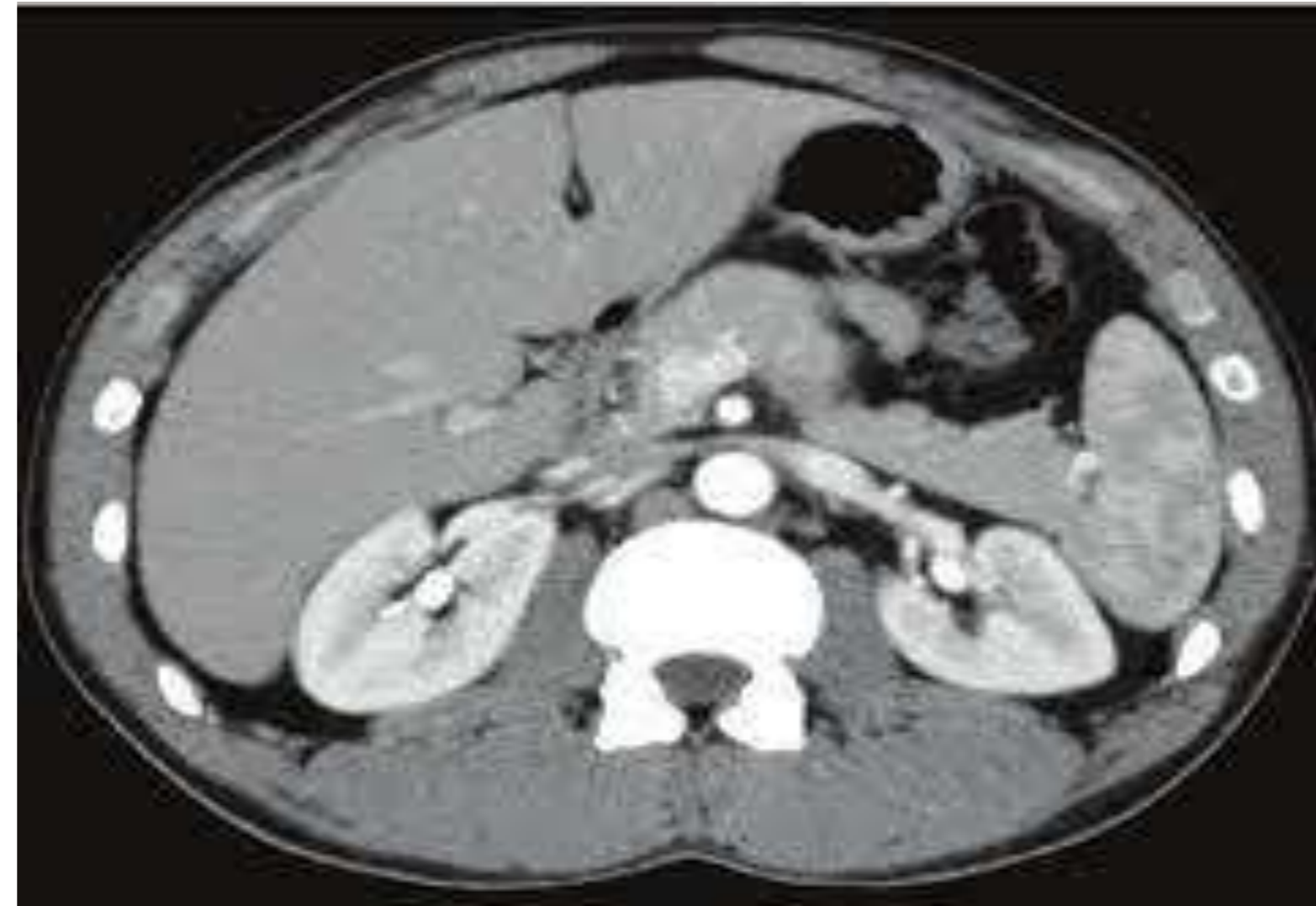


# CT SAGITTAL IMAGE OF ABDOMEN





# CT AXIAL IMAGE OF ABDOMEN





# CT CORONAL IMAGE OF ABDOMEN





**THANK YOU**