



2025

KARNATAKA RADIOLOGY EDUCATION PROGRAM



Case presentation

COMPILED BY DR. RAME GOWDA (RESIDENT)

GUIDE: DR OM PRAKASH A R

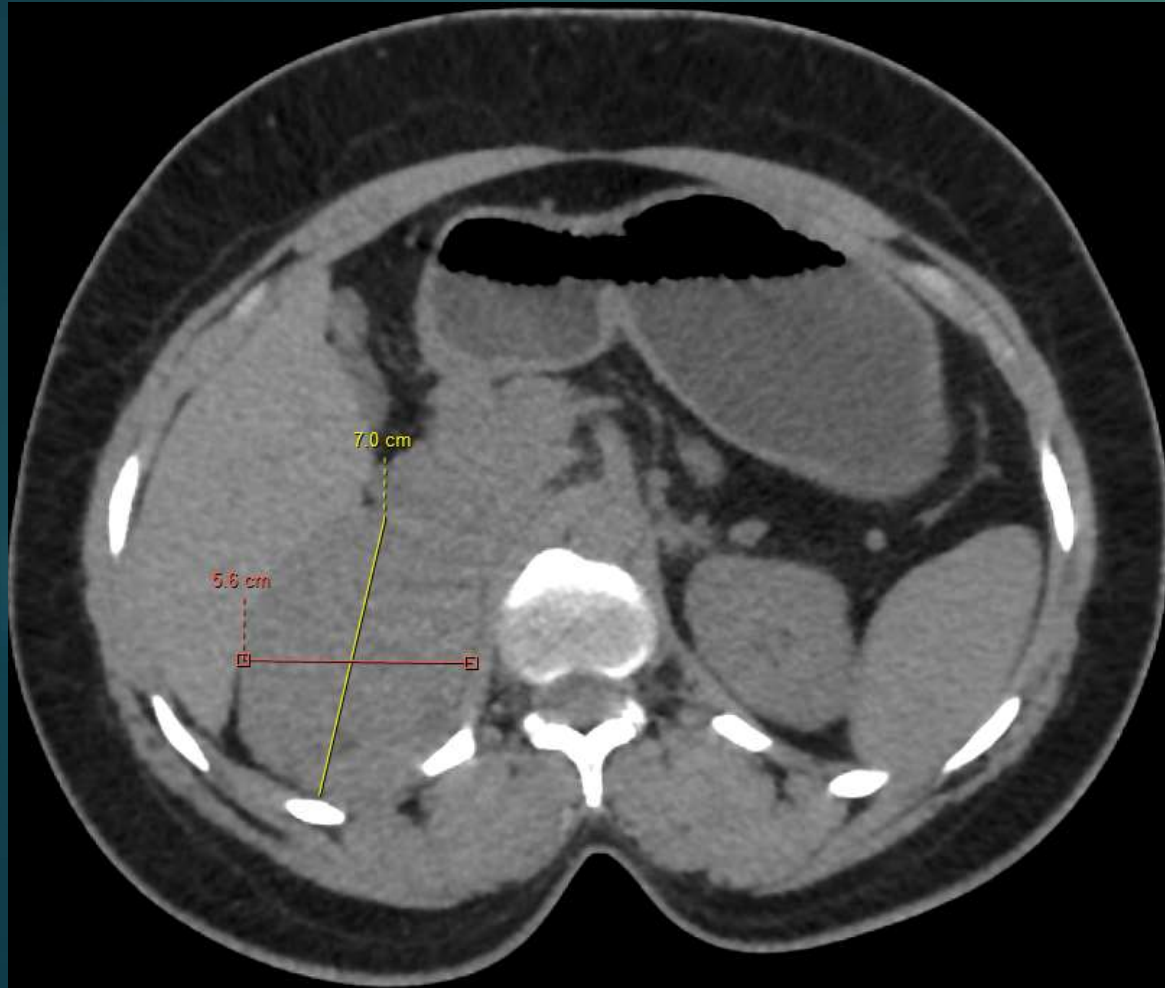
PROFESSOR

SUBBAIAH MEDICAL COLLEGE, SHIMOGA

Clinical details

- ▶ A 41 year old female presented to ER with h/o pain abdomen (left flank) since 3 months.
- ▶ No other significant clinical presentations.

Imaging findings – Plain CT



- ▶ Well defined heterogeneous soft tissue density mass lesion (35-40HU) in the right supra-renal region with few fatty attenuation areas of -10 to -20HU. No e/o calcification within. Right adrenal gland is not separately visualized. Anteriorly lesion abuts 2nd part of duodenum, IVC. Posteriorly 12th rib and corresponding intercostal space, however no erosion. Laterally segment V and VI of liver. Superio-medially right diaphragmatic crura with maintained fat planes. Inferiorly the superior pole of right kidney. On post contrast study shows heterogeneous enhancement with areas of necrosis within.

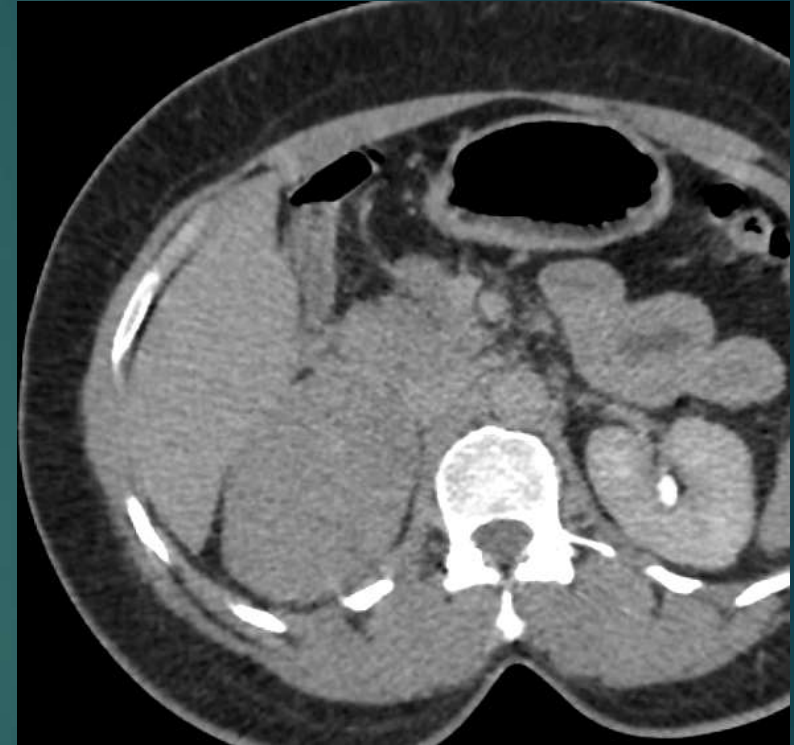
Imaging findings axial – Contrast CT



Non-contrast CT



Venous phase CT



15 min delayed phase CT



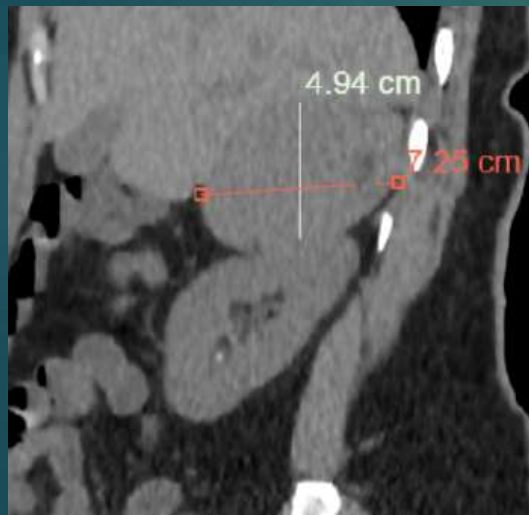
Non-contrast CT



Venous phase CT



15 min delayed phase CT





- Avg HU on
 - plain CT – 38
 - Venous phase – 84
 - 15 min delay - 58
- Absolute washout of - 56 %
- Relative washout of - 31%.

Method of calculation

$$\text{Absolute washout: } 100 \times \frac{\text{Post HU} - \text{Delayed HU}}{\text{Post HU} - \text{Pre HU}}$$

$$\text{Relative washout: } 100 \times \frac{\text{Post HU} - \text{Delayed HU}}{\text{Post HU}}$$

Final INTERPRETATION

WELL DEFINED HETEROGENEOUS SOFT TISSUE DENSITY LESION IN THE RIGHT SUPRA-RENAL REGION WITH ENHANCEMENT AND WASHOUT CHARACTERISTICS AS DESCRIBED – **Indeterminate lesion**

Probable Differentials:

1. PHEOCHROMOCYTOMA

2. ADRENOCORTICAL CARCINOMA

******Thank You******