SNS COLLEGE OF ALLIED HEALTH SCIENCE, COIMBATORE -35.

(Affiliated to The Tamil Nadu Dr. M.G.R. Medical University, Chennai)

B.Sc., CARDIAC TECHNOGY

ANATOMY PUZZLE

UNIT 5 - TOPIC : KIDNEY

scenario (read all clues before answering)

- Mr. R, a 52-year-old man, is admitted after a 6-hour history of worsening right-sided flank pain and vomiting. He had normal kidney function (serum creatinine 0.9 mg/dL) two weeks ago during a routine check. Current findings over the first 12 hours:
- Urine output: 120 mL in last 8 hours (oliguria).
- Temperature: 38.4°C. Heart rate 104/min. BP 150/90 mmHg.
- Exam: severe right costovertebral angle (CVA) tenderness; mildly distended bladder on palpation. No peripheral edema.
- Point-of-care urine strip: blood ++, nitrite +, leukocyte esterase +.
- Urine microscopy (manual): many WBCs, some bacteria, a few RBCs, muddy brown casts **absent**.
- Labs: serum creatinine 2.6 mg/dL (rising), BUN 48 mg/dL, Na 134 mEq/L, K 4.6 mEq/L, arterial pH 7.37. WBC 14,200 /µL.
- Bedside bladder scan: post-void residual ~500 mL.
- Portable ultrasound (renal): moderate **right hydronephrosis**, left kidney normal size, no obvious mass.
- No history of chronic kidney disease, no recent contrast exposure, no diuretic use.

Detective Tasks

1. List the **four** most likely causes for this acute kidney injury (AKI)
2. For your **top diagnosis**: give **three** logical clues from the case that support it
3. For the top diagnosis, list **two immediate management steps** you would take (prioritized).

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ANATOMY PUZZLE

CRITERIA	DESCRIPTION	POINTS
1. Completeness	Answering all questions	5 pts
2. Accuracy	Clearly answering all questions	3 pts
4. Neatness	Clear handwriting, no erasures	2 pts
	TOTAL	**10 pts**