

Patient Name	: Mr.ASHOK KUMAR DWIVEDI	Visit No	: CHA250047260
Age/Gender	: 54 Y/M	Registration ON	: 17/Mar/2025 02:57PM
Lab No	: 10144555	Sample Collected ON	: 17/Mar/2025 02:57PM
Referred By	: Dr.L	Sample Received ON	:
Refer Lab/Hosp	: CHARAK NA	Report Generated ON	: 17/Mar/2025 04:15PM

RENAL DOPPLER STUDY

Compromised assessment due to excessive bowel gases, poor breath holding and co-existing renal parenchymal disease.

Renal Doppler

- Gray scale imaging of the kidneys was done follow by analysis of renal vasculature in colour Doppler.

Gray Scale

- Both kidneys are normal in size, shape & position. Right kidney measures 88.9 x 48.9 mm. Left kidney measures 90.7 x 41.4 mm. **Bilateral renal cortical echogenicity appears raised with blurring of cortico-medullary differentiation at places. Few anechoic cortical cysts are seen in left kidney with the largest measuring approx 26 x 23 mm seen at upper pole.** No obvious calculus is seen. No hydronephrosis is seen.

Colour and pulsed Doppler study

- *Bilateral main renal arteries could not be very well visualized from origin upto renal hila; however, renal arteries at hila and their segmental branches show maintained colour flow.*
- Doppler parameters are as follows:-

	RIGHT			LEFT		
	PSV (cm/s)	RI	AT (sec)	PSV (cm/s)	RI	AT (sec)
Renal artery at hilum	54.3	0.81	0.04	62.9	0.77	0.04
Upper polar Segmental artery	19.8	0.75	0.04	22.4	0.78	0.04
Mid polar Segmental artery	16.2	0.74	0.04	22.7	0.79	0.04
Lower polar Segmental artery	23.4	0.76	0.04	24.8	0.75	0.04



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OPINION:

- RAISED BILATERAL RENAL PARENCHYMAL ECHOGENICITY WITH BLURRING OF CORTICO-MEDULLARY DIFFERENTIATION AT PLACES AS WELL AS INCREASED VALUES OF RESISTIVE INDEX ($RI \geq 0.75$) AS DESCRIBED ABOVE - LIKELY DUE TO RENAL PARENCHYMAL DISEASE / MEDICAL RENAL DISEASE.
- LEFT RENAL CORTICAL CYSTS.
- NO OBVIOUS INDIRECT EVIDENCE OF SIGNIFICANT RENAL ARTERY STENOSIS.

Note: The above assessment is based on indirect method of analysis of doppler parameters namely AT (acceleration time) and RI (resistive index) in segmental branches alone. Co-existing renal parenchymal disease can alter the values of these parameters. Direct visualization of main renal arteries was not a part of this study. Possibility of renal artery stenosis cannot be ruled out based on indirect assessment of doppler parameters alone due to low negative predictive value.

CT renal angiography is gold standard investigation to rule out possibility of renal artery stenosis.

Clinical correlation is necessary.

[DR. JAYENDRA K. ARYA, MD]

Transcribed By: RACHNA

*** End Of Report ***

CHARAK

