



Centre OP/IP No/UHID Collection Date/Time	
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**Clinical features**: 50-year-old male with f/u of post renal transplant; ABO incompatible; DM; HTN.

**Specimen Type**: Kidney biopsy (Light microscopy+Immunofluorescence)

#### Gross Description:

Patient Name Age/Gender MaxID/Lab ID Ref Doctor

ULTRA RAPID KI

**Hospital Nar** 

Light microscopy (K-2978/22): Received single grey white linear core measures 0.8 cm in length. All tissue submitted in cassette A.

Immunofluorescence (K-2979/22): Received single core measures 0.5 cm in length.

#### **Microscopic Description:**

#### Light Microscopy :

2H&E, 2 PAS, 1 Ag H&E, 1GMS and MT stained section of allograft kidney biopsy studied .

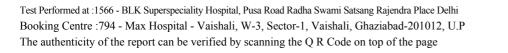
Kidney biopsy in single linear core reveals 13 glomeruli of which 1 glomerulus is globally sclerosed. Majority of the non-sclerosed glomeruli show ischemic wrinkling of capillary loops. No evidence of segmental sclerosis lesion seen. No glomerulitis (g0), mesangial matrix expansion (mm0) or chronic glomerulopathy seen (cg0). No necrotizing lesion seen. No extracapillary proliferation noted.

Tubulointerstitial compartment show multifocal patches of tubular atrophy and interstitial fibrosis involving 30 -35% of the sampled renal cortex (ct2,ci2). The atrophic tubules show endocrinization pattern of tubular atrophy. The non-atrophic tubules show compensatory enlargement with patchy acute tubular injury. Moderate tubulitis seen in atrophic tubules however no tubulitis seen in non-atrophic tubules indicating t-IFTA2(t0). Moderate interstitial inflammation seen involving >25% of scarred renal cortex indicating i-IFTA2. No interstitial inflammation noted in the non-scarred renal cortex (i0). Few tubules show apoptotic casts.

Vascular compartment show mild intimal sclerosis with hyperplastic arteriopathy. Few of arterioles show non-circumferential arteriolar hyalinosis (ah2). No endothelitis (v0) or transplant arteriopathy seen (cv0). No peritubular capillaritis is seen (ptc0).

There is no morphological evidence of BKV nephropathy.

Immunofluorescence : IF core reveals 4 glomeruli.







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Laboratory Investigation Report

Patient Name	Centre	
Age/Gender	OP/IP No/UHID	
MaxID/Lab ID	Collection Date/Time	
Ref Doctor	Reporting Date/Ti	
	ology	
C4d : Negati	)	
IgG :Negat		
IgA : Negat		
IgM : Negative		
C3 : Negative		

Kappa and Lambda : Show no light chain restriction in tubular casts

## Immunohistochemistry :

SV40 –Negative

Banff Score : g0 cg0 mm0 t0 ct2 i0 ci2 v0 cv0 ptc0 ah2.C4d0

Overall features are of Grade II IFTA with chronic active T cell mediated rejection, Grade IA .

## **Diagnosis :**

Kidney(allograft)biopsy POD ~ - Grade II IFTA

- Chronic Active T-cell mediated rejection, Grade IA\*

## **Comments:**

1.Few tubules show apoptotic cast , raising the possibility of resolved /resolving co-existent infection. Please correlate with microbiological studies before treating chronic active T-cell mediated rejection.

2.i-IFTA (inflammation in areas of IFTA) is considered as a potential lesion of chronic active T-cell mediated rejection(TCMR).

\*Haas et al. The Banff 2017 kidney meeting report: Revised diagnostic criteria for chronic active T cell- mediated rejection, antibody-mediated rejection, and prospects for integrative endpoints for next-generation clinical trials. Am J Transplant.2018;18:293-307.

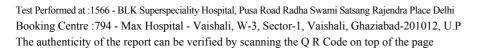
This report needs to be read & interpreted in relation to the addendum report as follows

-----Addendum Report-----

Addendum DateTime : 09/12/2022 01:16PM

#### Addendum Comment :

In view of ABOi transplant setting and 10 gm proteinuria, immunofluorescence was attempted on paraffin block and C4d immunohistochemistry was also performed.





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Patient Name Age/Gender MaxID/Lab ID Ref Doctor

Centre OP/IP No/UHID Collection Date/Time Reporting Date/Time

Histopathology

# Paraffin Immunofluorescence: Section reveal 13 glomeruli

- IgG :Negative
- IgA : Negative
- IgM : Negative
- C3 : Negative
- C1q : Negative

Kappa and Lambda : Show no light chain restriction in tubular casts

### Immunohistochemistry:

C4d : Focally positive in 20-25% of peritubular capillaries (C4d2 ; possibly related to accommodation process)

#### Diagnosis:

Kidney(allograft)biopsy POD ~ - Grade II IFTA

- Chronic Active T-cell mediated rejection, Grade IA\*

## **Comments:**

1. Proteinuria could be related to significant ischaemic wrinkling of capillary loops, however advised electron microscopic examination to rule out coexistent podocytopathy.

\*\*\* End Of Report \*\*\*

Dr. Rajan Duggal Associate Director & HOD (Reg no 27948)

Test Performed at :1566 - BLK Superspeciality Hospital, Pusa Road Radha Swami Satsang Rajendra Place Delhi Booking Centre :794 - Max Hospital - Vaishali, W-3, Sector-1, Vaishali, Ghaziabad-201012, U.P The authenticity of the report can be verified by scanning the Q R Code on top of the page



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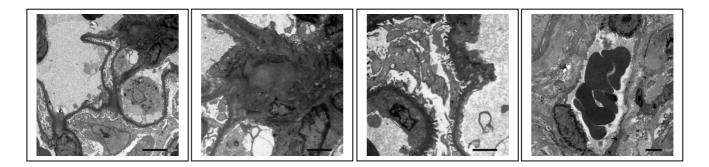
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Name Lab No. Ref by Collected A/c Status Collected at





RENAL PATHOLOGY REPORT



SPECIMEN	:	Kidney biopsy: Electron Microscopy
CLINICAL HISTORY	:	ABOi Renal allograft recipient. DM+
GROSS	:	Received 1 linear core measuring 0.5 cm for EM studies.
		[EM: 22 - G - 737]
ELECTRON MICROSCOPY:		Tissue was processed for transmission electron microscopy and ultrathin sections stained with uranyl acetate and lead citrate. One glomerulus and accompanying tubulointerstitium were analysed.
		The glomerular basement membrane thickness varies from 298.6 to 558.3 nm (mean 407.5 nm). Focal effacement of foot processes of visceral epithelial cells is noted (about 30-35%). No electron dense/ organized deposits or basement membrane lamellations are observed. Focal GBM subendothelial rarefaction is observed. Tubuloreticular inclusions are not identified in endothelial cell cytoplasm.
		Tubules show electron lucent vacuolar inclusions in cytoplasm. Extraglomerular

Classification: Internal

Note: 1. Slides / Blocks can be issued only on advise of the referring consultant after a minimum of 48 hours.

- 2. Gross specimens will be retained only for a period of 1 month after the date of reporting.
- 3. Contact histopathology department for any clarification



electron dense deposits or viral particles are not identified.

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	Peritubular capillaries do not show significant multilamination of basement membranes.
IMPRESSION	: Kidney, electron microscopy:
	<ol> <li>Glomerular basement membrane thickness ranging from 298.6 to 558.3 nm (mean 407.5 nm).</li> </ol>
	<ol> <li>Focal effacement of visceral epithelial cell foot processes (about 30- 35%).</li> </ol>
	3. No evidence of electron dense deposits or fibrils/ micro tubular structures in mesangial areas or glomerular basement membranes.
	4. Focal GBM subendothelial rarefaction is observed.
	5. Peritubular capillaries do not show significant multilamination of basement membranes.
COMMENTS	: The LM & DIF findings depicted in report (No. K-2978/22 & K-2979/22) provided have been noted. Please correlate with clinical picture & other relevant investigative findings.

fharen

Dr Alok Sharma MD, Pathology Technical Director - Renal Pathology & Transmission Electron Microscopy NRL - Dr Lal PathLabs Ltd

Note: Case reported by Dr Alok Sharma

Classification: Internal

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Age
Gender
Reported
<b>Report Status</b>
Processed at



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