

Client: Example Client ABC123
123 Test Drive
Salt Lake City, UT 84108
UNITED STATES

Physician: Doctor, Example

Patient: Patient, Example

DOB: 4/28/1956
Gender: Male
Patient Identifiers: 01234567890ABCD, 012345
Visit Number (FIN): 01234567890ABCD
Collection Date: 00/00/0000 00:00

SP Final Report

ARUP test code 8070060

Submitting Physician

[Redacted] Phone: [Redacted]
[Redacted] Fax: [Redacted]
Dr. [Redacted] Nephrologist
P: [Redacted]
F: [Redacted]

Clinical History

Nephrotic range proteinuria 14 g, creatinine 3.8 mg/dL, negative HIV, ANCA, ANA (verbal report from Dr. [Redacted]).

Diagnosis

NATIVE KIDNEY, NEEDLE CORE BIOPSY:

- EXTENSIVE FOOT PROCESS EFFACEMENT.
- FOCAL ENDOTHELIAL INJURY.
- FOCAL GLOBAL GLOMERULOSCLEROSIS (16.3%).
- FOCAL ACUTE TUBULAR INJURY.
- MILD INTERSTITIAL FIBROSIS AND TUBULAR ATROPHY (10%).
- MILD ARTERIO- AND ARTERIOLOSCLEROSIS.
- SEE COMMENTS.

11/29/22 MPR/MPR

I certify that I personally conducted the diagnostic evaluation on the above specimens and have rendered the above diagnosis(es):

[Redacted Signature]
electronic signature

University of Utah Health Care, Department of Pathology
Huntsman Cancer Institute
2000 Circle of Hope, RM 3100
Salt Lake City UT 84112

H=High, L=Low, *=Abnormal, C=Critical

Comments

The examination of the biopsy shows by light microscopy 16 glomeruli, six are globally sclerosed. The remaining glomeruli show minimal mesangial expansion. There is a background of mild interstitial fibrosis and tubular atrophy as well as mild arterio- and arteriosclerosis. Immune complex type deposits are not identified on immunofluorescence studies. Electron microscopy studies show marked foot process effacement and electron dense deposits are not identified. The morphological findings are consistent with minimal change disease. This process could be primary or secondary to different etiologies such as drug toxicity, lymphoproliferative disorders, etc. Clinical correlation is recommended. There are mild changes of arterionephrosclerosis. There are no features of an immune complex-mediated glomerulonephritis.

Dr. [REDACTED] was contacted on November 28, 2022.

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.

Stains performed at ARUP Laboratories on block(s) 2A. Controls performed as expected.

Gross Description

Received on 11/22/2022 is a kidney biopsy kit from [REDACTED] which consists of _ containers labeled _.

Specimen one is submitted in formalin for light microscopy. It consists of two pieces of tan tissue measuring 1.0, 0.5 cm. The specimen is submitted in cassette 1A.

Specimen two is submitted in Zeus fixative for immunofluorescence. It consists of two pieces measuring 0.7, 0.6 cm. The specimen is submitted to the Histology Laboratory for frozen cutting and then to the Immunohistochemistry Laboratory for immunofluorescence staining.

Specimen three is submitted in glutaraldehyde for electron microscopy. It consists of two pieces of tan tissue measuring 0.8, 0.5 cm. The specimen is submitted to the Electron Microscopy Laboratory.

MPR/BRC 11/23/22

Light Microscopy

Two H+E-, two PAS-, two trichrome- and two Jones' silver-stained slides are reviewed. Serial sections through the biopsy show two fragments of renal cortex and medulla containing up to 16 glomeruli, six are globally sclerosed. The remaining glomeruli show patent capillary loops with thin capillary walls without holes, spikes or splitting. There is minimal increase in mesangial matrix without increase in mesangial cellularity. Endocapillary hypercellularity or crescents are not identified. There is mild interstitial fibrosis and tubular atrophy involving approximately 10% of the sample associated with scant predominantly mononuclear inflammatory infiltrate. There are few tubules with lumina dilatation and some of them contain proteinaceous casts. The arterioles show mild media fibrous thickening and occasional hyalinosis. The interlobular arteries show mild intima and media fibrous thickening.

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Immunofluorescence

Duplicate frozen sections are stained with antisera for IgG, IgA, IgM, C3, Clq, albumin, fibrinogen, Kappa and Lambda light chains. There are up to 16 glomeruli per section available for examination, one is globally sclerosed. 2+ arteriolar staining is seen with C3. IgG, IgA, IgM, C3, Clq, both light chains, and fibrinogen are negative within the glomeruli. Albumin and controls stained appropriately.

Electron Microscopy

Toluidine blue stained thick sections (five blocks) show 17 glomeruli available for examination, one is globally sclerosed. The tubulointerstitial and vascular changes are similar to light microscopy sample. On ultrastructure, the glomerular basement membranes are segmentally wrinkled and most segments are of normal thickness alternating with few segments of thickening. There are no subepithelial nor subendothelial electron dense deposits. The epithelial cells show cytoplasmic vacuoles and there is marked foot process effacement involving nearly completely the capillary wall circumference. There is one glomerulus showing endothelial damage and segmental expansion of subendothelial space. The endothelial cells in remaining three glomeruli examined appear unremarkable and do not contain reticular aggregates in the loops examined. The mesangial areas do not exhibit electron dense deposits. The tubular basement membranes do not contain electron dense deposits. There are few vacuoles in tubular epithelial cells cytoplasm. Fibrillary material is not identified.

VERIFIED/REPORTED DATES				
Procedure	Accession	Collected	Received	Verified/Reported
Submitting Physician	SP-220-031233	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
Clinical History	SP-220-031233	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
Diagnosis	SP-220-031233	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
Comments	SP-220-031233	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
Gross Description	SP-220-031233	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
Light Microscopy	SP-220-031233	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
Immunofluorescence	SP-220-031233	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
Electron Microscopy	SP-220-031233	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00

END OF CHART

H=High, L=Low, *=Abnormal, C=Critical

Unless otherwise indicated, testing performed at: