Histological patterns of Post Covid AKI: A Myriad of Presentations:

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Background

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Covid – 19 is relatively a new disease with varied presentations which can affect multiple organs including kidney. AKI is quite commonly associated with covid-19 infection. However, very little is known about the patho physiology associated.

Objective

To study the histological patterns of covid associated AKI.

Materials & Methods:

- •This is a retrospective longitudinal study.
- •45 patients developing AKI after covid -19 infection have been identified.
- •AKI was defined as per KDIGO criteria.
- •Evaluation of AKI was done with routine analysis and causes other than covid infection were ruled out.
- •Renal biopsy was done and core specimens were sent for Light microscopy and Immunoflourescence.

Results

| Total patie | nts – | 109 |
|----------------------|-------|-----|
| Acute tubular Injury | - | 27 |
| Acute TIN | - | 26 |
| IRGN | - | 11 |
| Crescentic GN | - | 8 |
| Chronic TIN | - | 4 |
| TMA | - | 6 |
| IgA Nephropathy | - | 3 |
| Granulomatous TIN | - | 3 |
| FSGS | - | 4 |
| Cast nephropathy | - | 4 |
| MCD | - | 1 |
| Lupus Nephritis | - | 1 |
| Papillary necrosis | - | 1 |
| Background disease | - | 10 |

Patient's age varied from 2 to 76 years. Among all the patients, 36 are male, 9 are female.

The duration between Covid infection and AKI ranged from 2 weeks to 6 months.

Conclusion:

AKI followed by covid 19 has a variety of pathologic mechanisms. Studying the patterns and their further follow up will be beneficial since there is very limited data.