## **Highlights From the Issue**

It is my pleasure to present to you the May – June 2024 issue of the Indian Journal of Nephrology. The issue has one review article, six original articles, two research letters, one case series and several case reports and letters to the editor.

The review article discusses the lost art of using the examination of urinary sediment.<sup>1</sup> The authors point out that this under-utilized tool is a simple, cost-effective, and powerful diagnostic tool and goes to the development of a skilled nephrologist. They focus on how urine sediment analysis can help in differentiating between various causes of acute kidney injury (AKI) and in patient management. They describe the process of preparing the sample for microscopy, discuss the automated systems and the importance of quality control. They do not overlook the limitations. This article will prove beneficial for young trainees who have not yet had the opportunity to conduct laboratory procedures like urine centrifugation and microscopic analysis.

Next, Dr. Divyaveer and colleagues report on the effectiveness of lactoferrin for treatment of anemia of chronic kidney disease (CKD).<sup>2</sup> The pilot single-center study examined the effectiveness of oral lactoferrin given to patients who had anemia due to CKD and were on stable EPO treatment. They noticed an improvement in hemoglobin from a mean value of 8.18 at baseline to 8.54 at week 2, which further went up to 8.96 at week 4. The improvement was higher in women, but this difference did not achieve statistical significance. This treatment should be tested in appropriately designed, randomized controlled trials.

Dr. Rathi and colleagues describe a prospective randomized, double-blind pilot study that examines the role of desmopressin acetate in the prevention of kidney biopsyrelated complications in patients with kidney dysfunction.<sup>3</sup> They randomized patients with an estimated glomerular filtration rate (eGFR) of less than 45 ml/min/1.73 m<sup>2</sup> into two groups – one received an intranasal desmopressin spray, and the other one a placebo, saline internasal spray. A total of 80 patients were equally randomized into two arms. The group that received internal desmopressin had a greater number of minor bleeding complications, but there was no difference between groups in the incidence of major complications. The study did not find any utility of prophylactic depressant use before kidney biopsy in patients with reduced kidney function.

In a prospective study, Dr. Modi and colleagues used a smartphone with a 16-megapixel macro lens to count glomeruli in a kidney biopsy specimen and comparing it to light microscope counting.<sup>4</sup> A total of 47 specimens were obtained from 24 patients. They observed a positive

Dr. Esha Shukla and colleagues have presented a prospective observational study on 126 patients with COVID-19 and acute kidney injury who were treated with hemodialysis.<sup>5</sup> They measured a range of parameters in the patients and found that the neutrophil lymphocyte ratio and IL-6 were higher in non-survivors. They conclude that IL-6 is a poor predictor in COVID-19 patients with AKI, and that hemodialysis reduced cytokine storm by reducing IL-6 levels.

Next, a team from the All India Institute of Medical Sciences, Raipur, describes the clinico-epidemiological profile of patients with CKD of unknown etiology from Chhattisgarh and the adjoining regions of Odisha.<sup>6</sup> Out of a total of 5365 patients seen at their center during the two years, 166 were diagnosed with chronic kidney disease of unknown etiology (CKDu). These patients were predominantly male, belonged to rural areas, and were engaged in farming. Most of these patients came from three districts, suggesting that there is a clustering of these cases in these regions. The authors suggest more details studies to explore the true prevalence of CKDu, in these endemic areas of Chhattisgarh and Odisha.

Dr. Pranaw Jha and colleagues from the Medanta Institute of Kidney and Urology have presented their data on lowrisk patients undergoing living kidney transplantation.<sup>7</sup> Out of 350 transplants, 143 received no induction, 112 basiliximab and 95 were given thyroglobulin. Biopsy-proven acute rejection rates were less frequent in the thyroglobulin group, than no induction and basiliximab groups. This difference persisted after adjustment for several confounders. The authors conclude that in low-risk living related living donor kidney transplant recipients on standard triple-drug immunosuppression, thymo induction provides an advantage so far as biopsy-proven, acute rejection is concerned over no induction or basiliximab induction.

In a research letter, Dr. Aishwarya Lakshmi and colleagues from Sri Venkateswara Institute of Medical Sciences, Tirupati, describe their experience of treating patients of maintenance dialysis during the COVID-19 pandemic.<sup>8</sup> Dr. Vijoy Kumar Jha and colleagues from the Army Base Hospital, Delhi have presented their experience of treating 71 patients with teriparatide.<sup>9</sup> They examined bone formation markers and density at baseline, three months, and six months and observed consistent improvement.

The case reports are a mix of interesting cases with surprising findings, ranging from the discovery of

microfilariae on kidney biopsy, a young boy presenting with kidney failure and hyperglycemia found to have a mutation in the hepatocyte nuclear factor one beta gene, recurrent AKI following exposure to the pesticide dichlorvos, a case of infected renal cyst complicated by renal vein thrombosis, an individual presenting with Takayasu arteritis in association with ankylosing spondylitis and ulcerative colitis, which eventually developed secondary renal amitosis, a patient with renal mucormycosis who developed disseminated infection to the bone leading to the development of lytic lesions, and a rare case of bleeding renal angiolipoma diagnosed to have Wunderlich syndrome.<sup>10-16</sup> There are a series of letters to the editors also describing unusual clinical experiences.<sup>17-20</sup>

The image on the cover, contributed by Dr. Mahesha Vankalakunti, illustrates the changes observed during acute antibody-mediated rejection in a kidney transplant biopsy.

I hope you enjoy the new issue. I want to thank all the authors and look forward to your feedback.

## Vivekanand Jha<sup>1,2,3</sup>

<sup>1</sup>The George Institute for Global Health, UNSW, New Delhi, India, <sup>2</sup>Manipal Academy of Higher Education, Manipal, Karnataka, India, <sup>3</sup>Faculty of Medicine, Imperial College London, London, UK

Corresponding author: Prof. Vivekanand Jha, The George Institute for Global Health, 308, Third Floor, Elegance Tower, Plot No. 8, Jasola District Centre, New Delhi – 110 025, India. E-mail: vjha@ic.ac.uk

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