Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.
Tessa Novicki, Michelle Osuna, Evelyn Cruz, Francisco Barrios, Laura Palau, Sanjana Ravi, Lilia Cervantes, Deidra Crews. 1University of Texas at Austin Dell Medical School; 2Johns Hopkins University School of Medicine; 3University of Colorado; 4Central Health

Latinx individuals with early kidney disease are more likely to progress to kidney failure than non-Latinx populations. Many do not interact with care until they are in kidney failure due to barriers to care. The NKF Kidney Risk Quiz (KEEP) conducts community screening events nationwide. Community health workers (CHW) effectively facilitate care navigation for Latinx populations. Partnering KEEP events with a CHW intervention to facilitate care linkage may enable earlier medical intervention.

We piloted a CHW intervention for individuals who were at risk for kidney disease or had urine albumin-to-creatinine ratio (ACR) ≥30 mg/g at a KEEP event at the Mexican Consulate in Austin, Texas. Objectives were to determine (1) the feasibility of using KEEP events to identify Latinx individuals with early kidney disease who are uninsured and have unmet social needs, and (2) the feasibility and acceptability of using a CHW to improve CKD awareness, address barriers to care, and establish medical care. This pilot is funded by the NKF Young Investigator Research Grant.

Of 82 individuals who attended the event, 52 (63%) were at risk for kidney disease according to the NKF Kidney Risk Quiz, 15 (18%) had ACR 30-300 mg/g, and 1 (1%) had ACR >300 mg/g. 23 (60%) had ACR 30-300 mg/g, and 6 (40%) had ACR <30 mg/g. Mean age was 49 years, 47% were male, 73% reported being unaware of kidney problems, 60% were uninsured, 60% reported speaking English poorly or not at all, 53% were unemployed, 33% reported housing insecurity, 47% reported food insecurity, and health literacy was poor for most (53% inadequate, 40% marginal health literacy). The CKDopps is a nephrology clinic–based cohort study of non-dialysis CKD population.

Uremic pruritus is a common symptom of advanced CKD, and is associated with depression, worse quality of life, and poor sleep quality. However, clinical outcomes have not been investigated in the non-dialysis CKD population.

The CKDopps is a nephrology clinic–based cohort study of patients with eGFR <60 mL/min. This analysis included 1708 patients from Brazil (N=498) and the US (N=1210) in 2013-2020 who self-reported the extent to which they were bothered by itch over the past 4 weeks. Cox regression was used to investigate the associations between urinary pruritus severity and progression to kidney replacement therapy (KRT) initiation (p for trend <0.001), mortality (p=0.012), and hospitalization (p=0.17) are summarized in Figure 1.

Over half (53%) of the patients were at least somewhat bothered by itch. Among patients at least moderately bothered, 21%, 11%, and 0.6% were taking an antihistamine, gabapentin, or pregabalin, respectively, while 72% were not prescribed any of these medications. Over a median 1.2 (IQR: 0.5, 2.0) years of follow-up, the adjusted associations between pruritus severity and progression to kidney replacement therapy (KRT) initiation (p for trend <0.001), mortality (p=0.012), and hospitalization (p=0.17) are summarized in Figure 1.

The majority of CKD patients reported some level of pruritus, and these patients were largely untreated. Pruritus severity was associated with higher incidence of KRT, mortality, and hospitalization. Further research is needed to evaluate the potential impact of pruritus treatment on these clinical outcomes.

MINIMAL CHANGE DISEASE RELAPSE AFTER SARS-COV-2 BOOSTER VACCINE:

Syed Haider, David Corbin, Nupur Uppal. Donald and Barbara Zucker School of Medicine at Hofstra/Northwell Immune dysregulation has been postulated as a pathogenetic mechanism for minimal change disease (MCD) and several vaccines have been reported to act as a trigger for relapse. While cases of both de-novo MCD and MCD relapse have been reported following severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) mRNA vaccinations, we report, to the best of our knowledge, the first case of MCD relapse following booster dose of Pfizer-BioNTech SARS-CoV-2 vaccine.

63-year-old Italian male, with history of nephrotic syndrome secondary to kidney biopsy proven MCD, who had achieved complete remission with steroid therapy, had follow ups done that showed spot urine protein: creatinine of 10.1 and albumin of 3.9 g/dL. He had received the booster dose of Pfizer-BioNTech SARS-CoV-2 vaccine 2 weeks ago, and endorsed generalized weakness, puffiness over face, edema over upper extremities that appeared within a week after administration of the vaccine, and weight gain of 10 lbs over past week. Blood pressure was elevated (152/78 mmHg). He denied any recent infections, use of Nonsteroidal Anti-Inflammatory Drugs, or antibiotics. Other diagnostic work up revealed hypertriglycerideremia, normal serum creatinine, serological work up for secondary causes of glomerular diseases was negative. He was initiated on oral prednisone therapy. Spot urine protein:creatinine decreased to 1.1, 2 weeks after initiation of steroids.

Vaccination is a recognized trigger for relapse of nephrotic syndrome. mRNA vaccines are expected to produce a higher antibody response as well as increased production of cytokines and chemokines. This can lead to dysregulation in permeability factors that can result in relapsing glomerulonephritis. As data on adverse effects of SARS-CoV-2 vaccines continue to evolve, we suggest to closely monitor patients with history of nephrotic syndrome for relapse after receipt of the SARS-CoV-2 vaccine, including the booster dose. Further studies are needed to determine whether relapse of MCD is specific for SARS-CoV-2 mRNA vaccination and to decipher mechanisms for possible immune dysregulation in those patients. This may help in formulation of protocol for vaccination in patients with nephrotic syndrome and contribute to informed decision making.

THE UNUSUAL CASE OF HYPOKALEMIA IN A PATIENT WITH ADDISON’S DISEASE:

Kinjal Gosalia, Avani Sinha, Purva Sharma, Nupur Uppal. Northshore University Hospital

Addison’s disease is usually associated with hyperkalemia or normokalemia, we report an interesting case of profound hypokalemia secondary to distal renal tubular acidosis, associated with autoimmune polyendocrinopathy candidiasis ectodermal dystrophy (APECED).

27-year old female with APECED on chronic florinef therapy was hospitalized for evaluation and management of severe persistent hypokalemia. She was noted to have intermittent hypokalemia for ~7 years, which was well controlled with oral supplementation until a year ago when she became profoundly hypokalemic despite supplementation. Due to persistent hypokalemia, dose of florinef...