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1. **A CASE REPORT OF TYPE 1 CRYOGLOBULINEMIA:**

Elvira Gonzalez Negrete1, Vincent Campion1, Erika Bracamonte1, Chyi Chyi Chong1, Basim Ahmad1, Lawrence Langan1, Ryan Harrington1, Stefan Hamaway1, Alexander Imas1, Wen Ting Yang1, Mariana Markell1, Lawrence Williams1, Paul Kline2, Harrington1, Stefan Hamaway1, Alexander Imas1, Wen Ting Yang1, Mariana Markell1, SUNY Downstate Health Science University, Brooklyn, NY, United States

**Summary:**

Cryoglobulinemia is a rare diagnosis and renal failure secondary to cryoglobulinemia is traditionally seen in type II. In this case we have a patient with type 1 cryoglobulinemia which accounts for less than half of all cryoglobulinemias. In this patient’s case he recently finished treatment and had good renal recovery. Most documented cases of relapsing cryoglobulinemia occur in patients with viral infections. The survivability and mortality are usually related to the underlying cause, and organ involvements.

**Methods:**

This case here shows a relapsing type 1 cryoglobulinemia. Type 1 cryoglobulinemia is a rare diagnosis and renal failure secondary to cryoglobulinemia is traditionally seen in type II.

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1. **GROCERY SHOPPING PATTERNS AND FOOD SCARCITY DURING THE COVID19 PANDEMIC IN INNER-CITY PATIENTS WITH CHRONIC KIDNEY DISEASE (CKD):**

Michael Goldberg1, Basim Ahmad1, Lawrence Langan1, Ryan Harrington1, Stefan Hamaway1, Alexander Imas1, Wen Ting Yang1, Mariana Markell1, SUNY Downstate Health Sciences University, Brooklyn, NY, United States

**Summary:**

In this case we analyze the relationship between grocery shopping habits in patients with chronic kidney disease (CKD) compared to those from family medicine clinic (FM). We present a case of Collapsing Glomerulopathy (CG) in a patient with Coronavirus disease 2019 (COVID-19). A 53-year-old African American female with history of diabetes mellitus type II and hypertension presented with 7 days of fevers, cough, worsening dyspnea, diarrhea and oliguria. She was found to have severe AKI with serum creatinine of 6.2 mg/dL, up from a baseline of 0.8 mg/dL, and nephrotic-range proteinuria (>2000 mg/dL), hematuria, pyuria, hypoalbuminemia, elevated LDH, leukocytosis, metabolic acidosis, and elevated inflammatory markers. COVID-19 PCR was positive; an extensive serologic work up to explain AKI was negative. Renal imaging revealed bilaterally increased echogenicity with normal arterial and venous Doppler flow, nonspecific left perinephric stranding concerning for pyelonephritis, and an obstructing 3 mm calculus with right hydronephrosis. Fluid resuscitation, empiric antibiotics, and dexamethasone were initiated.

**Methods:**

Gomory Broder (Cyclophosphamide, Bortezomib, Dexamethasone) for IgG Lambda with 20% Plasma. The patient was started on intermittent hemodialysis due to renal recovery and significant fibrosis on renal biopsy.

In this case we have a patient with type 1 cryoglobulinemia which accounts for less than half of all cryoglobulinemias. In this patient’s case he recently finished treatment and had good renal recovery. Most documented cases of relapsing cryoglobulinemia occur in patients with viral infections. The survivability and mortality are usually related to the underlying cause, and organ involvements. This case here shows a relapsing type 1 cryoglobulinemia. Type 1 cryoglobulinemia is a rare diagnosis and renal failure secondary to cryoglobulinemia is traditionally seen in type II.

**Acknowledgments:**

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Received TOL or PBO were instructed to maintain good hydration and avoid thirst.

The relationship between changes in first morning predose spot Uosm at Week 3 and % change in TKV at Month 12 was assessed by linear regression. As only spot Uosm (effect at lowest TOL concentration) was collected in TEMPO 3:4, short-term Trial 248 [Shoval, J Clin Pharmacol 2017;57:906-17] was analyzed to explore the relationship between trough (16-24 hours) Uosm and daily reduction in Uosm via 24-hour area under the Uosm-time curve (AUC24).

In TEMPO 3:4, despite the same spot Uosm reduction in some subjects, TKV growth reduction by TOL was greater than PBO: eg a -250 mOsm/kg change in Uosm at Week 3 was associated with a -1% change in TKV at Month 12 for TOL vs +4.5% for PBO (Panel A). In Trial 248, for similar trough Uosm values, cumulative 24-hour suppression of Uosm was greater on TOL: a trough Uosm of 300 mOsm/kg reflected a Uosm AUC24 (in mOsm/hour/kg) of ~6180 for PBO and ~4180 for TOL (Panel B).

Although similar reductions in spot Uosm are possible with TOL and PBO with potentially high water intake, TOL-treated subjects show greater reduction in TKV growth vs PBO after 1 year, likely due to sustained, 24-hour vasopressin antagonism.

**Results:**

**A random sample of pts from kidney transplant (29), CKD (14), dialysis (5), and family medicine clinic (24) were surveyed by telephone regarding frequency of food shopping, types of food purchased and concerns regarding COVID19. Pts were grouped as High Frequency (HF-once a week or less), and Low Frequency (LF-once every two weeks or greater) shoppers. There were no HF reported buying more food overall (p=0.03). LF were more likely to cut portion sizes or skip meals due to finances. 4. CKD pts who shopped less were more fearful of COVID and felt less comfortable in public spaces. 5. These data suggest that multiple factors are affecting food choices in CKD pts and may contribute to food scarcity in this population.

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**In our population: 1. Prior to COVID-19 grocery store habits did not differ between CKD and FM pts. 2. After COVID-19 CKD pts shopped less than FM patients and less than they did before. 3. CKD patients who shopped less frequently bought less frozen food, ate less fast food and less food total and were more likely to cut portion sizes or skip meals due to finances. 4. CKD pts who shopped less were more fearful of COVID and felt less comfortable in public spaces. 5. These data suggest that multiple factors are affecting food choices in CKD pts and may contribute to food scarcity in this population.**

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**GROCERY SHOPPING PATTERNS AND FOOD SCARCITY DURING THE COVID19 PANDEMIC IN INNER-CITY PATIENTS WITH CHRONIC KIDNEY DISEASE (CKD):**

Michael Goldberg1, Basim Ahmad1, Lawrence Langan1, Ryan Harrington1, Stefan Hamaway1, Alexander Imas1, Wen Ting Yang1, Mariana Markell1, SUNY Downstate Health Sciences University, Brooklyn, NY, United States

**Summary:**

Inner-city CKD pts have been affected by both the COVID19 pandemic and economic hardship. We studied grocery store shopping habits in pts with CKD compared to pts from family medicine clinic (FM).

**Methods:**

A random sample of pts from kidney transplant (29), CKD (14), dialysis (5), and family medicine clinic (24) were surveyed by telephone regarding frequency of food shopping, types of food purchased and concerns regarding COVID19. Pts were grouped as High Frequency (HF-once a week or less), and Low Frequency (LF-once every two weeks or greater) shoppers. There were no differences between kidney disease clinics so they were analyzed together.

Mean age for CKD (combined) was 60.8±11.2. There were 22 (45%) male and 27 (55%) female respondents, with 6 (13%) Hispanic, 56 (73%) black, 3 (6%) white, 4 others (8%). FM pts were older than CKD (p=0.02, 65.3±8.5) with no difference for race or gender. There was no difference in frequency of grocery shopping for CKD pts and FM pts (p=0.05) before COVID19. CKD pts shopped less than FM during COVID19 (p=0.01). CKD pts also decreased shopping frequency compared to pre COVID19 (p=0.05). Within CKD, 15 pts were grouped into HF and 19 to LF. There were no differences in those groups for age, race or gender. HF reported buying more frozen food (p=0.01) and eating more fast food (p=0.01) while eating more food overall (p=0.03). LF were more likely to cut portion sizes or skip meals due to lack of money (p=0.02) and agree with the statements “I am afraid of the coronavirus” (p=0.04) and “I am afraid of going to public spaces” (p=0.01).

**Results:**

In our population: 1. Prior to COVID-19 grocery store habits did not differ between CKD and FM pts. 2. After COVID-19 CKD pts shopped less than FM patients and less than they did before. 3. CKD patients who shopped less frequently bought less frozen food, ate less fast food and less food total and were more likely to cut portion sizes or skip meals due to finances. 4. CKD pts who shopped less were more fearful of COVID and felt less comfortable in public spaces. 5. These data suggest that multiple factors are affecting food choices in CKD pts and may contribute to food scarcity in this population.
glucosuria, hematuria, and pyuria. She was treated for cystitis but gross hematuria but urine cultures returned negative. Gross hematuria ensued in a few weeks. CT urography showed generalized bladder wall thickening. Cystoscopy revealed the entire bladder to be covered with a "white furry layer" and a few interspersed hemorrhagic areas (Fig 1). Necrosis, ulceration, and inflammation with fungal yeast forms were seen on biopsy. empagliflozin and secukinumab were stopped. Treatment with fluconazole was ineffective. She was later hospitalized for AKI Cr 5 mg/dL. She had bilateral hydropnephrosis from the fungal layer obstructing the ureteral orifices noted on cystoscopy. She had percutaneous nephrostomy and 4 weeks of intravenous amikacin. Fungal cultures confirmed candida glabrata susceptible to anidulafungin. On follow-up, the patient had improvement in her symptoms without gross hematuria. Cystoscopy demonstrated partial improvement, nearly 60% of the bladder was clear of the fungal layer.

We suspect that the amplified effect of glucosuria from SGLT2 inhibitors with background secukinumab therapy may have led our patient to have severe fungal cystitis.

Nephrologists must be aware of the drug interactions between monoclonal antibodies and SGLT-2 inhibitors and the associated risk of serious infections.

105 AQUAPHERESIS FOR LIFE-THREATENING CARDIO-RESPIRATORY FAILURE:
Joseph Gotesman1, Kush Dholakia 2, Nirav Patel 2, Maria DeVita 2, S Jacob Scheinerman 2. 1Renal Focus of NY, New York, NY, United States; 2Renal Focus of NY / SUNY Downstate, Brooklyn, NY, United States

Volume expansion including myocardial and pulmonary edema increases metabolic demand in acute severe cardio-respiratory failure. This clinical scenario leads to multi-system organ failure including acute renal failure with the potential need for hemodialysis (HD).

HD provides clearance and ultrafiltration via diffusion and convection, respectively. Isolated ultrafiltration (UF), or Slow Continuous Ultrafiltration (SCUF), is frequently utilized in these patients. Aquapheresis (AQ) refers to UF performed in non-dialysis patients with an Aquadex console manufactured by CHFSolutions. Presently, AQ has been almost exclusively initiated in patients with diuretic-resistant heart failure. A unique, though underutilized, advantage of AQ is its portability. This case report highlights the utilization of the portable feature of AQ in a patient with profound multi-organ failure.

A 74yo man presented with STEMI in cardiogenic shock. Cardiac catheterization revealed severe CAD, EF of 30%, and a VSD. He was intubated, in hypoxic respiratory failure on multiple vasopressors and an IABP. He required emergent bedside VA ECMO support for rescue. CVVHD was initiated for clearance and ultrafiltration to reduce the myocardial and respiratory workload. The patient was to undergo attempted percutaneous closure of the VSD in our Structural Heart Hybrid OR.

With an expected transit time of >3h, the patient was switched to AQ with a goal of continuing volume removal at a rate of 300mL/h during transport and while in the OR to avoid further respiratory decompensation, and to provide myocardial unloading in addition to 3.5LPM of extracorporeal support.

The patient tolerated the transport mode of AQ. Total UF of 1.5L was generated while away from the CTICU which was integral in avoiding further decompensation. The transport equipment included ECMO, transport ventilator with transport nitric oxide, and the