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we observed the emergence of the albuminuria (19mg/g vs. 42 mg/g,  $p < 0.001$ ), higher frequency of thrombocytopenia (12.2% vs 36.6%,  $p = 0.002$ ) and of epithelial cells in the urinary sediment (78% vs 98.1%,  $p = 0.016$ ). Albuminuria was significant ( $p < 0.012$ ) in patients with metastatic cancer.

**Conclusions:** Although there was no diagnosed of AKI, there was albuminuria and an increase in epithelial cells after seven days of chemotherapy with CDDP, especially in patients with metastatic cancer compared to those who do not have metastasis. These changes suggest early renal changes after the CDDP, even without the diagnosis of AKI.

No conflict of interest

## POS-053

### 90-DAY POST-HOSPITAL FOLLOW-UP IN SURVIVORS AFTER COVID-19-ASSOCIATED ACUTE KIDNEY INJURY REQUIRING KIDNEY REPLACEMENT THERAPY



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**Introduction:** Acute kidney injury treated with kidney replacement therapy (AKI-KRT), represents a frequent and severe complication of COVID-19 disease. While the in-hospital mortality of these patients is high, little is known about the kidney prognosis of survivors, particularly in the post-hospital setting.

**Methods:** We retrospectively identified all COVID-19 patients with AKI-KRT (n=74) admitted to a large tertiary care center in Berlin, Germany, between March and June 2020 and assessed kidney outcomes (grade of kidney recovery (full/partial), eGFR and need for dialysis) at hospital discharge and during post-hospital follow up (need for dialysis).

**Results:** Patients were predominantly male (74.3%), median age was 64.5 years and about 20% had preexisting CKD  $\geq$  CKD G3 (median baseline eGFR 76.5 ml/min/1.73m<sup>2</sup>). All patients were treated in the ICU at time of AKI-KRT onset. 98.6% of patients were mechanically ventilated, 39.2% received ECMO therapy. By October 21<sup>st</sup>, 2020, 37 (50 %) were discharged from acute care 36 (48.6%) had died and one patient (1.4%) continued to be in the intensive care unit. At the time of hospital discharge 25 (67.6 % of discharged patients) showed full renal recovery defined as not even meeting the criteria for AKI stage 1 anymore. Twelve patients fulfilled the criteria of acute kidney disease (AKD), including seven patients (18.9% of discharged patients) continuing to be dependent on KRT. Median eGFR at hospital discharge in surviving patients no longer requiring KRT was 71.2 ml/min/1.73m<sup>2</sup>. During a median follow-up time of 95 days (IQR 64-133) after discharge in 35/37 patients with follow-up data all but one patient (97.3%) had recovered from dialysis dependency. Two patients had recurrent AKI-KRT secondary to acute illness. No deaths occurred after hospital discharge.

**Conclusions:** Dialysis-dependent AKI in COVID-19 patients is associated with a high in-hospital mortality, but in survivors kidney recovery is common even after a long course of dialysis-dependency.

No conflict of interest

## POS-054

### SURPRISING CAUSE OF SEVERE SYMPTOMATIC HYPERCALCAEMIA; FULLER'S EARTH INGESTION



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**Introduction:** Fuller's earth is used in textile industry and in cosmetics. Common components are calcium montmorillonite, kaolinite, and attapulgite. Here is a description of an unusual case hypercalcaemia due to ingestion of Fuller's earth.

**Methods:** A 45-year-old morbidly obese lady was admitted with dyspnoea slowly increasing-3 months, decreased urine - 1 month, pedal edema - 1 week. Decreased appetite and nausea since 1 month. She had lower back ache since 1 week. No h/o altered sensorium or loose motion. There was no history of flank pain, fever, haematuria, pyuria and retention of urine. Diabetes since 5 years, fairly controlled She had poorly controlled hypertension. She had acute kidney injury, 2 years ago, due to urosepsis and her kidney function improved to 1.3mg/dl with treatment. O/E she had pallor, grade 1 pedal edema, no lymphadenopathy. pulse of 90/min, BP- 210/110 mmHg. she had bilateral basal crackles.

**Results:** Her serum creatinine was 6.78 mg/dl, with Serum Calcium -16.9 mg/dl. Her serum electrophoresis, iPTH, 25 OH Vitamin D and 1, 25 Vitamin D were within normal limits. Sarcoidosis was discarded when chest X ray didn't show any lymphadenopathy and her serum ACE level was normal

Meanwhile after some encouragement, she revealed eating Multani Mitti - 500gm daily for 3 months along with milk products to increase her health. She was diagnosed with hypercalcaemia due to fuller's earth ingestion. She was treated with oral hydration and intravenous furosemide. Her serum calcium improved from 16.9mg/dl to 10.5mg/dl over 15 days. Kidney function improved to 3mg over 6 weeks.

**Conclusions:** Fuller's earth contains anhydrous aluminium silicate and small amounts of magnesium and calcium oxide and alkali which can cause hypercalcaemia similar to milk alkali syndrome.

No conflict of interest

## POS-055

### ESTIMATED VERSUS MEASURED GLOMERULAR FILTRATION RATE IN ACUTE DECOMPENSATED HEART FAILURE



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**Introduction:** In patients undergoing decongestive therapy for acute heart failure (AHF), endogenous filtration markers such as serum creatinine (Scr) or cystatin C (CysC) are used to monitor kidney function. We tested whether dynamics of endogenous filtration markers and estimated GFR (eGFR) based on these markers appropriately reflect changes of measured GFR (mGFR) patients with AHF.

**Methods:** In this prospective cohort study in 50 hospitalized patients with AHF undergoing diuretic therapy, GFR was measured using a two-component intravenous visible fluorescent injectate (VFI) at two time-points 48h apart. Serum concentrations of a high molecular weight dextran component of VFI were measured 15 and 60 min after injection to quantify plasma volume (PV) using indicator-dilution principle. Concentrations of a low molecular weight component were measured to determine mGFR based on PV-normalized plasma pharmacokinetics. Pearson's r, Bland-Altman plots, precision, accuracy and bias were calculated for 4 established equations (CKD EPI<sup>Scr</sup>, CKD EPI<sup>Cys</sup>, CKD EPI<sup>Scr Cys</sup>, sMDRD) and kinetic GFR (kGFR). 38 subjects completed serial mGFR data.

**Results:** Scr and CysC based estimates of GFR, when compared with mGFR, provided only moderate correlation (Pearson's r, range 0.80 – 0.88) and precision (r<sup>2</sup>, range 0.65 – 0.78) and failed recommended margins for accuracy (<75% of estimates scored within 30% of mGFR). Kinetic GFR did not outperform static eGFR formulas regarding bias, accuracy and precision. Following 48 hours of decongestive therapy, changes of Scr, CysC and eGFR based on these markers poorly reflected