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compared with the HN model group. Similarly, Scutellarin decreased the NGAL, Kim-1, Cystatin C and IL-18 protein expression levels in HN mouse ($p < 0.05$). Overexpressed CCN1 could not induce the NLRP3 inflammasome activation with no change of mRNA and protein expression levels of NLRP3, ASC and pro-caspase-1 compared with the control HK-2. However, HK-2 showed a significant NLRP3 inflammasome activation and pyroptosis. Importantly, knockdown of CCN1 not only aggravated NLRP3 inflammasome activation and pyroptosis, but also abrogated the protective effect of Scutellarin in UA induced HK-2 injury.

Conclusions: Scutellarin might alleviate HN progression via a mechanism involved in CCN1 regulation on NLRP3 inflammasome activation.

No conflict of interest

POS-483

OUTCOMES IN INPATIENTS WITH CHRONIC KIDNEY DISEASE INFECTED WITH COVID-19, A SINGLE-CENTRE ANALYSIS FROM A SECONDARY CARE HOSPITAL IN KENT, SOUTHERN ENGLAND



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Introduction: The outcomes of patients with underlying Chronic Kidney Disease (CKD) infected with COVID-19 are relatively poorly understood. We aimed to explore this area as well as the outcomes associated with CKD in combination with other common co-morbidities.

Methods: Data was retrospectively collected on 487 adult inpatients infected with COVID-19 (positive PCR) between April and June 2020. The data collected from electronic records included baseline, peak and discharge serum creatinines and eGFR, stage of CKD, presence of renal replacement therapy, demographics and co-morbidities. An Excel spreadsheet was used to analyse data for means and standard deviations.

Results: There were 487 patients in total. The mean age was 71.9 (+16.9) years. Of these patients 102 (20.9%) had CKD3-5 including 6 on long term dialysis, the mean age of CKD3-5 patients was 80.6 (+10.9) years.

For CKD patients the mean eGFR at baseline, admission, nadir and discharge was 43.8 (+11.4), 34.9 (+16.0), 28.4 (+13.9) and 37.6 (+17.3) ml/min/1.73m² respectively. For CKD3 the mean eGFR at baseline, admission, nadir and discharge was 47.2 (+8.6), 32.8 (+14.5), 31.1 (+13.2), and 40.1 (+15.6) ml/min/1.73m². For CKD4 the mean eGFR at baseline, admission, nadir and discharge were 25.1 (+3.6), 15.3 (+7.2), 13.7 (+6.6) and 24.0 (+20.0) ml/min/1.73m² respectively. All patients with CKD5 at presentation were already on dialysis. Of the patients 81/487 (16.6%) had CKD 3, 15/487 (3.1%) had CKD 4, and 6/487 (1.2%) had CKD5 (5 with haemodialysis and 1 with peritoneal dialysis).

The mortality rate of CKD patients was 60/102 (58.8%). Mortality rates for CKD 3 was 47/81 (58.0%), for CKD 4 11/15 (73.3%) and for CKD5 2/6 (33.3%). This compared to mortality rates of 106/385 (27.5%) for patients who did not have Chronic Kidney Disease. The data set included 3 patients with functioning renal grafts. 2/3 (66.7%) had chronic kidney disease (as defined by eGFR). The mortality rate for those with renal grafts was 1/3 (33.3%).

In CKD patients (dialysis patients excluded) 60/96 (62.5%) were discharged (or died) without significant deterioration in their baseline creatinine or a "recovered creatinine" (defined as an increase of <1.25x baseline creatinine). For CKD 3 this number was 52/81 (64.2%) and for CKD4 patients this was 8/15 (53.3%). For patients with CKD who recovered their creatinine the mortality rate was 27/60 (45%), for those who did not recover it was 31/36 (86.1%).

Of the CKD patients 2/106 (1.9%) required acute haemofiltration. The mortality rate for these patients was 1/2 (50%). However, 2/2 (100%) of these patients had recovered renal function at discharge or death.

We compared the mortality rate associated with CKD with other common co-morbidities such as dementia, Chronic Respiratory disorders (COPD/Fibrosis/Asthma), Hypertension, Diabetes and Malignancy. We also compared mortality rates for patients with CKD who had other concurrent co-morbidities; See table below:

Patients Group (Co-morbidities)	Total Number	Deceased	Mortality Rate
CKD 3-5	102	60	60/102 (58.8%)
Diabetes	145	60	60/145 (41.4%)
Diabetes and CKD	47	28	28/47 (59.5%)
Hypertension	264	94	94/264 (35.6%)
Hypertension and CKD	66	35	35/66 (53.0%)
Chronic Respiratory Disease	91	27	27/91 (29.6%)
Chronic Respiratory Disease and CKD	18	10	10/18 (55.6%)
Ischaemic Heart disease	99	44	44/99 (44.4%)
Ischaemic Heart Disease and CKD	31	18	18/31 (58.1%)
Dementia	85	37	37/85 (43.5%)
Dementia and CKD	19	13	13/19 (68.4%)
Malignancy	59	22	22/59 (37.2%)
Malignancy and CKD	13	8	8/13 (61.5%)

Conclusions: Patients with Chronic Kidney Disease had a poor prognosis, worse than that associated with other common co-morbidities. Patients with CKD4 had a worse prognosis than those with CKD3. Deterioration of eGFR during admission was associated with higher mortality rates.

No conflict of interest

POS-484

COVID-19 RISK PERCEPTION IN PATIENTS WITH ADVANCED CHRONIC KIDNEY DISEASE



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Introduction: People with chronic kidney disease (CKD) are at increased risk of severe illness from COVID-19 (SARS-Cov2 infection). In the UK people with the greatest risk of severe illness were advised to shield from late March –August 2020. Until November this did not include patients with CKD stage 5 (CKD5). Our Low Clearance Clinic (LCC) cares for 500+ patients with GFR <20ml/min, most with CKD5. Our community has high levels of deprivation and an ethnically diverse population, and suffered high levels of COVID-19 mortality and morbidity during the first wave. As cases began to rise in the UK second wave we aimed to assess COVID-19 risk perception, factors affecting this, and impact on personal behaviour among our LCC cohort, with a view to improving our communication to patients.

Methods: All suitable patients attending LCC appointments (face to face and telephone) at a single London hospital during a seven week period in Autumn 2020 were invited to participate. The study terminated at the start of the second England-wide lockdown. Participation comprised completion of an anonymous survey. After completion patients were provided with an information leaflet highlighting the vulnerability of CKD5 patients to COVID-19 and advice to reduce their chances of acquiring infection.

Results: • 89 participants (Table 1).

Table 1: Demographics, n=89

Sex	Male	45 (50.6%)
	Female	44 (49.4%)
Age (years)	<24	0
	25-34	2 (2.2%)
	35-44	7 (7.9%)
	45-54	18 (20.2%)
	55-64	25 (28.1%)
	65-74	21 (23.6%)
	75-84	13 (14.6%)
	85+	3 (3.4%)
	Ethnicity	White
Black / African / Caribbean / Black British		25 (28.1%)
Asian / Asian British		6 (6.7%)
Other ethnic group		3 (3.4%)
Mixed / Multiple ethnic groups		2 (2.2%)
Rather not say		1 (1.1%)