P050 INFLUENCE FACTORS IN MORTALITY OF COVID-19 PATIENTS WITH UNDERLYING RHEUMATOLOGICAL DISORDERS

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Background/Aims
Since the outbreak and rapid spread of COVID-19, rheumatologists have sought to provide the best solutions to provide proper shielding of patients vulnerable to COVID-19. Set aside from social distancing and self-isolating, the British Society for Rheumatology proposed pragmatic guidance for different groups of patients for shielding. Clinical presentation, epidemiology, and potential treatment opinions of the management of COVID-19 patients with rheumatic disease had been reported, but a few reports which show a comparison between survivors and non-survivors in relation to their co-morbidities.

Methods
We collected data from a search identifying 1,200 patients testing positive for SARS-COV-2 with an identified rheumatological condition until 31st April 2020 at Imperial College NHS Trust. A positive laboratory finding is defined as one or more positive result for SARS-COV-2 PCR on nasopharyngeal swab done for inpatients.

Results
Among 1,200 patients, 39 patients had underlying rheumatological diseases. 12 patients died, and 27 patients were discharged. 50% of the patients who died had chronic kidney disease as an existing comorbidity (OR 26, 95%CI (2.8-258.1, p value 0.001) compared with only 3% of patients who survived. All the patients with heart failure in this sample died in hospital (33%, OR 29, 95%CI (1.4-597.4, p value 0.006). Regarding drug therapy, 50% of patients who died were receiving more than one immunosuppressant compared with 37% of those who survived. There was a significant association linking non-survivors with a high CRP value (54%, OR 25.2, 95% CI (2.4-258.2, p value 0.009) compared with only 4.5% in patients who survived. 70% of patients who died had d-dimer of (>2000ng/ml) compared with 16% of those who survived (OR 11.6, 95% CI (1.86-73.06), p value 0.011). Creatinine level also had a significant link with non-survival. 58% patients who died had an initial creatinine (>140umol/l) compared with 18% of survivors (p value 0.0232). Additionally the patients with an elevated creatinine prior to deterioration (which is an indication of acute kidney injury) represented 32% of the total sample and of those, 66% did not survive compared with 13% who did (p value 0.007). We also reviewed the medication adjustment according to NICE guideline. In our study, it was observed that medications were properly adjusted after discussion with rheumatologist.

Conclusion
Patients with chronic kidney disease and cardiovascular disease should be strictly shielded as a same priority as patient who are taking high dose of immunosuppressive therapy. Follow-up could only be considered for remote consultation in virtual clinic apart from severity of sickness that require for hospital admission. I believe many questions remain for the rheumatology society: How will we continue better rheumatology service during and beyond the pandemic? How particularly important to shield the high-risk patients by widespread adoption of the virtual clinic?

Disclosure
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