Conclusion: The least significant change in bone densitometry in patients with obesity is higher than in general population. These results may improve DXA interpretation in this specific population, and may personalize their medical care.

REFERENCES:

Disclosure of Interests: None declared.

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new developments in covid-19 research

outcomes in inflammatory arthropathy patients hospitalized for covid-19

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Background: Covid 19 is a new and rapidly spreading corona virus which has reached pandemic proportions. As of 5/22/20 there are 5.08 million confirmed cases and 332,000 deaths worldwide. Primary manifestations are respiratory, with a subset developing severe hypoxic respiratory failure. Several risk factors predispose patients to worse outcomes including age, obesity, hypertension, chronic kidney disease, COPD, asthma, CHF, and diabetes. This is a retrospective cohort analysis of patients with Rheumatoid arthritis, Ankylosing spondylitis, or Psoriatic arthritis who were hospitalized for COVID-19 infection across 165 HCA hospitals from 1/1/2020 to 5/30/2020. We compared endpoints and calculated odds of ICU admission, invasive ventilation, mortality compared to control as well as length of stay and discharge location.

Objectives: Our objectives include measuring the outcome of patients in two arms, the first being those with Rheumatoid arthritis, Ankylosing spondylitis, and Psoriatic arthritis who are infected with COVID 19 to an age matched and comorbidity matched arm (using the Charlson comorbidity index) for the composite endpoint of ICU admission, invasive ventilation, and death. We believe the inflammatory arthropathy arm will have a worse composite endpoint than the control arm. We will also attempt to calculate a hazard ratio of this arm vs the control to the composite endpoint. We will also examine the length of stay as well as inflammatory markers mentioned in between the two arms. We suspect initial inflammatory markers will be lower in the inflammatory arthropathy arm, particularly CRP and LDH, due to chronic immune modulating medication and these markers will not correlate as closely with severe illness represented by the composite endpoint as in the control arm.

Methods: We analyzed 86,217 patients admitted with COVID-19 comparing 751 patients who had inflammatory arthropathy to patients who did not. T tests were used for parametric outcome and chi square tests for non-parametric outcomes. Multivariate analysis included potential confounders such as age, and comorbidities such as diabetes, heart disease, etc.

Results: The odds ratio for mortality in the arthropathy arm was 1.37 with a confidence interval of 1.09 to 1.71 with a p value of 0.006. The odds ratio for ventilation was 1.35 with CI of 1.09 to 1.67 and p value of 0.026. The odds ratio of ICU admission was 1.46 with CI of 1.24 to 1.72 and P value of 0.000. The average length of stay of the arthropathy arm was 8.51 days +/- 10.02 vs 4.59 days +/- 8.26 of the control, p < 0.001. The discharge disposition of the arthropathy arm vs control group is as follows, 13.32% died inpatient vs 5.87% in the control arm. The discharge disposition of the arthropathy arm vs control group is as follows, 13.32% died inpatient vs 5.87% in the control arm. The discharge disposition of the arthropathy arm vs control group is as follows, 13.32% died inpatient vs 5.87% in the control arm.

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