

## Posters

### Scientific Presentation: Resp (Respiratory)

#### 153 AGE AND THE EXTENT OF CHEST RADIOGRAPHIC FINDINGS IN HOSPITALIZED PATIENTS WITH COVID 19

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**Introduction:** Since the emergence of COVID 19 in December 2019, its clinical and radiological features are still being discovered and their prognostic implications evaluated. Chest X-ray (CXR) typically shows patchy or diffuse asymmetric airspace opacities. Regardless of the different classifications of radiological findings that have been used, it is becoming clear that multi-lobar changes in the lungs are associated with poorer outcomes than single lobar involvement or minimal/no radiological abnormalities.

**Aim:** To assess the correlation of age with the extent of CXR findings in hospitalized COVID 19 patients.

**Methods:** A retrospective, cross-sectional analysis was carried out on inpatients with RT-PCR confirmed COVID 19. Chest X-ray findings were classified as minimal/no radiological changes, single lobar opacification and multi-lobar changes (involving 2 or more lobes and/or ARDS changes). SPSS 26 software was used for statistical analysis. Spearman's correlation and linear regression were used to assess correlation.

**Results:** 211 patients were included in the analysis; 124 males and 87 females. Mean age of the patients was 72.4 years; SD  $\pm$ 16.15. There was significant positive correlation between age and degree and extent of radiological changes in all patients ( $r = 0.367$ ;  $p < 0.01$ ). This correlation persisted even when broken down by gender ( $r = 0.448$ ;  $p < 0.01$ ) for males and ( $r = 0.322$ ;  $p < 0.01$ ) for females. Discussion: Older age has been repeatedly reported as a risk factor for poor prognosis in COVID 19. The main findings of COVID-19 on CXR are those of atypical or organizing pneumonia. Older people tend to have more extensive involvement of the lungs. There could be many explanations for the CXR correlation with age including the diminished cardiovascular reserve with ageing, the accumulation of comorbidities and decreased or abnormal immune response.

**Conclusion:** Age significantly correlate with the extent of chest radiographic findings in inpatients with COVID 19.