An ARDS mystery: could mycoplasma be the culprit?

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Scattered case reports have reported the occurrence of ARDS due to mycoplasma pneumonia, a common culprit of community acquired pneumonia notable for its characteristically terrible pattern of bilateral infiltrates on chest radiography out of proportion to the patient’s symptoms. These cases are notable often for the patient presenting late in their course of illness and requiring escalating oxygen requirements to the point of mechanical ventilation with ventilatory requirements meeting criteria for ARDS and considerable responsiveness to prone ventilation. The exact pathophysiology linking mycoplasma pneumoniae to ARDS remains to be elucidated as do the exact risk factors that portend this serious potential complication of an often-covered etiology for community acquired pneumonia. We present the case of a 70 year old gentleman who clinically had the picture of community acquired pneumonia on admission with extensive bilateral infiltrates in the setting of a temporal rise in local cases of COVID-19, but negative respiratory pathogen panel screening by nasopharyngeal swab twice, negative SARS-CoV-2 RNA nasopharyngeal swab by PCR three times, negative serologies to SARS-CoV-2 twice approximately one week apart, negative interstitial lung disease serologies, and negative cultures from blood, urine, and sputum for bacterial and fungal etiologies. His only positive finding prior to the development of hospital acquired pneumonia was IgG to mycoplasma pneumonia. We review recent literature on mycoplasma-associated ARDS as well as acute interstitial pneumonia as potential etiologies for this case.