Inhaled nitric oxide tied to improved P/F ratio in COVID-19 with ARDS

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Inhaled nitric oxide (iNO) is associated with improvement in the mean

partial pressure of oxygen (PaO_2)/fraction of inspired oxygen (FiO_2) ratio (P/F ratio) among patients hospitalized with COVID-19 and mild-to-moderate acute respiratory distress syndrome (ARDS), according to a study published online April 11 in *Drugs in Context*.

Steven H. Abman, M.D., from the University of Colorado Anschutz School of Medicine and Children's Hospital Colorado in Aurora, and colleagues conducted a retrospective medical chart review study that included patients who were aged 18 years or older with mild-to-moderate ARDS who received iNO for ≥24 hours continuously during hospitalization for COVID-19. The analysis included 37 patients at six sites.

The researchers observed an increase in P/F ratio from 136.7 at baseline to 140.3 and 151.8, respectively, at 48 and 72 hours after iNO initiation. There was a 62 percent response rate (23 patients). No patient experienced adverse events during hospitalization, including methemoglobinemia, airway injury, or worsening pulmonary edema associated with iNO. Twenty of the patients (54.0 percent) improved or remained stable according to the physician-rated Clinical Global Impression-Improvement scale score at discharge.

"This study provides additional evidence supporting a favorable benefit-risk profile for iNO in the treatment of COVID-19," the authors write. "Future randomized, placebo-controlled studies are needed to determine its potential efficacy and place in therapy."

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More information: Steven H Abman et al, Real-world use of inhaled

nitric oxide therapy in patients with COVID-19 and mild-to-moderate acute respiratory distress syndrome, *Drugs in Context* (2022). DOI: 10.7573/dic.2022-1-4