Lung injury in COVID-19 is not high altitude pulmonary edema
20 April 2020

High Altitude Pulmonary Edema is coauthored by Andrew M. Luks, MD, University of Washington, Seattle, and colleagues from Himalayan Rescue Association, Intermountain Medical Center (Salt Lake City, UT), University of Utah, Salt Lake City, St. Mary's Medical Center, San Francisco (CA), VA Puget Sound Health Care System, Seattle, and University of Colorado Anschutz Medical Campus (Aurora).

The researchers discuss the similarities between HAPE and ARDS, and also highlight the differences between them. ARDS in COVID-19 occurs as a result of an inflammatory response to the presence of the virus, whereas HAPE does not occur as a result of underlying inflammation, but rather as a result of excessive and uneven hypoxic pulmonary vasoconstriction. Understanding the different mechanisms of HAPE and ARDS is critical for patient management because the treatment for each will be quite different. Long-term supportive care including mechanical ventilation may be needed to overcome the underlying inflammation in COVID-19.

"It is vitally important to not equate these two diseases simply because they share some similarities in their radiologic appearance and cause hypoxemia (low blood oxygen content). This can be said for many other acute lung injuries. Any perceived link of HAPE to COVID-19 lung injury could have deleterious consequences if the same medications useful in HAPE were tried in those with COVID-19 related respiratory failure," says Erik R. Swenson, MD, Editor-in-Chief of High Altitude Medicine & Biology and Professor of Medicine, University of Washington and Division of Pulmonary and Critical Care Medicine, Veterans Administration Puget Sound Healthcare System.
