

Do We Need to Diagnose ARDS?



Acute respiratory distress syndrome (ARDS) is the clinical expression of acute, non-haemodynamic lung oedema. It is typically diagnosed by hypoxaemia, and bilateral lung infiltrates in the absence of increased capillary hydrostatic pressure. ARDS represents nearly a quarter of the ICU patients who require mechanical ventilation. There is significant research and literature on ARDS, with over 13,000 articles published on this syndrome since 1967. This might suggest that diagnosing a patient as having ARDS would play a critical role in improving the patient's outcome. But the question is: does it?

The problem is that ARDS is generally considered a disease when, in fact, it is a syndrome that is associated with several predisposing factors. It is also important to note that there is no specific treatment for ARDS. The usual prescription is the use of small tidal volume ventilation of 6 ml/kg of predicted body weight. However, this approach is not limited to patients with ARDS. Large tidal volumes are usually avoided in all cases of mechanical ventilation, and hence limiting fluid overload is a strategy that is used in all critically ill patients, not just those suffering from ARDS.

Diagnosing ARDS does not suggest any pharmacological therapies either. Muscle relaxants, if used, should be done so as part of an individualised decision process. The use of corticosteroids in all ARDS patients also remains controversial. So again, the question remains: is it important to diagnose ARDS?

Findings from the LUNG SAFE study show that mild ARDS was missed by clinicians in nearly 50% of cases. Even severe ARDS was missed in over 20% of cases. There was a minor impact on the tidal volume chosen in the LUNG Study in patients with ARDS, but there was an impact on adjunctive measures. Post hoc analyses of ARDS clinical trials show that response to treatments (PEEP, fluid therapy and simvastatin) was dependent on whether the patients had a hypo or hyperinflammatory sub phenotype.

COVID-19 has also brought much attention to ARDs. COVID-19 related respiratory failure is often ARDS but not always. But does the label of ARDS help these COVID-19 patients? Not really because the management of COVDID-19 related respiratory failure is the same, whether it is called ARDS or not. The important thing to remember is that ARDS is not the disease. COVID-19 is the disease, and ARDS is the syndrome. ARDS has an underlying cause, and the cause requires specific therapy. There is really no need to diagnose ARDS or treat it, but instead, the focus should be on identifying the underlying condition and treating that condition.

Source: Intensive Care Medicine

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