

263 Airway, Voice and Swallow Outcomes Following Endotracheal Intubation and Mechanical Ventilation For COVID-19 Pneumonitis: Preliminary Results of a Prospective Cohort Study

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Introduction: The COVID-19 pandemic has placed exceptional demands on Intensive Care Units (ICU) across the world – particularly requiring patients to be intubated and mechanically ventilated. Laryngeal injury following intubation is a common occurrence, therefore this study aims to analyse airway, voice, and swallow (AVS) outcomes of patients intubated for COVID-19 pneumonitis and compares it to intubated non-COVID-19 respiratory patients and other ICU admissions.

Method: We collected data from inpatient records, and follow-up clinics on intubated adult patients discharged from a tertiary care hospital ICU between 01/03/20 and 30/04/20. Patients were assessed with the AVS Scale, Voice Handicap Index-10 (VHI-10), and Eating Assessment Tool-10 (EAT-10).

Results: 86 patients were admitted with COVID-19 pneumonitis, 17 patients were admitted with non-COVID-19 respiratory failure, and 26 patients were admitted with a non-respiratory diagnosis.

The COVID-19 cohort demonstrated higher rates of AVS difficulties (airway 59% vs 44% and 31%, voice 40% vs 19% and 19%, swallow 21% vs 6% and 12%). VHI-10 and EAT-10 scores showed no significant differences between groups.

Conclusions: Patients intubated for COVID-19 pneumonitis reported higher rates of AVS difficulties against non-COVID-19 reasons for intubation. Robust prospective screening protocols are essential to improving patient outcomes by highlighting and therefore managing laryngological sequelae that occur following intubation.