

Category : **Respiratory: other**

## **A118 - Tracheostomy experience during sars-cov-2 pandemic in a hospital from bogotá, colombia**

**EE Rodríguez<sup>1</sup>; NA Pedraza Lopez<sup>1</sup>; R Toro Manotas<sup>2</sup>; E Valencia Morera<sup>2</sup>; J Perez Pinzon<sup>2</sup>; E Reyes<sup>1</sup>; F Medina<sup>1</sup>; YR Cárdenas<sup>1</sup>**

<sup>1</sup>Fundación Santa Fe de Bogotá, Intensive Care Department, Bogotá, Colombia, <sup>2</sup>School of Medicine, Universidad de los Andes, Intensive Care Department, Bogota, Colombia

### **Introduction:**

Viral pneumonia is the main complication of SARS-Cov-2 infection. Many patients require prolonged invasive mechanical ventilation and subsequent tracheostomy.[1] There is no standard recommendation about the optimal timing for the procedure. [2,3] The aim of this study was to describe the clinical outcomes in COVID-19 patients who underwent early versus late tracheostomy.

### **Methods:**

A retrospective single-center observational descriptive study was performed at a fourth level hospital on patients with confirmed diagnosis of COVID-19 and admission to the ICU who required mechanical ventilation and subsequent tracheostomy between January and July of 2021. Group analysis by the timing of tracheostomy since the start of mechanical ventilation was done in two sets: until day 14 (group 1) and from day 15 onward (group 2). The measured outcomes were hospital length of stay (LOS), ICU length of stay (ICLOS) and overall mortality.

### **Results:**

151 patients were included, almost all patients required ICU due to respiratory failure (96%). 42 patients conformed group 1 and 109 patients were included in group 2. Baseline characteristics are shown in Table 1. Mortality (50% vs 56,8%;  $p=0,4$ ) was not statistically different between groups. However, LOS (33,5 IQR 27,3 vs 43 IQR 20;  $p=0,003$ ) and ICLOS (25 IQR 19 vs 32 IQR 19;  $p<0,001$ ) were shorter in group 1.

### **Conclusion:**

Optimal timing for tracheostomy in critically ill COVID-19 patients is still undefined. Our study showed similar results found in other populations [4,5]. ICLOS and LOS seem to be shorter in early tracheostomy group. Other outcomes such as morbidity, time to decannulation and the possibility of early pulmonary rehabilitation should be included in future studies.

### **References:**

- 1.Rappoport W et al. Rev Cirugia 72(5):449-54,2020.
- 2.Cheung N et al. Respir Care 59(6):895-915,2014.
- 3.Freeman B. Crit Care Clin 33(2):311-22,2017.
- 4.Kuno T et al. Indian J Otolaryngol Head Neck Surg,2021.
- 5.Kwak P et al. JAMA Otolaryngol Head Neck Surg 147(3):239-44,2021.

### **Table:**

	Group 1 ( $\leq 14$ days) n= 42	Group 12 ( $\geq 15$ days) n=109	P - Value
Age	56,6 (IQR 29,8)	63 (IQR 12)	0,015*
BMI	27,6 (IQR 4,83)	27,8 (IQR 5,78)	0,7
APACHE II score	13,5 (IQR 7)	12 (IQR 7)	0,3
SOFA score	6 (IQR 3,75)	4 (IQR 4)	0,023*
PAFI	180 (IQR 69)	184 (IQR 78)	0,9

Sex	Women: 16 (38%) Men: 26 (62%)	Women: 42 (38,5 %) Men: 67 (61,5%)	0,9
Hemodynamic support at tracheostomy	9 (21,5%)	40 (36,5%)	0,07

*Baselines characteristics*