Massive pneumomediastinum following oro-tracheal intubation in an emergency setting

Lucas Ferreira Theotonio dos Santos; Daniel Joelsons; Ho Yeh Li
ICU division, Infectious and Parasitic Diseases Department, Faculty of Medicine, University of Sao Paulo, Brazil.

Clinical image description

We admitted in our intensive care unit, a 34-year old, female patient from the emergency room, with a hypothesis of COVID-19 disease, who was intubated before transportation due to hypoxic respiratory insufficiency. In physical examination the patient showed a massive subcutaneous emphysema. A computed tomography confirmed the hypothesis of pneumomediastinum/pneumothorax (Figure 1A). Refractory hypoxemia issued despite optimized mechanical ventilation, so we opted to submit the patient to Extracorporeal Membrane Oxygenation (ECMO). A diagnostic bronchoscopy showed an important laceration of the trachea (Figure 1B, black arrow, and Figure 1C), near the carina. Despite rare, tracheal lesion after intubation may have a dramatic outcome.