

Severe and non-severe Covid-19 patients with post-intubation tracheal stenosis

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Editorial

Acute respiratory distress syndrome (ARDS), the most common and severe complication in COVID-19 patients requires ventilation and oxygen therapies.¹ A previous study from China indicated that invasive mechanical ventilation (IMV) was required between 9.8 and 15.2 % of the patients.² Median duration of mechanical ventilation of 17 days and high frequent re-intubation were found in COVID-19 patients.^{3,4} Several previous studies lastly revealed the association between obesity (a proven risk factor for benign subglottic/tracheal stenosis (SG/TS) and required-IMV-COVID-19 patients.⁵ Approximately, 10-22 % of non-COVID-19 patients were reported of SG/TS.⁶ Currently, experiences in SG/TS in COVID-19 scenario are still not demonstrated.¹ Hypothetically, after extubation, a SG/T cicatricial concentric stenosis (Figure 1)¹ in a number of these patients, including long-COVID-19 will be developed and differential diagnosis of SG/TS with other pulmonary or tracheobronchial diseases could be significantly played by high-resolution-computed tomography (HRCT) (Figure 2).^{6,7} Consensus about the best therapy strategy for SG/TS is still not developed.¹

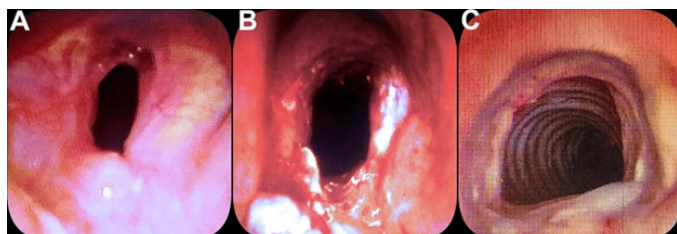


Figure 1

A- Tracheoscopy. Circumferential cicatricial tracheal stenosis. Cotton-Meier grade 3;

B- Bronchoscopy. Anatomic result immediately after endoscopic balloon dilation. The airway patency is restored.

C- Endoscopic assessment 2 months after surgery.¹

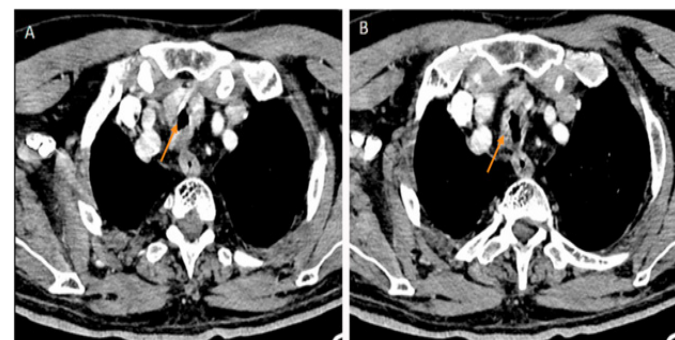


Figure 2 CT scan findings for Case 2. A significant tracheal stenosis after 2 months of intubation due to SARS-CoV-2 infection (A, B arrows).⁷

Conclusion

In conclusion, in recovered COVID-19 patients with breathing difficulties after mechanical ventilation weaning should be highlighted suspecting tracheal stenosis (SG/TS), whereas the management is similar to general tracheal stenosis.

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Conflict of interests

Author declares that there is no conflict of interest.

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