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Editorial

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Tracheostomy in coronavirus disease 2019: timing, outcomes, prognosis and technique

Jonathan Fishman and Edward Fisher, Senior Editors

In this month's Editorial, we have chosen to highlight an article by Takhar *et al.*, published in this month's issue.¹ This study provides one of the most comprehensive reports to date on tracheostomy outcomes in coronavirus disease 2019 (Covid-19).

Tracheostomy for weaning critically ill patients with Covid-19 who are receiving invasive mechanical ventilation remains a matter of debate.²⁻⁴ Controversy exists regarding timing, outcomes, prognosis, and optimal technique (open *vs* percutaneous *vs* hybrid techniques) to reduce aerosol generation and risk of transmission to healthcare workers. The paper by Takhar *et al.* primarily aimed to analyse the intra–operative and post-tracheostomy outcomes in 81 patients with Covid-19 pneumonitis requiring prolonged mechanical ventilation. In addition, the authors critically sought to analyse any effect of timing of tracheostomy upon outcomes in their cohort, and report their experience of both staff and patient safety.

On univariate analysis, there was no difference in outcomes between early tracheostomy (before day 14) and late tracheostomy (day 14 or later following endotracheal intubation). The authors conclude that timing may not be the single most important factor that should determine the decision to proceed with tracheostomy, and the broader clinical picture should be considered, including markers of disease severity and levels of respiratory support. Early tracheostomy, however, may avoid the glottic complications of long-term endotracheal intubation (e.g. posterior glottis stenosis). Furthermore, the authors found that percutaneous tracheostomy techniques performed via a multidisciplinary approach, with appropriate training, were safe and optimised healthcare resource utilisation (e.g. avoiding transfer to the operating theatre). In their study, there were no identified cases of healthcare worker transmission. The authors of the study acknowledge that given the current variation in practice and outcomes, there is an urgent need for further work, to better understand the optimal timing, indications and outcomes of tracheostomy patients with Covid-19 infection.

References

- 1 Takhar A, Tornari C, Amin N, Wyncoll D, Tricklebank S, Arora A et al. Safety and outcomes of percutaneous tracheostomy in coronavirus disease 2019 pneumonitis patients requiring prolonged mechanical ventilation. J Laryngol Otol 2020;134:961–70
- 2 Glibbery N, Karamali K, Walker C, Fitzgerald O'Connor I, Fish B, Irune E. Tracheostomy in the coronavirus disease 2019 patient: evaluating feasibility, challenges and early outcomes of the 14-day guidance. J Laryngol Otol 2020;134:688-95
- 3 Queen Elizabeth Hospital Birmingham COVID-19 airway team. Safety and 30-day outcomes of tracheostomy for COVID-19: a prospective observational cohort study. Br J Anaesth 2020;125:872–9
- 4 Volo T, Stritoni P, Battel I, Zennaro B, Lazzari F, Bellin M et al.. Elective tracheostomy during COVID-19 outbreak: to whom, when, how? Early experience from Venice, Italy. Eur Arch Otorhinolaryngol 2020. Epub 2020 Jul 12