

“Tracheostomy healing time after decannulation”: can we improve it?

Özlem Özkan Kuşcu,¹ Dilek Özcengiz,² Antonio M Esquinas³

¹Department of Anesthesiology and Reanimation, Faculty of Medicine, Baskent University, Ankara, Turkey

²Department of Anesthesiology and Reanimation, Faculty of Medicine, Cukurova University, Adana, Turkey

³Hospital General Universitario Morales Meseguer, Molina Segura, Murcia, Spain

Dear Editor,

We read with great interest the article “Tracheostomy healing time after decannulation” by Christiansen *et al.* [1]. The authors aimed to determine the tracheostomy wound healing time after decannulation. Few studies addressed the factors affecting the tracheostomy healing time, such as patient’s age, consciousness, oxygenation, duration of spontaneous breathing before decannulation, and cough effectiveness [2,3]. However, eligibility criteria for decannulation have not been studied on formal criteria, and unfortunately, large, randomized, and multicenter clinical studies investigating the factors affecting decannulation are still insufficient. We commend the authors for raising awareness about this issue. In this study, the duration of tracheostomy healing time after decannulation was found to be related to cannulation time. However, in our opinion, some issues need to be considered for proper clinical extrapolation.

First, as the authors mentioned in the article, pulmonary secretions may accumulate around the stoma site [4], which may increase the risk of wound infection and impaired wound healing [5]. The effect of wound infection on tracheostomy healing time after decannulation needs further research.

Second, nutritional problems may impair wound healing. Critical patients are at risk of malnutrition. Wound healing is challenging for malnourished patients [6]. Furthermore, we think that the effect of nutritional status on tracheostomy healing time after decannulation is another essential issue that needs further research.

We appreciate the study by Christiansen *et al.* exploring the duration of tracheostomy healing time after decannulation and look forward to future studies on this issue.

Key words: Tracheostomy healing time; decannulation; wound healing; wound infection; nutrition.

Correspondence: Özlem Özkan Kuşcu, Department of Anesthesiology and Reanimation, Faculty of Medicine, Baskent University, Şht. H. Temel Kuşuoğlu Sk No.45, Ankara, Turkey. Tel. +90.31.2466666-11156.

E-mail: ozlemozkankuscu@gmail.com

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References

1. Christiansen KJ, Devantier L, Pasgaard T, Benson TE, Petersen JJ, Kjærgaard T, et al. Tracheostomy healing time after decannulation. *Multidiscip Respir Med* 2022;17:822.
2. Stelfox HT, Crimi C, Berra L, Noto A, Schmidt U, Bigatello LM, et al. Determinants of tracheostomy decannulation: an international survey. *Crit Care* 2008;12:R26.
3. Stelfox HT, Hess DR, Schmidt UH. A North American survey of respiratory therapist and physician tracheostomy decannulation practices. *Respir Care* 2009;54:1658-64.
4. Freeman S. Care of adult patients with a temporary tracheostomy. *Nurs Stand* 2011;26:49-56.
5. Wynn M. The impact of infection on the four stages of acute wound healing: An overview. *Wounds UK* 2021;17:26-32.
6. Lew CCH, Yandell R, Fraser RJ, Chua AP, Chong MFF, Miller M. Association between malnutrition and clinical outcomes in the intensive care unit: a systematic review. *JPEN J Parenter Enteral Nutr* 2017;41:744-58.

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