

## Tilmelding af Foredrag

### Foredragets titel

Consequences of open versus closed tracheostomy immediately after decannulation

### Forfatter(e)

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### Afdeling/praksis

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### Uddannelsesniveau

Afdelingslæge, ph.d.

### Introduktion

Decannulation of tracheostomy tube creates an iatrogenic passage in the patient's upper airways. Current practice involves sealing the tracheostomy wound with a non-airtight occlusive bandage. This study aims to investigate the feasibility and impact of an intratracheal tracheostomy sealing, in attempt to normalize physiological airway conditions, hereby improving pulmonary function and voice quality after decannulation.

### Materiale/metode

Fifteen adult, tracheostomized patients at Department of Anaesthesiology and Intensive Care, Aarhus University Hospital, Aarhus, Denmark were included. A temporary, intratracheal, sealing was inserted after decannulation. Spirometry with measurement of forced vital capacity (FVC), forced expiratory volume in first second (FEV1), and peak expiratory flow (PEF) was performed as a measure of airway flow. Voice recordings were assessed using an equal appearing interval scale.

### Resultater

Mean FVC with 95% (CI) was 915 (633-1323) mL at baseline which increased to 1386 (1080-1777) mL after insertion of the sealing disc,  $P < .001$ . Mean FEV1 with 95% CI was 736 (505-1074) mL at baseline and increased to 958 (702-1307) mL,  $P < .001$ . Mean PEF with a 95% CI was 98.0 (65.5-146.6) at baseline and increased to 105.2 (73.8-150.0),  $P = .36$ . Voice quality increased from a mean value  $\pm$  standard deviation of  $2 \pm 1$  to  $4 \pm 1$ ,  $P < .001$ .

### Diskussion

This feasibility study showed that applying intratracheal tracheostomy sealing was simple and safe. Additionally, it led to immediate improvements in FVC, FEV1, and voice quality for decannulated patients.

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