

European Respiratory Society Annual Congress 2013

Abstract Number: 5192

Publication Number: P4919

Abstract Group: 2.1. Acute Critical Care

Keyword 1: Critically ill patients **Keyword 2:** Airway management **Keyword 3:** Mechanical ventilation

Title: Emergency percutaneous tracheotomy in failed intubation

Prof. Dr Bassem 32905 Beshey Bassem, Beshey@alexmed.edu.eg MD ¹, Prof. Dr Tamer 32906 Helmy Tamer.Helmy@alexmed.edu.eg MD ¹, Dr. Hany 32907 Asaad Hany.Asaad@alexmed.edu.eg MD ¹ and Prof. Dr Emad 32908 Ibrahim Emad.Ibrahim@alexmed.edu.eg MD ². ¹ Critical Care Medicine, Alexandria Faculty of Medicine, Alexandria, Egypt, 21521 and ² Chest Medicine, Alexandria Faculty of Medicine, Alexandria, Egypt, 21521 .

Body: Objective: Cricothyrotomy is the emergency surgical means of gaining access to the airways. However it holds a lot of problems to the patient and is only a temporary measure until a definitive airway is reached. Griggs' forceps technique for elective bedside percutaneous dilational tracheotomy (PDT) is safe, fast, and carries fewer complications in expert hands. This study aimed at comparing between emergency cricothyrotomy and emergency PDT in patients with failed intubation. Design: a comparative double blind randomized study. Setting emergency room of Alexandria main University Hospitals. Patients: This study was conducted on failed airway patients according to the failed airway management algorithm. Total number of patients in need for intubation was 3785. Those with difficult airway were 365 patients (9.64%), 196 of them were successfully intubated soon and so were excluded from the study. 169 failed to intubate, and to ventilate patients. Methods: they were serially randomized into group I (85 patients): percutaneous cricothyrotomy and group II (85 patients): PDT using Griggs' forceps technique. Results: success rate was 95.3% in group I and 97.6% in group II (P=0.452). Procedure duration (in minutes) was 1.85±0.36 in group I versus 1.46±0.31 in group II (P=0.106). Lung atelectasis occurred to 8.2% of patients in group I only (P=0.011). Vocal cord injury occurred to 4.7% of patients in group I versus 1.2% in group II (P=0.074). Subglottic stenosis was recorded in 5.88% of patients in group I versus 1.2% in group II (P=0.039(P=0.452)). Conclusion: emergency PDT is feasible and safe in expert and trained hands in patients with failed emergency intubation.