

ORIGINAL ARTICLE

Airway Management via Insertion of Laryngeal Tube versus Combitube into a Manikin by Emergency Medicine Residents

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Abstract

Introduction: Laryngeal tube (LT) and combitube (CT) are among devices used for establishing the airway in patients. This study was done with the purpose of comparing the success rate and duration of intubation when emergency medicine (EM) residents used LT or CT. **Methods:** In this cross sectional study, carried out in Tabriz, Iran, in 2016, all EM residents of Tabriz University of Medical Sciences were included. Number of attempts and time required for successful intubation via LT and CT and airway management were evaluated for each participant using a manikin. **Results:** A total of 52 EM residents in three groups (First Year: 17, Second Year: 16, and Third Year: 19) with the mean age of 36.24 ± 9.21 years participated in this study (61.53% male). All the residents were successful in inserting LT and CT on the first attempt. Mean duration of CT and LT placement in third year residents (7.5 ± 2.01 , 6.39 ± 1.21 , respectively) was significantly shorter than second year residents (9.25 ± 2.87 , 8.06 ± 2.24 , respectively) and first year residents (13.06 ± 3.54 , 11.76 ± 2.43 , respectively). Mean duration of CT placement (9.9 ± 3.15) was significantly greater than LT placement (8.71 ± 2.88) ($p < 0.05$). **Conclusion:** Based on the results obtained in the present study, EM residents were successful in LT and CT placement into a manikin on the first attempt. However, time required for placement of LT was shorter than CT.

Key words: Airway management; intubation; emergency medicine; manikins
