



# Impact of supraglottic airways and endotracheal intubation on outcomes following witnessed out-of-hospital cardiac arrest

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# Outline of Proposal

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- ▶ Aims/Hypotheses
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# Introduction

- ▶ The benefits of advanced airway management including a supraglottic airway (SGA) and endotracheal intubation (ETI) for out-of-hospital cardiac arrest (OHCA) remains to be determined.

# Aims/Hypotheses



- ▶ The purpose of this study is to evaluate the effects of advanced airway placement and specialized training of advanced airway (ETI certified etc.) on survival in witnessed OHCA.

# Methods



- ▶ Design: Population-based cohort study (PAROS database)
  
- ▶ Survival outcomes were compared between those patients who received an endotracheal intubation (ETI group) versus those who received a supraglottic airway (SGA group).
  - Primary outcome:
    - 1-month favorable survival (CPC1 or 2)
  - Secondary outcome:
    - Return of spontaneous circulation on the scene
  
- ▶ Multivariable logistic regression controlling for age/ gender/ bystander CPR/ location/ initial rhythm (VF) / EMTs' status/ ETI/ EMS care interval (response time)

# Sub-analysis



- To compare advanced airway management systems among sites
- To compare the survival outcomes of attempted advanced airway cases among sites
- To compare advanced airway management systems to survival outcomes of attempted advanced airway cases

# My Proposal



To add response time of the final placement time of Advanced airway in the PAROS taxonomy

To add classification of Advanced airway equipment [Endotracheal tube, supraglottic airway (Combi-tube, LMA, LMT etc.)].

To add who attempted that advanced airway (EMT-B, EMT-I, EMT-P, ETI certified EMT etc.).

# Significance



- ▶ This study can determine the efficacy of the advanced airway management and special training of advanced airway in the pre-hospital setting.