Top Ten Things To Know

Time to Invasive Airway and Resuscitation Outcomes After In-hospital Cardiopulmonary Arrest (IHCA)

1. Placing an invasive airway during IHCA has been a priority intervention for advanced life support providers.

2. Invasive airways include endotracheal tube, laryngeal mask airway, tracheostomy, and cricothyrotomy.

3. Invasive airway placement during IHCA has the potential to interfere with other concurrent interventions such as uninterrupted chest compressions. The purpose of this study was to evaluate the association between time to invasive airway (TTIA) placement and patient outcomes after IHCA.

4. This NRCPR study population consisted of 25,006 adult IHCA patients receiving an invasive airway after IHCA.

5. The primary outcomes were
   a. Return of spontaneous circulation (ROSC)
   b. 24-hour survival
   c. Survival to discharge

6. Mean time to invasive airway placement was 5.9 minutes (43.8% <5 min and 56.2% => 5 min).

7. The patient outcomes for this study were
   a) ROSC 50.3%
   b) 24-hour survival 33.7%
   c) Survival to discharge (SDC) 15.3%

8. In IHCA events with an early (< 5 minutes) vs. late (> 5 minutes) TTIA, the outcomes were
   a) ROSC Early TTIA had no association
   b) 24-hour survival Early TTIA had better odds of 24-hour survival
   c) Survival to discharge Early TTIA could not be determined to have an impact

9. Early invasive airway management versus non-invasive bag-mask ventilation alone may not improve outcomes during the early stages of IHCA.

10. Further studies focusing on sequence of interventions are needed to determine optimum order of CPR steps that have the most positive impact on survival.

*Get With The Guidelines®-Resuscitation*, formerly NRCPR, is a performance improvement tool that can be used to identify and monitor key process variables and patient outcomes for in-hospital cardiac arrest.

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