

AIRWAY MANAGEMENT IN PATIENTS WITH OUT-OF-HOSPITAL CARDIAC ARREST: TRACHEAL INTUBATION VS. BAG-MASK VENTILATION.

A European, multicenter, randomized controlled trial

CAAM TIAL

Frédéric Adnet

Samu 93 – Urgences – Inserm U942

Avicenne University Hospital

93000 Bobigny, France

Trial funded by French Ministry of Health (PHRC 2013)

Declaration of interest

- I have nothing to declare

Declaration of Interest

- None

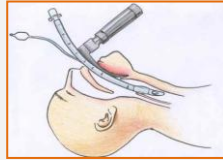
Background

- **Benefit of endotracheal intubation (ETI) during CPR is unclear.**
- **Observational studies suggest Bag-Mask ventilation (BMV) associated with better survival than is ETI**
- **Quasi-randomized trial in children in US suggest no significant difference in survival or neurologic outcome with ETI vs. BMV**

Out-of-hospital cardiac arrest patient
Meets inclusion criteria, no exclusion criteria

Resuscitation attempted

Randomize



Control group:
Tracheal intubation

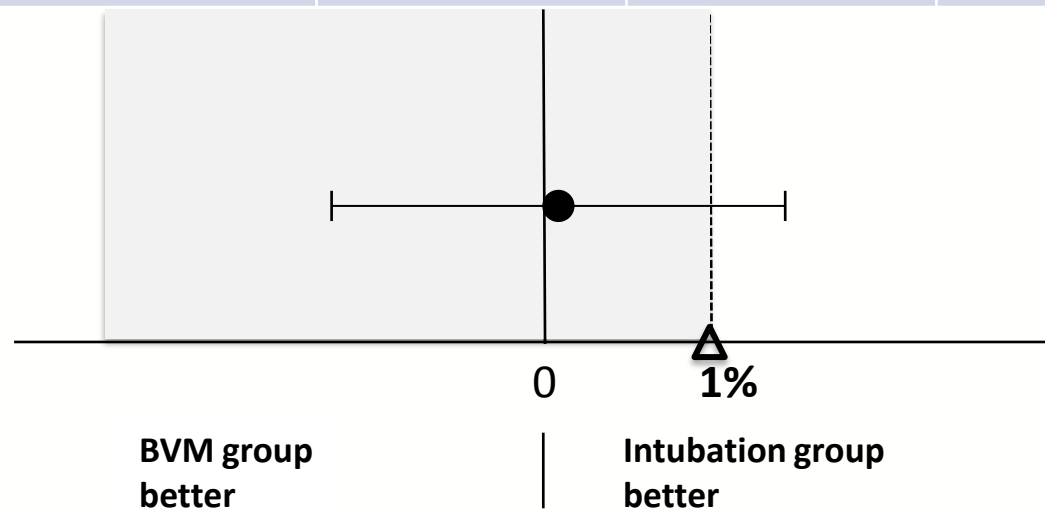


Intervention group:
Bag-mask ventilation

Primary Endpoint

Survival at day 28 with Cerebral Performance
Categories of 2 or less

Primary outcome	BMV (N=1018)	TI (N=1022)	Difference	[95% CI]
Survival with good neurological status at day 28	N= 42 (4.2%)	N= 43 (4.3%)	0.11	[-1.64; 1.87]



Safety

Item	BVM group	ETI group	p
BVM or ETI failure – no. (%)	64 (6.3)	26 (2.5)	<0.0001
Aspiration or regurgitation of gastric content	152 (14.9)	79 (7.7)	<0.0001

Conclusions

- **Our trial was inconclusive regarding the demonstration of non-inferiority of BMV compared with TI for airway management during CPR in OHCA patients**
- **However, this randomized study did not confirm superiority of BVM reported in observational studies**
- **On the other hand, BMV is associated with increased complications and difficulty.**