Dead Ringers:
Impact of an On-Scene DNR and Termination Policy

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Survival rate for OOHCA remains poor

Multiple studies have shown that failure to achieve ROSC in the field is uniformly predictive of poor outcome

Varying guidelines exist to terminate resuscitative efforts in the field

Transport of OOHCA pts with ongoing CPR remains a common practice in many EMS systems
Why is this a problem?

- Cost
- Manpower
- False sense of hope for families
- Tying up hospital beds
- Unnecessary code 3 driving
Should we be transporting patients with CPR in Progress?
EVALUATION OF PRACTICE

- 2005 Los Angeles study found that 9% of OOHCA pts had resuscitative efforts terminated in the field.

- Wide variability amongst different base stations (range 0-37%).

- Overall survival rate 1.5%.

- Survival from witnessed VF = 6.1%.


What is the problem?

- Packaging a cardiac arrest pt necessitates prolonged interruptions in chest compressions
- Increased chance of ETT and IV dislodgement
- Improper chest compression and ventilation rates
- Increased hazards for providers performing CPR in the back of a moving ambulance
- Studies have shown that uninterrupted chest compressions is key variable for ROSC
To determine the impact of new protocols, training and a QI program to reduce the number of hospital transports of OOHCA pts who fail to achieve ROSC in the field.
NEW PROTOCOLS AND TRAINING

- Expectation is to remain on scene for at least 20 minutes for OOHCA pts
- Individual feedback to paramedics who contacted OLMC while en route to hospital with ongoing CPR
- Introduction of digital, waveform capnography for both ETT confirmation and use as a prognostic tool
Training provided for all prehospital providers and OLMC individuals (base stations)

New BCLS/ACLS guidelines emphasizing uninterrupted chest compressions and minimizing overventilation

Continuous QI program measuring ongoing data with individual feedback

Prospective evaluation for 1 year (2007) compared with our previously published data (2000-2001)
Results

- ROSC ↑↑ from 6.5% to 25.3%
- Rate of termination of resuscitative efforts in the field ↑↑ from 9% to 28%
Presenting Rhythm

- Incidence of VF = 19.4%
- Incidence of VF (’00-’01) = 14.7%
**Conclusions**

- Hospital transport for most OOHCA pts who fail to achieve ROSC in the field is futile.
- This common practice is associated with tremendous costs.
- Various clinical prediction rules exist for termination of resuscitative efforts in the field.
- Application of new guidelines with appropriate training and an active QI program can have a significant impact on performance.