



2015 Lifesaving Conference



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Airway Management During CPR: The do's and don'ts

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Management of the drowned victim

- CPR
- Oxygen
- Suction
- Advanced medical Care

Insulate and Evacuate

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Decisions-When to start CPR?

- Knowing what to do is the easy part
- Making the decision to do what you know you need to do is the hard part
- www.youtube.com/watch?v=88uCTEmuuGI
- www.youtube.com/watch?v=KXjEnTHMUow

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Challenges in pre-hospital airway management



- Reluctance of rescuer to have direct contact with patient
- Airway positioning/clenching
- Regurgitation
- Aspiration
- Stiff lungs
- Co-ordination with chest compressions
- Ventilation during transport

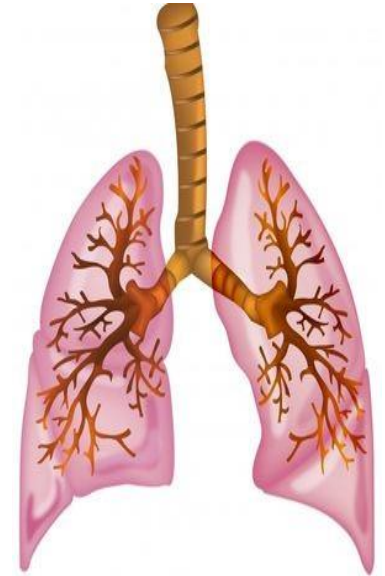
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Challenges in drowned patient

- Regurgitation
 - fluid/vomit in the airway
 - yuk factor
- Stiff lungs – difficult to ventilate
 - laryngospasm
 - due to inhaled water and loss of surfactant
 - high lung resistance
 - preferential movement of air into stomach
 - different ventilation requirements to optimize airway recruitment



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Options for Airway Management

- Mouth to mouth/nose
 - First response option
 - In water rescue
- Mouth to mask
 - Can be used with oxygen therapy
- Oro-pharyngeal (Guedel) airways
- Bag valve mask ventilation
- Supraglottic airway devices
- Intubation
- Suction devices

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LSV resuscitation training BVMV

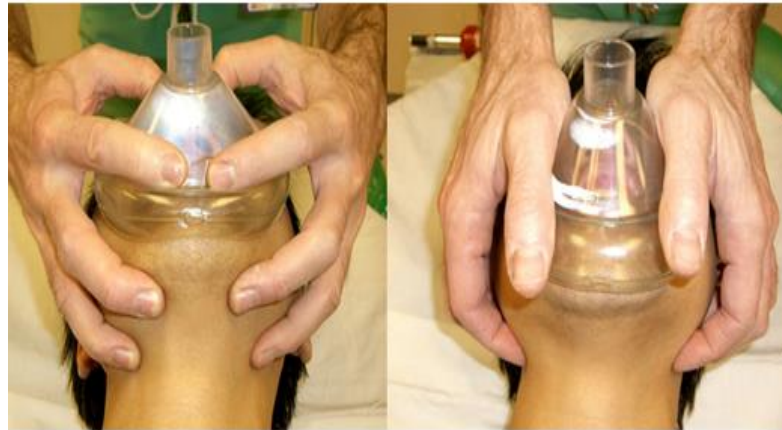
- Bag valve mask ventilation
 - Two man technique to operate the unit
 - Third person to do the chest compressions



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LSV resuscitation training BVMV

- Difficulties arise in scenarios with one or two rescuers.
 - Requires a resuscitation team
 - One handed technique not an option
 - Failure to ventilate – adequate only ~50% time
 - Regurgitation



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Do's



- Empower rescuers to start CPR without fear of harm
- Trust your instinct that victims looks dead
- Roll victim onto the side if fluid/debris is seen in airway on initial inspection
- Aim for continuous CPR with minimal interruptions
- Continually assess efficacy of ventilation – is chest rising/falling
- Clear airway if vomit or particulate matter is present – then reassess

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Don't's



- Don't EVER use pulse checks in CPR decision making
- Don't wait for airway equipment before starting CPR
- Don't routinely roll drowned victim onto their side to clear the airway
- Don't use victim's own fingers to clear mouth
- Don't force clenched jaw open with your fingers
- Don't interrupt chest compressions to insert oral airway or suction
- Don't interrupt chest compressions to clear an airway that keeps re-accumulating clear fluid

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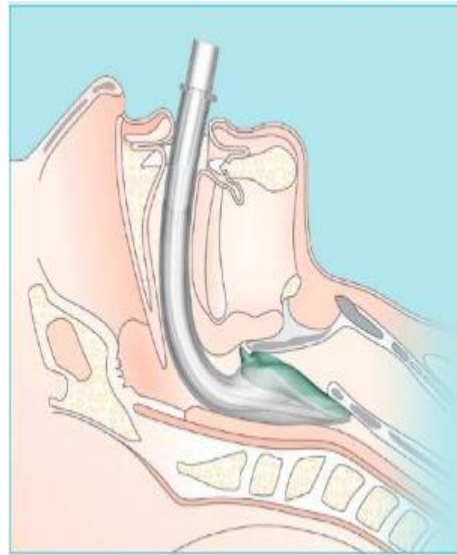


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LSV supraglottic airway trial



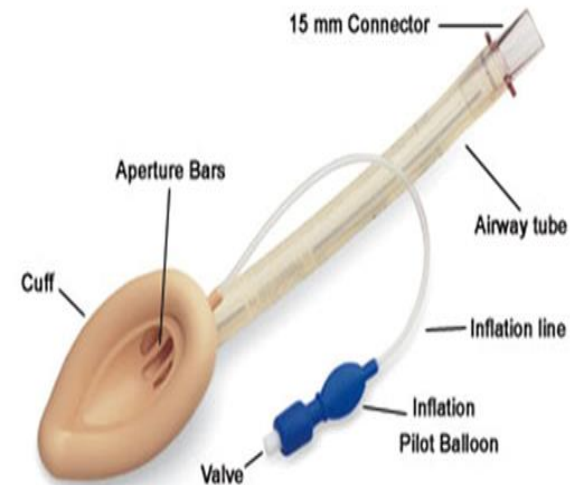
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Supraglottic airway devices

- Definition
 - Tube with a cuff, inserted blindly into the pharynx
 - Allows ventilation to be directed over the glottis
- Role in airway management
 - anaesthesia
 - wards
 - ambulance services
 - field medicine



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SGA use by first responders

- Possible advantages
 - Low cost, single use
 - Training manikins
 - Stays in place
 - Suitable for teams of two
 - Decreased hands off chest
 - Decreased risk of regurgitation and aspiration
- Likely disadvantages
 - Delayed time to first breath
 - Insertion failure rate
 - Reluctance to use perceived invasion device
 - Ongoing training requirements
 - Airway leak



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