Airway Management Skill Station

Key learning outcomes
By the end of this session, candidates should be able to:
- show competency and confidence in the principles of establishing and maintaining a patent airway and providing adequate ventilation in an airway training manikin
- understand the complications and contraindications for each of the techniques taught

Instructor Information
Candidates should be advised that the skills taught in this section are subject to continuous assessment. Candidates must demonstrate competency in airway management throughout the course.

The instructor should:
- assess the ability of all candidates to maintain an airway achieve effective ventilation of a manikin using bag-mask.
- (Optional) assess the ability of all candidates to achieve effective ventilation of a manikin using achieve effective ventilation of a manikin using mouth-to-mouth, pocket mask or barrier device. – GPs may require expired air ventilation for RACGP CPD
- enable all candidates to receive instruction in and the opportunity to practice insertion of a supraglottic airway device (e.g. laryngeal mask airway (LMA) or i-gel) and ventilate a manikin using the device (This is optional on the ALS1 course)

This skill station is divided into two sections; the first is compulsory for all candidates.
1. All candidates must receive practical instruction and undergo continuous assessment of their competency in the following:
   - basic airway opening manoeuvres
     - head tilt/chin lift
     - jaw thrust
   - insertion of airway adjuncts
     - oropharyngeal (Guedel) airway
     - nasopharyngeal airway
   - use of suction
   - ventilation using a self-inflating bag-mask with supplementary oxygen and reservoir
     - two person technique
   - Discuss/Demonstrate - Optional assessments
     o mouth-to-mouth ventilation
     o ventilation using a pocket mask with expired air +/- supplementary oxygen

2. Advanced Airway - supraglottic airway insertion is an optional skill on the ALS1 course. Candidates must receive instruction in and be allowed to practice:
   - insertion of and ventilation with a supraglottic airway (e.g. LMA, i-gel).

Completion of a continuous assessment form is unnecessary for candidates who learn and demonstrate the above skills successfully. A form should be completed for those candidates who need remedial support and for those who do not meet the outcome-based criteria for airway management. This will provide a definite record of progress.
Instructor Information
The practical skills of airway management and ventilation should be taught around a simple scenario. In order not to confuse the candidates, this is best achieved by simulating a patient with airway and breathing problems, or a respiratory arrest, thereby eliminating the need for chest compressions. The scenario can be broken down into four elements:

Initial approach
- airway assessment
- basic airway opening manoeuvres
Discuss ventilation with expired air via a pocket mask (optional to demonstrate/assess candidates)
Discuss confirmation of ventilation using expired air (optional to demonstrate/assess candidates)

Arrival of basic adjuncts
- correct use of suction
- correct sizing and insertion of oro- and nasopharyngeal airway
- addition of supplementary oxygen to pocket mask (optional)
- confirmation of ventilation (e.g. chest rise and fall)

Arrival of additional equipment
- assembly of self-inflating bag-mask, reservoir and supplementary oxygen
- ventilation using two-person technique
- confirmation of ventilation (e.g. chest rise and fall)

Advanced Airway - Supraglottic airway (OPTIONAL)
When all candidates have been assessed on these three elements, the Instructor should then introduce airway management using a supraglottic airway. This can be achieved by expanding the scenario in such a way that ventilation is becoming inadequate. For example for an LMA this will require:
- sizing and inspecting the LMA
- checking cuff integrity and lubricating
- correctly inserting and inflating the cuff (if appropriate)
- confirming ventilation using self-inflating bag, reservoir and supplementary oxygen
- discussing the role of waveform capnography

Allow candidates to ask questions and reflect on the session content before terminating the session with a succinct review of all the major points covered.

Instructor Information - points for further discussion/further demonstration
- mouth-to-mouth ventilation including limited role in clinical settings
- producing a visible chest rise with ventilation
- avoiding hyperventilation (10 breaths per minute)
- equipment used for tracheal intubation
- one versus two person bag mask ventilation
- supplemental oxygen at highest inspired concentration possible during CPR
- oxygen therapy guided by pulse oximetry in patients with a circulation.

Summary
- basic airway opening and ventilation techniques
- open airway, if patient not breathing start ventilation
- give oxygen