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Introduction

This presentation has been designed to compliment the CPR lead lecture and seminar presentations within the FACT theme, and is based on the current guidelines from the Resuscitation Council (Resuscitation Council, 2005).

The correct procedure for assessing a collapsed patient and performing CPR will be reviewed.

DRsABC is a useful acronym to help you remember each stage in sequence:

Danger

Response

Shout for help

Airway

Breathing

Circulation

Danger

Check for danger to either yourself or the patient, to ensure it is safe to approach.

Danger within the community may include:

Furniture, pets, utilities

Danger within the hospital setting may include:

Bedside furniture, jugs of water, vase of flowers, visitors, cables, spillages

Response



Shake and shout

Shout for help



'Can I have a hand over here <u>now</u> please!'

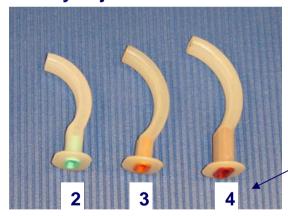
As you have an unresponsive patient, you need some help.

Airway



Open the airway with a head tilt, chin lift manoeuvre **Look** for any visible obstructions

Airway adjunct



The oropharyngeal airway may be used to help maintain the airway

Available in a variety of sizes



An estimate of the size required may be obtained by selecting an airway with a length corresponding to the vertical distance between the ear lobe and the corner of the mouth. Alternatively, the distance from the middle of the patients front teeth to the angle of the jaw.



Look, Listen and Feel for Breathing



Look, listen and feel for breathing for 10 seconds, whilst maintaining the head tilt / chin lift

Breathing? Yes



If the patient is unresponsive, but is breathing and has a pulse, they need to be placed in the recovery position

No Breathing



If the patient is not breathing, then the resuscitation team or an ambulance is called

Circulation



Locate the carotid pulse and feel for 10 seconds



Not Breathing, Has Pulse (Respiratory Arrest)

Ventilate the patient's lungs and check for a pulse every 10 breaths (every minute)

Ventilations may be achieved by using:

- Mouth to mouth ventilations
- Pocket mask +/- oxygen
- Bag-valve-mask +/- oxygen
- Endotracheal tube (ET tube)
- Laryngeal mask airway (Used infrequently during cardiac arrest. Mainly used in theatres.)

Mouth to Mouth Ventilations



Ensure you open airway with head tilt and chin lift. Pinch the soft part of the patients nose closed



Take a normal breath and place your lips around the mouth, making sure you have a good seal.

Blow steadily into the mouth whilst watching for the chest to rise and fall to ensure an effective breath

Ventilation with Pocket Mask



A pocket mask may be used with or without oxygen.



Ventilation with Bag-Valve-Mask



The two person technique is preferable. One person holds the face mask in place whilst maintaining the airway, whist an assistant squeezes the bag.

Ventilation with Endo Tracheal Tube

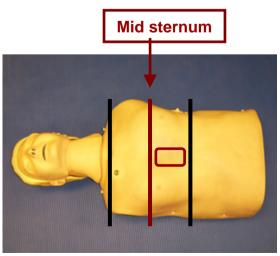


The Endotracheal (ET) tube is held in place with a tube tie. The mask is removed and the ET tube is attached to the bag with a catheter mount.

Not Breathing, No Pulse?

Commence CPR at a ratio of: 30 chest compressions: 2 ventilations

Chest Compressions





The heel of the hand is placed in the middle of the lower half of the sternum, indicated by the rectangle on the picture on the left



www.cetl.org.uk



Chest Compressions – How long?

Continue CPR until:

The patient shows signs of life

The resuscitation team / ambulance arrives and tells you to stop

You are physically exhausted

To see video of chest compressions go to CPR tutorial at www.cetl.org.uk/learning/tutorials.html

Independent study

By the end of your nursing programme, you should be able to demonstrate the ability to participate and communicate as a team member in simulated advanced life support.

It would therefore be useful to familiarise yourself with the following:

The ALS algorithm

Drugs used in a cardiac arrest

Cardiac arrest rhythms

Test your CPR knowledge: http://www.cetl.org.uk/learning/cpr-quiz.html

References and further reading

Resuscitation Council (2005) guidelines which can be found at www.resus.org.uk

Hand H & Banks A (2004) The contents of the resuscitation trolley. **Nursing Standard** 14(8) 43-52

Jevon (2006) Resuscitation skills – part 1: the recovery position Nursing Times 102(25) 23-9

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Jevon P (2008) Maintaining an airway: Nursing Standard 22(26) pp35-7

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