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
Cardio Pulmonary Resuscitation (CPR)

Shout for help

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.
Cardio Pulmonary Resuscitation (CPR)

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.
Cardio Pulmonary Resuscitation (CPR)

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.
Cardio Pulmonary Resuscitation (CPR)

Ventilation with Bag-Valve-Mask

The two person technique is preferable. One person holds the face mask in place whilst maintaining the airway, whilst 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.
Cardio Pulmonary Resuscitation (CPR)

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


