The Prince Charles Hospital / Intensive Care Unit (ICU)

# **Procedures**

# Angiogram

An angiogram is completed in the x-ray or cardiology department. A dye (contrast) is injected into a blood vessel and x-rays are taken to visualise specific areas of the body (e.g. cerebral angiogram visualises the vessels in the brain).

# Arterial blood gases (ABGs)

A blood test taken from a catheter placed in an artery (arterial line). It gives information on the levels of oxygen and carbon dioxide in the blood, as well as other results on the patient's status.

# **Arterial line**

A small catheter is inserted into an artery in the patient's arm or leg. It continuously monitors the patient's blood pressure and allows staff to take blood for testing.

# **Bronchoscopy**

A flexible tube (bronchoscope) is inserted through the patient's breathing tube to inspect the airways, remove secretions and take specimens.

# **Central line**

This is a fine catheter that is inserted into a large vein in the neck, upper chest or groin. It has multiple channels at each end to deliver numerous fluids and drugs.

# **Computed tomography (CT)**

Also known as a CAT scan, these are specific x-ray tests that produce cross-sectional images of the body using x-rays and a computer.

# **Dialysis**

The patient is connected to a machine via a catheter and tubing that allows the blood to be filtered to remove toxic substances and fluid. This is necessary when the kidneys have failed or are not working effectively during the patient's illness. Usually it is a temporary measure.

# Echocardiography/ultrasound

This is a test that uses sound waves to create a picture of the heart and various organs and structures in the body. It can be done non-invasively through the skin or through the oesophagus (food-pipe) for the heart. This information may assist in finding defects with organ functioning or measure heart functioning.

# Extracorporeal membrane oxygenation (ECMO)

This is a device that supports patients whose health and / or lungs are failing despite all other treatment.

# **Electrocardiograph (ECG)**

This is a device that records the electrical activity of the heart.

# Electroencephalography (EEG)



This is a procedure where a number of small electrodes are placed on the patient's head to record the electrical activity of the brain. This test may assist in finding out if there are seizures not evident on examination. It is a non-invasive procedure.

# Endotracheal tube (ETT)

A tube inserted through the patient's mouth or nose to deliver air and oxygen to the patient's lungs when they are unable to breathe on their own. It is connected to a ventilator or respiratory support.

# Intercostal catheter (ICC)

A tube attached to a drainage container is inserted into the chest to drain fluid or air from around the lung.

# Intra-aortic balloon pump

A device that can provide temporary support to a weak heart whilst it recovers or whilst further suitable treatment measures are explored. It is also known as balloon pump.

#### Left ventricular assist device

A device that can temporarily help support a patient's failing heart while their heart recovers or until the patient receives a heart transplant if deemed suitable. It is also known as artificial heart or a 'VAD'.

# Magnetic resonance imaging (MRI)

It is a special scan used for taking pictures of specific areas in the body. It is able to take pictures of body tissues that do not show up on x-ray.

#### **Monitor**

Looks like a computer screen. It displays some of the body's functional parameters by continuous waveforms and/ or numbers. The screen can display a patient's heart rate, blood pressure, oxygen levels and temperature.

# Nasogastric or orogastric tube

A tube inserted through the nose or mouth that runs down the back of the throat in the food pipe (oesophagus) to the stomach. It is used to deliver nutrition to the patient or to drain stomach contents, when they are severely unwell e.g. unconscious or needing to be kept asleep on a ventilator.

# Pacing

A pacemaker is a device that can help a patient's heart to beat at a desired rate, most commonly used after cardiac surgery. These devices are usually temporary but may be permanent, where required.

# Patient controlled analgesia (PCA).

An infusion pump with a remote button that allows a patient to take painkillers and control their own pain relief.

#### **PICC**

Peripherally inserted central catheter. These are similar to a central line that may be left in for longer periods of time than intravenous drips.

# Sequential compression devices (SCUDS)

These are air filled stockings that are attached to a small machine that inflate and deflate to help move the blood in the patient's legs and reduce the risk of forming unwanted clots.

# Suctioning

A long thin tube is inserted into the patient's breathing tube (ETT) to clear away any sputum or mucous from the lungs. This is done regularly and may make the patient cough.

# **Tracheostomy**

A tube inserted into the patient's airway via their neck. It is usually inserted after the patient has had an ETT for a period of time and is still requiring support for breathing or secretion management.

# Urinary catheter

A catheter placed inside the patient's bladder and connected to a drainage bag to accurately measure urine output.

### Vas-cath

A catheter that is inserted into a large vein with two openings at each end. It is generally used if the patient requires dialysis.

# Ventilator

A machine that temporarily assists or completely takes over a patient's breathing when they are not capable of doing it on their own due to illness.