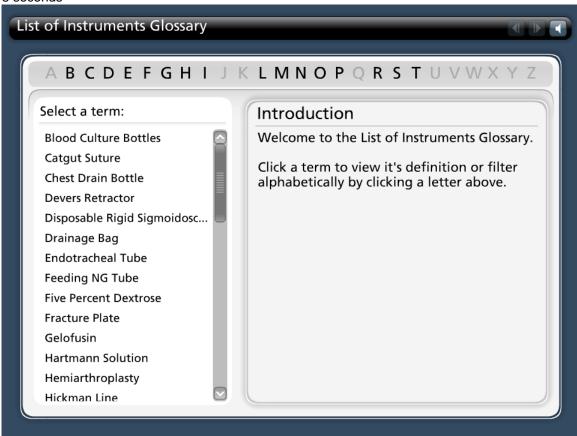
List of Instruments Glossary

Items: 43 Terms (Including Introduction)

Introduction

5 seconds



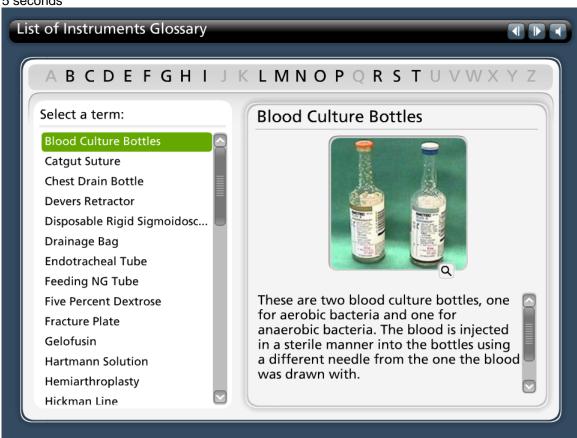
Entry Text

Welcome to the List of Instruments Glossary.

Click a term to view it's definition or filter alphabetically by clicking a letter above.

Blood Culture Bottles

5 seconds

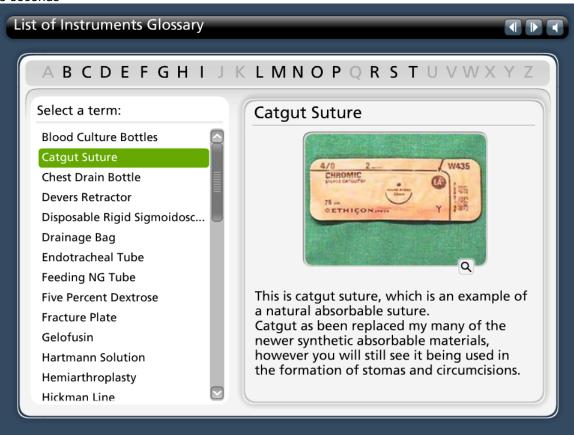


Entry Text

These are two blood culture bottles, one for aerobic bacteria and one for anaerobic bacteria. The blood is injected in a sterile manner into the bottles using a different needle from the one the blood was drawn with. Blood cultures are a useful investigation in a case of pyrexia or suspected systemic sepsis.

Catgut Suture

5 seconds

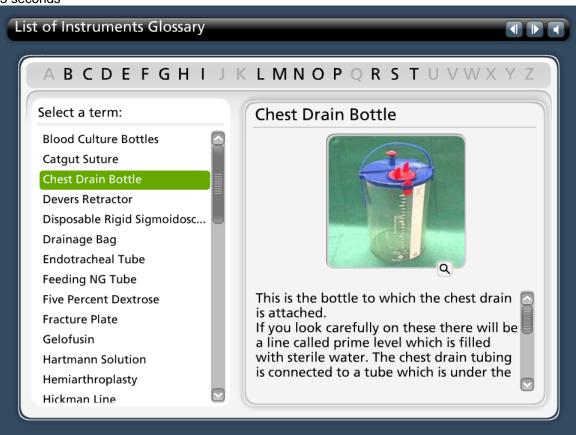


Entry Text

This is catgut suture, which is an example of a natural absorbable suture. Catgut as been replaced my many of the newer synthetic absorbable materials, however you will still see it being used in the formation of stomas and circumcisions.

Chest Drain Bottle

5 seconds



Entry Text

This is the bottle to which the chest drain is attached.

If you look carefully on these there will be a line called prime level which is filled with sterile water. The chest drain tubing is connected to a tube which is under the sterile water and therefore acts as a water seal.

After a chest drain has been inserted you can see bubbling in the water as the air leaves the pleural space. The chest drain bottle can also be used to collected blood, fluid and pus from the pleural space. The system can be driven by attaching suction to the top of the bottle making it an example of a active closed drainage system.

Devers Retractor

5 seconds



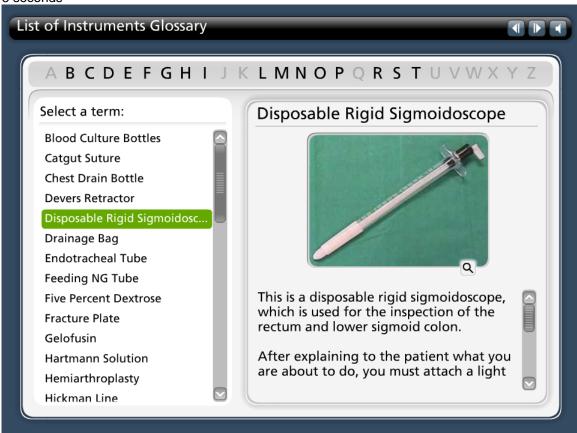
Entry Text

This is a type of retractor which is used in open abdominal surgery to allow the surgeon to operate.

There are different sizes and types of retractors available, you may frequently be asked to use one during you clinical training when you are assisting in theatre.

Disposable Rigid Sigmoidoscope

5 seconds



Entry Text

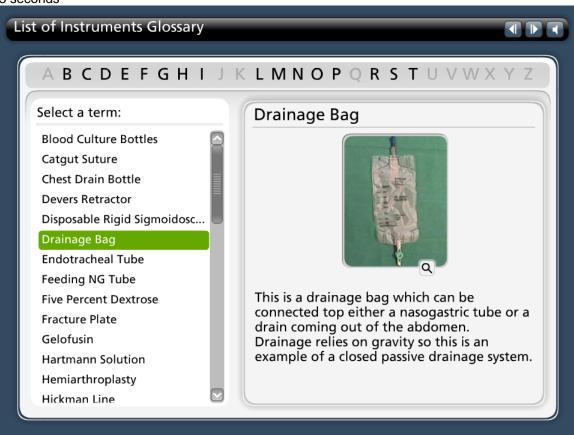
This is a disposable rigid sigmoidoscope, which is used for the inspection of the rectum and lower sigmoid colon.

After explaining to the patient what you are about to do, you must attach a light source and a air pumping device. The patient is placed in the left lateral position and a digital rectal examination is performed. The sigmoidoscope is then lubricated with jelly and inserted pointing towards the umbilicus. Air is pumped into the rectum to allow you see the direction of the rectal lumen.

Biopsies can also be taken of rectal mucosa through the sigmoidoscope e.g. in a case of ulcerative colitis.

Drainage Bag

5 seconds

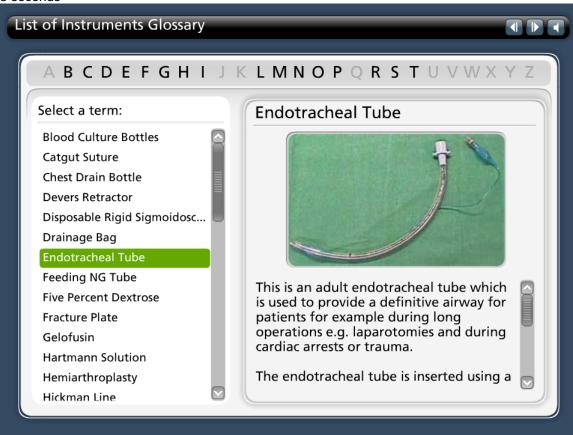


Entry Text

This is a drainage bag which can be connected top either a nasogastric tube or a drain coming out of the abdomen. Drainage relies on gravity so this is an example of a closed passive drainage system.

Endotracheal Tube

5 seconds



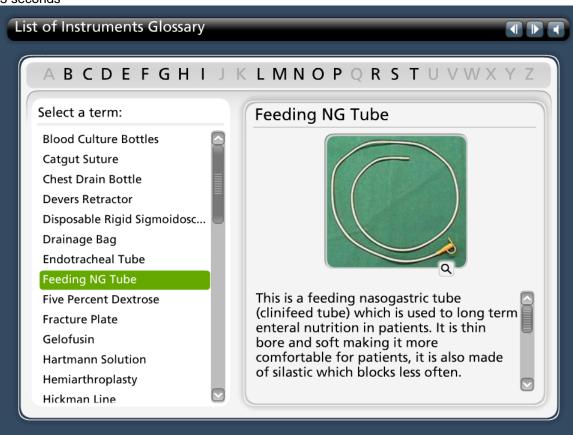
Entry Text

This is an adult endotracheal tube which is used to provide a definitive airway for patients for example during long operations e.g. laparotomies and during cardiac arrests or trauma.

The endotracheal tube is inserted using a laryngoscope, through the laryngeal folds. The end of the tube should lie just above the carina to allow ventilation of both lungs. After inserting the tube a balloon at the end of the tube is inflated with air through the blue side port. Position of the tube is checked by looking for symmetrical rising of the chest on ventilation breath sounds bilaterally and no gurgling over the epigastrium indicating oesophageal intubation. The tube is then tied into place.

Feeding NG Tube

5 seconds



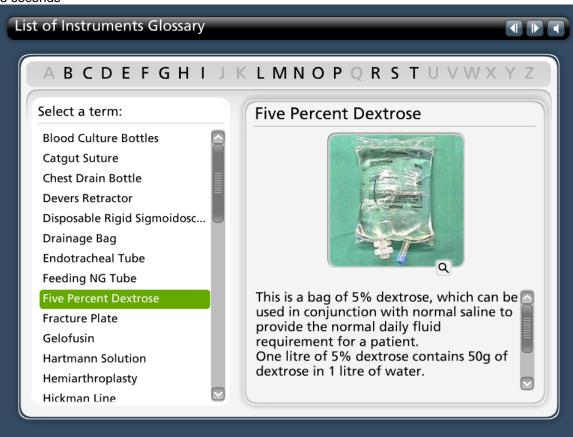
Entry Text

This is a feeding nasogastric tube (clinifeed tube) which is used to long term enteral nutrition in patients. It is thin bore and soft making it more comfortable for patients, it is also made of silastic which blocks less often.

After explaining to the patient what you are about to do the tube is inserted into the nostril after it has been lubricated. These tubes come with a wire inside them to aid their introduction, you advance the tube as the patient swallows. Correct position of the tube is checked by x-raying for the wire. When you are happy with the position of the tube the wire is removed and the feed attached in a sterile manner.

Five Percent Dextrose

5 seconds

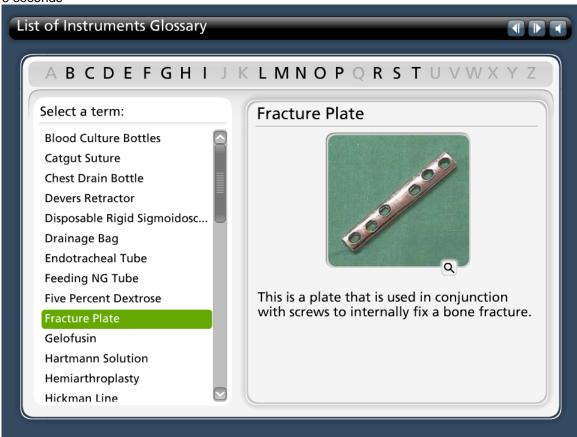


Entry Text

This is a bag of 5% dextrose, which can be used in conjunction with normal saline to provide the normal daily fluid requirement for a patient. One litre of 5% dextrose contains 50g of dextrose in 1 litre of water. It should be remembered that because the sugar in this fluid is metabolised to carbon dioxide and water you are essentially giving them water.

Fracture Plate

5 seconds

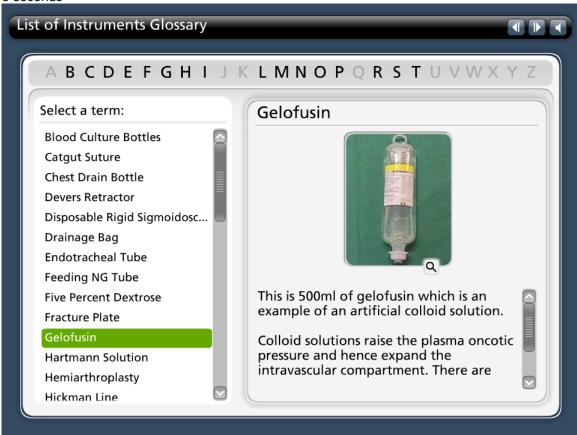


Entry Text

This is a plate that is used in conjunction with screws to internally fix a bone fracture.

Gelofusin

5 seconds



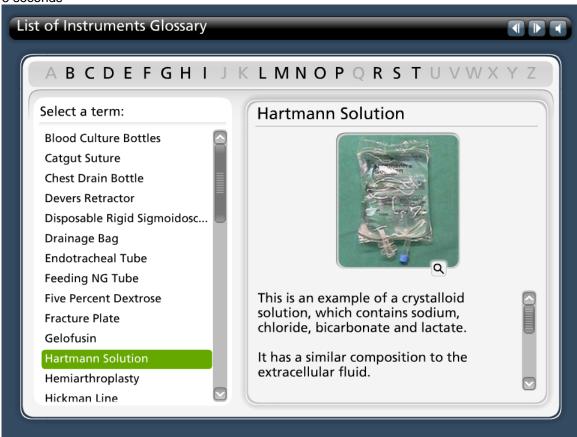
Entry Text

This is 500ml of gelofusin which is an example of an artificial colloid solution.

Colloid solutions raise the plasma oncotic pressure and hence expand the intravascular compartment. There are other colloids and some available are natural e.g. albumin and blood. Colloids are useful in cases of shock e.g. due to sepsis or hypovolaemia.

Hartmann Solution

5 seconds



Entry Text

This is an example of a crystalloid solution, which contains sodium, chloride, bicarbonate and lactate.

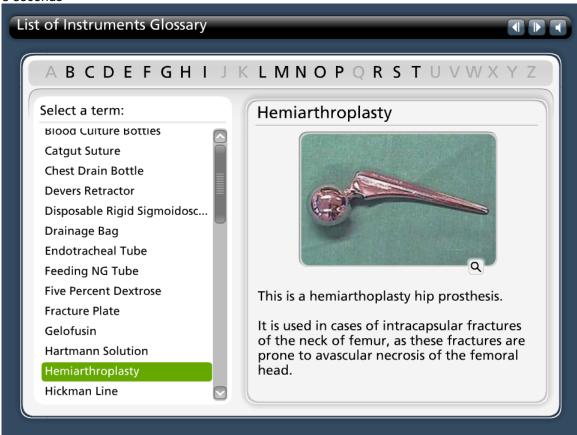
It has a similar composition to the extracellular fluid.

It can be used to provide the normal daily fluid requirement of a patient or to supplement the patient for additional loses.

Hartmann's solution is a favorite solution of anaesthetists and is the fluid advocated to be given initially in trauma in the Advanced Trauma and Life Support (ATLS) guidelines.

Hemiarthroplasty

5 seconds



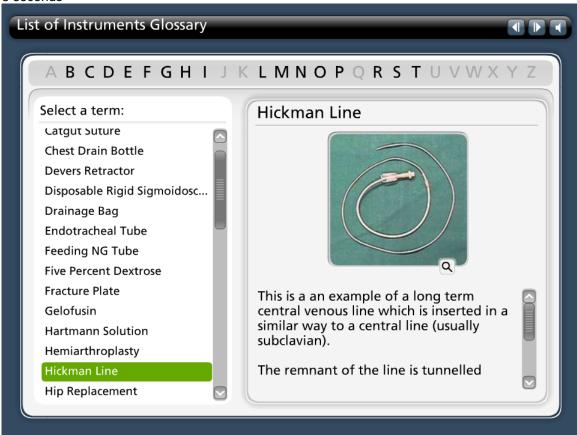
Entry Text

This is a hemiarthoplasty hip prosthesis.

It is used in cases of intracapsular fractures of the neck of femur, as these fractures are prone to avascular necrosis of the femoral head.

Hickman Line

5 seconds



Entry Text

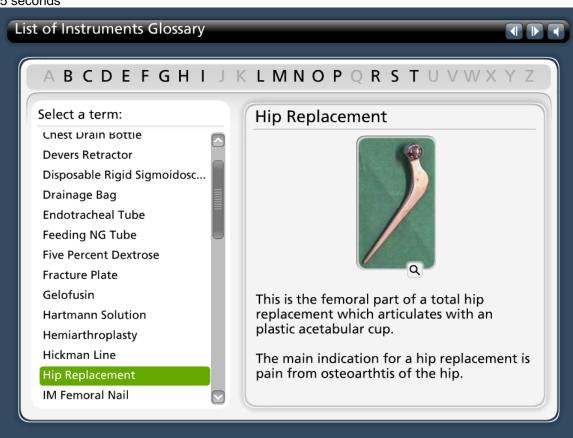
This is a an example of a long term central venous line which is inserted in a similar way to a central line (usually subclavian).

The remnant of the line is tunnelled subcutaneously which decreases the incidence of line infection.

These are indicated for longterm parenteral nutrition, longterm intravenous antibiotic therapy and chemotherapy.

Hip Replacement

5 seconds



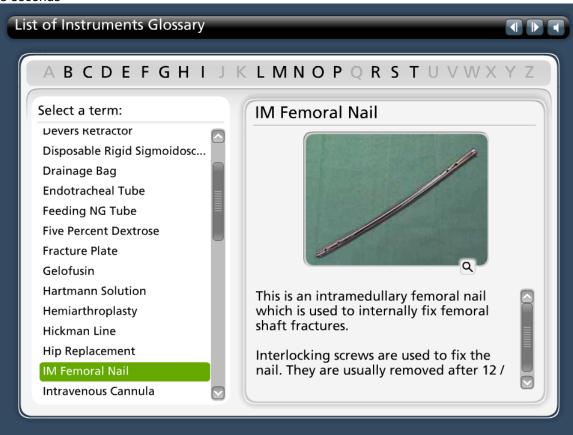
Entry Text

This is the femoral part of a total hip replacement which articulates with an plastic acetabular cup.

The main indication for a hip replacement is pain from osteoarthtis of the hip.

IM Femoral Nail

5 seconds



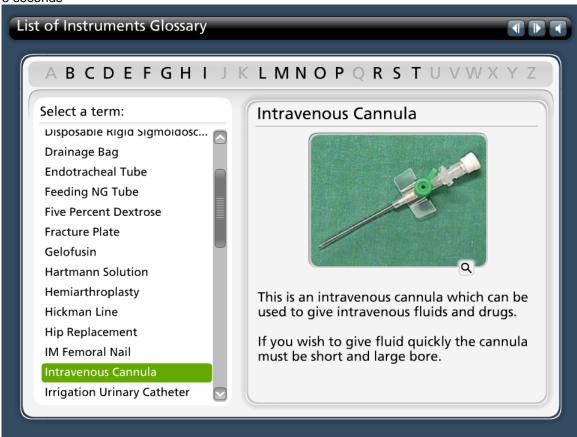
Entry Text

This is an intramedullary femoral nail which is used to internally fix femoral shaft fractures.

Interlocking screws are used to fix the nail. They are usually removed after 12 / 18 months.

Intravenous Cannula

5 seconds



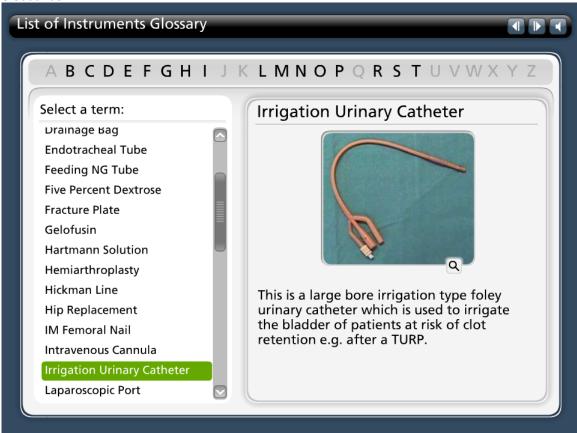
Entry Text

This is an intravenous cannula which can be used to give intravenous fluids and drugs.

If you wish to give fluid quickly the cannula must be short and large bore.

Irrigation Urinary Catheter

5 seconds

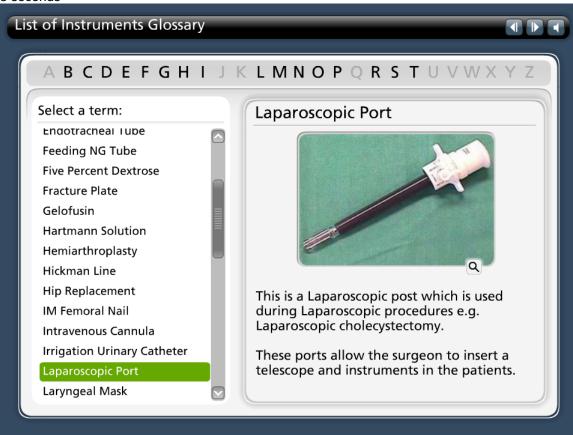


Entry Text

This is a large bore irrigation type foley urinary catheter which is used to irrigate the bladder of patients at risk of clot retention e.g. after a TURP.

Laparoscopic Port

5 seconds



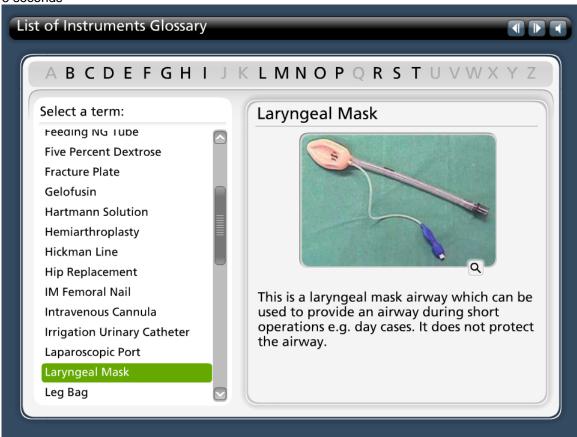
Entry Text

This is a Laparoscopic post which is used during Laparoscopic procedures e.g. Laparoscopic cholecystectomy.

These ports allow the surgeon to insert a telescope and instruments in the patients.

Laryngeal Mask

5 seconds

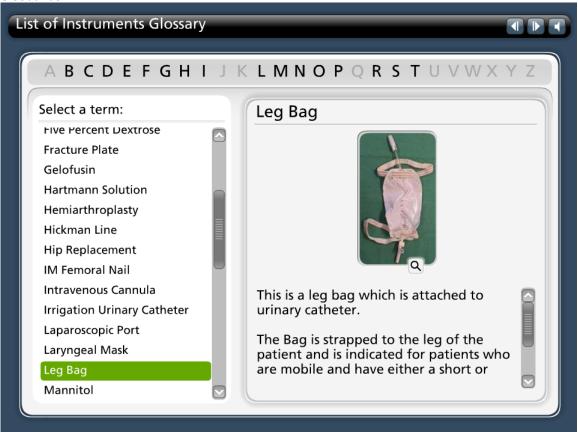


Entry Text

This is a laryngeal mask airway which can be used to provide an airway during short operations e.g. day cases. It does not protect the airway.

Leg Bag

5 seconds



Entry Text

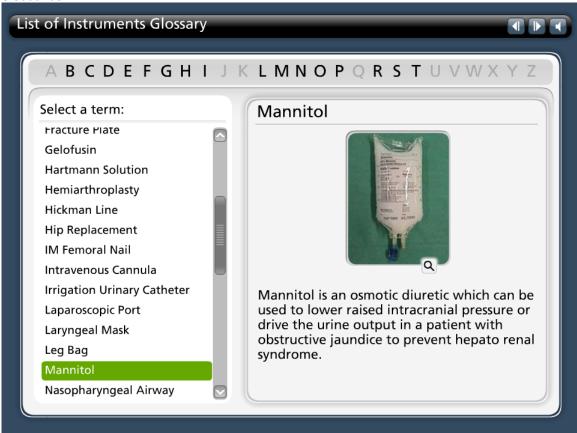
This is a leg bag which is attached to urinary catheter.

The Bag is strapped to the leg of the patient and is indicated for patients who are mobile and have either a short or long term indwelling urinary catheter.

A man who suffers with incontinence following sphincter damage after multiple TURPs.

Mannitol

5 seconds

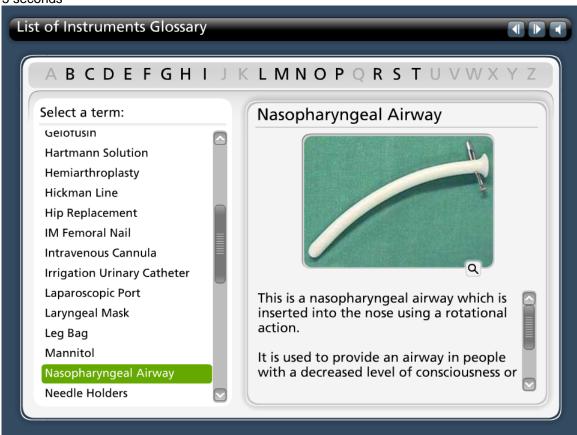


Entry Text

Mannitol is an osmotic diuretic which can be used to lower raised intracranial pressure or drive the urine output in a patient with obstructive jaundice to prevent hepato renal syndrome.

Nasopharyngeal Airway

5 seconds



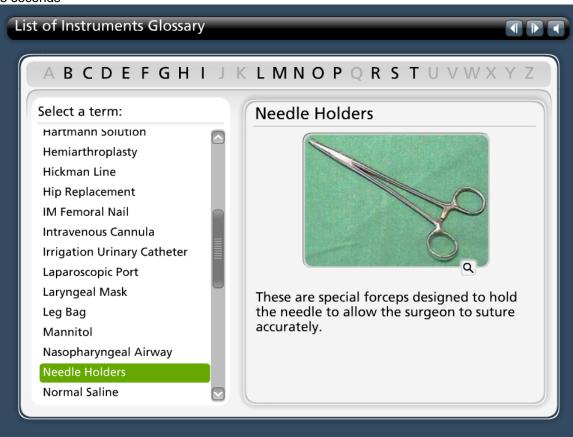
Entry Text

This is a nasopharyngeal airway which is inserted into the nose using a rotational action.

It is used to provide an airway in people with a decreased level of consciousness or decreased gag reflex. The diameter tube should be sized against the patients own little finger distal phalanx. A safety pin is placed in the end of the tube to prevent it being inhaled.

Needle Holders

5 seconds

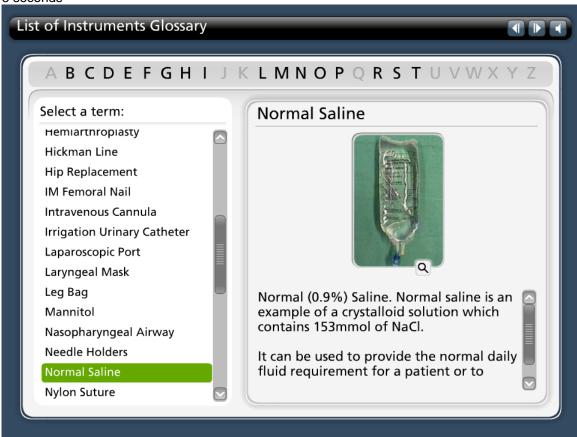


Entry Text

These are special forceps designed to hold the needle to allow the surgeon to suture accurately.

Normal Saline

5 seconds



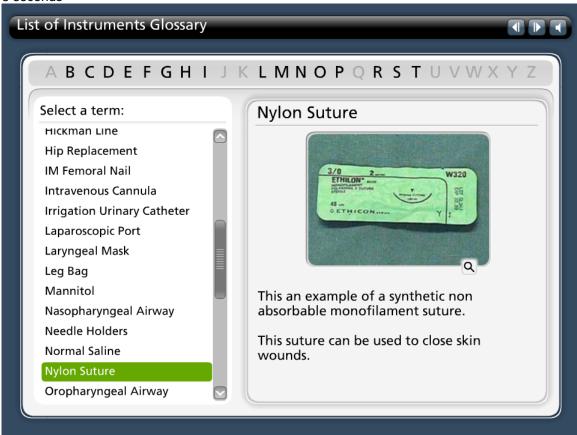
Entry Text

Normal (0.9%) Saline. Normal saline is an example of a crystalloid solution which contains 153mmol of NaCl.

It can be used to provide the normal daily fluid requirement for a patient or to replace additional losses e.g. vomit or diarrhoea.

Nylon Suture

5 seconds



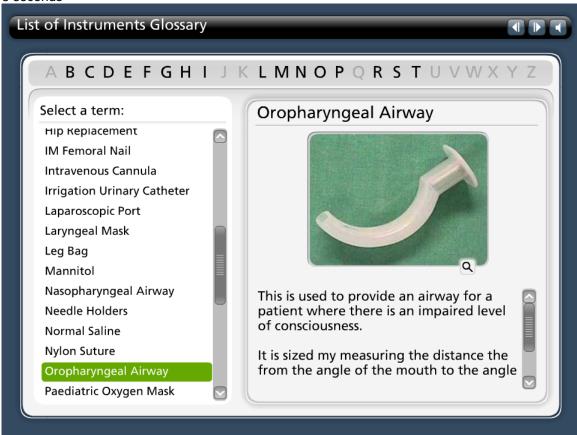
Entry Text

This an example of a synthetic non absorbable monofilament suture.

This suture can be used to close skin wounds.

Oropharyngeal Airway

5 seconds



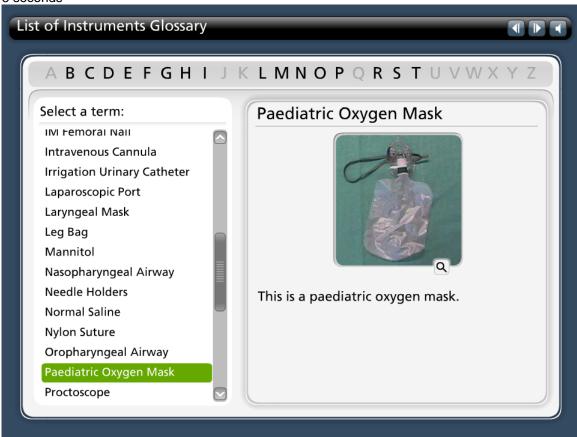
Entry Text

This is used to provide an airway for a patient where there is an impaired level of consciousness.

It is sized my measuring the distance the from the angle of the mouth to the angle of the jaw. It is inserted into the mouth upside down and rotated within the oral cavity. It is inserted the correct way up in children.

Paediatric Oxygen Mask

5 seconds

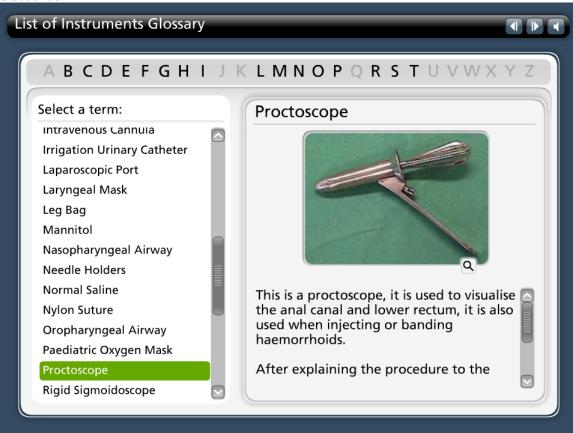


Entry Text

This is a paediatric oxygen mask.

Proctoscope

5 seconds



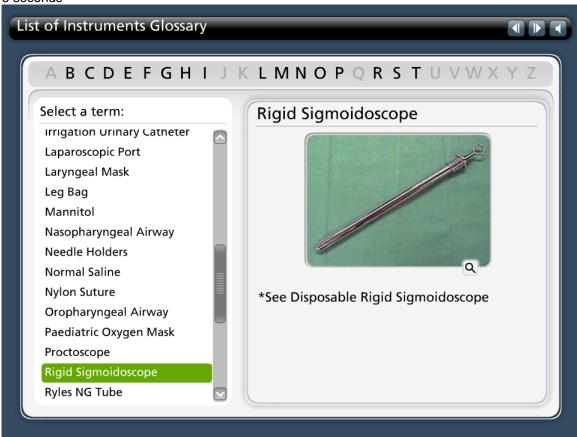
Entry Text

This is a proctoscope, it is used to visualise the anal canal and lower rectum, it is also used when injecting or banding haemorrhoids.

After explaining the procedure to the patient, the patient is placed in the left lateral position and a digital rectal examination is performed. The proctoscope is then attached to a light source and lubricated prior to its insertion into the rectum.

Rigid Sigmoidoscope

5 seconds

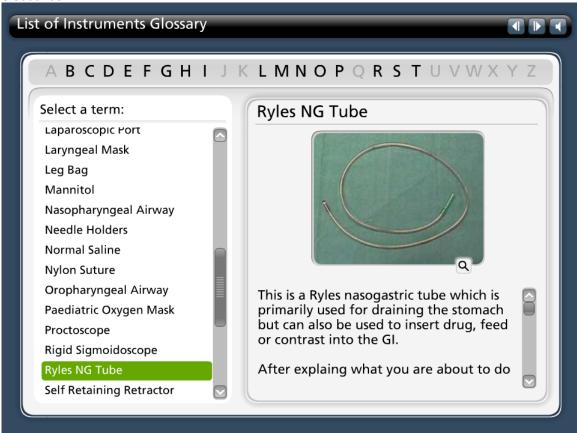


Entry Text

*See Disposable Rigid Sigmoidoscope

Ryles NG Tube

5 seconds



Entry Text

This is a Ryles nasogastric tube which is primarily used for draining the stomach but can also be used to insert drug, feed or contrast into the GI.

After explaing what you are about to do to the patient, you will require a NG tube which has been in the fridge as it is stiffer, some lubricant, a bladder syringe, a drainage bag, litmus paper and tape.

The tip of the NG tube is lubricated and inserted into the nostril of the patient pointing it towards the occiput. The tube is then advanced as the patient swallows. The correct position of the tube is checked by aspirating gastric contents and checking for acidity on litmus paper, if this is unavailable then air can be inserted to the tube and the epigastrium auscultated for bubbling. Finally an x ray can be taken to identify the tube, however this is time consuming and often does not show the tube. Once the tube is in the correct position a bag is attached and it is taped to the patients face.

Self Retaining Retractor

5 seconds

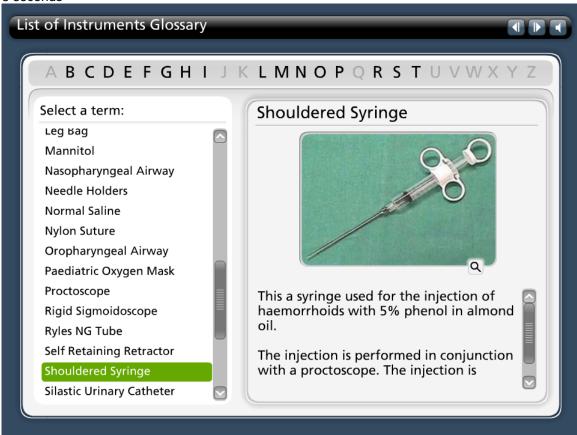


Entry Text

This is a type of retractor used to hold wounds open e.g. during a hernia repair or an appendicectomy.

Shouldered Syringe

5 seconds



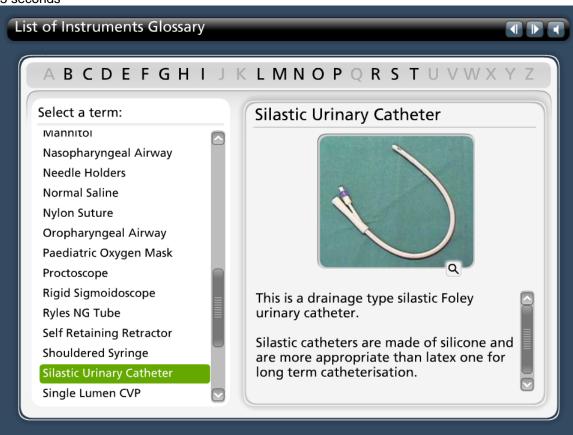
Entry Text

This a syringe used for the injection of haemorrhoids with 5% phenol in almond oil.

The injection is performed in conjunction with a proctoscope. The injection is performed above the dentate line as it is insensitive.

Silastic Urinary Catheter

5 seconds



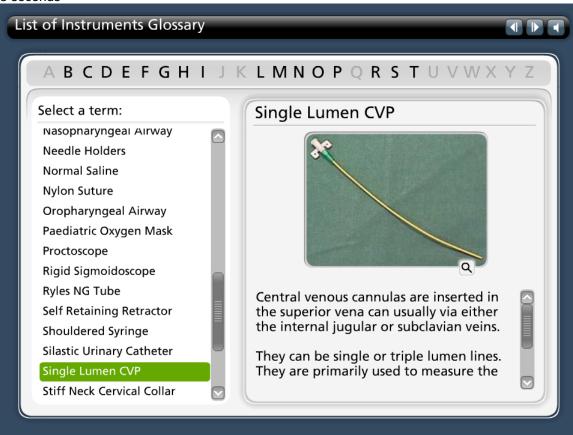
Entry Text

This is a drainage type silastic Foley urinary catheter.

Silastic catheters are made of silicone and are more appropriate than latex one for long term catheterisation.

Single Lumen CVP

5 seconds



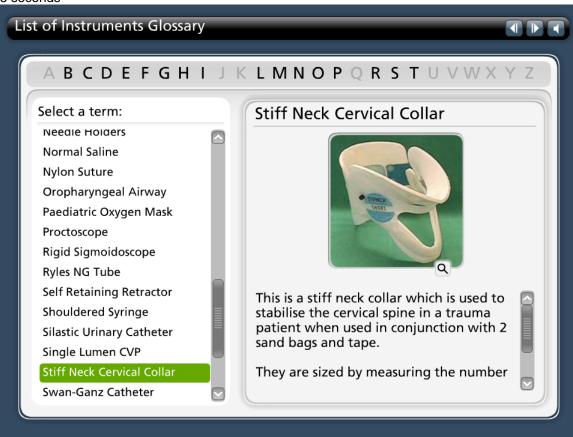
Entry Text

Central venous cannulas are inserted in the superior vena can usually via either the internal jugular or subclavian veins.

They can be single or triple lumen lines. They are primarily used to measure the central venous pressure. They can also be used for the insertion of drugs e.g. amiodarone, dopamine or chemotherapy.

Stiff Neck Cervical Collar

5 seconds



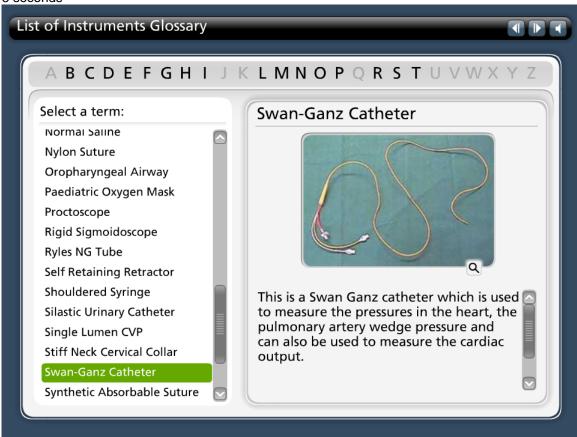
Entry Text

This is a stiff neck collar which is used to stabilise the cervical spine in a trauma patient when used in conjunction with 2 sand bags and tape.

They are sized by measuring the number of fingers from the clavicle to the angle of the mandible, and this is then compared to the measuring peg on the stiff neck collar.

Swan-Ganz Catheter

5 seconds



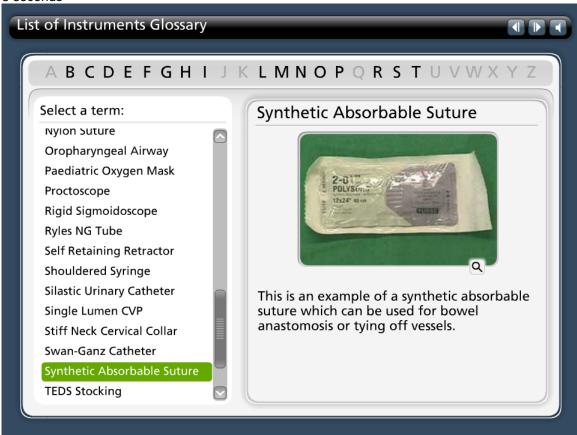
Entry Text

This is a Swan Ganz catheter which is used to measure the pressures in the heart, the pulmonary artery wedge pressure and can also be used to measure the cardiac output.

These are used in the intensive care setting and are typically inserted into a central vein.

Synthetic Absorbable Suture

5 seconds

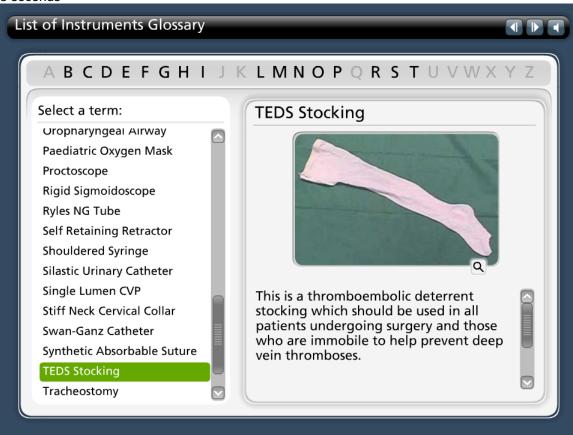


Entry Text

This is an example of a synthetic absorbable suture which can be used for bowel anastomosis or tying off vessels.

TEDS Stocking

5 seconds



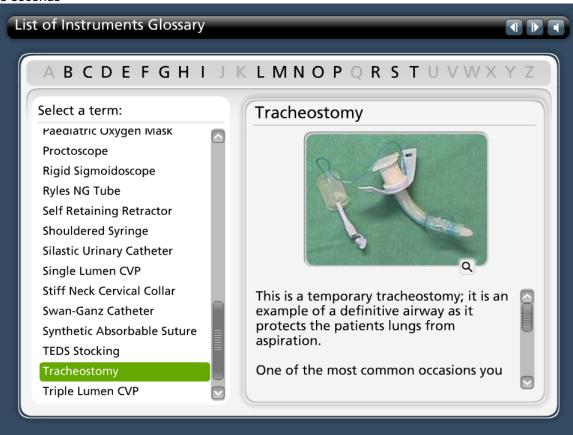
Entry Text

This is a thromboembolic deterrent stocking which should be used in all patients undergoing surgery and those who are immobile to help prevent deep vein thromboses.

They are available in different sizes and are used in conjunction with low dose subcutaneous heparin. They are contraindicated in patients with arterial disease of the lower limb.

Tracheostomy

5 seconds



Entry Text

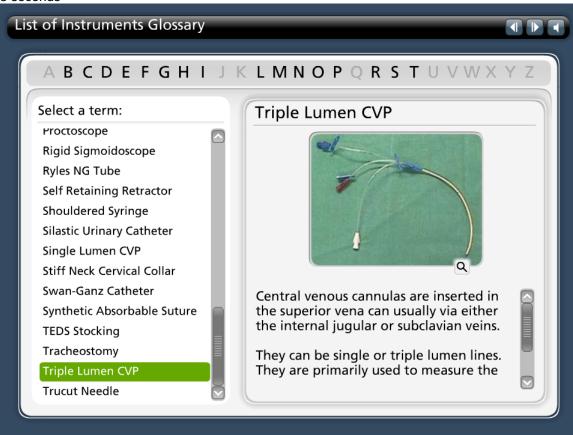
This is a temporary tracheostomy; it is an example of a definitive airway as it protects the patients lungs from aspiration.

One of the most common occasions you will see a tracheostomy is on a patient being ventilated on the intensive care unit.

A tracheostomy allows more efficient ventilation of the patient with a decreased dead space and also allows more effective suctioning of the airways. Tracheostomy can also be used in patients with upper airway obstruction or after laryngeal surgery.

Triple Lumen CVP

5 seconds



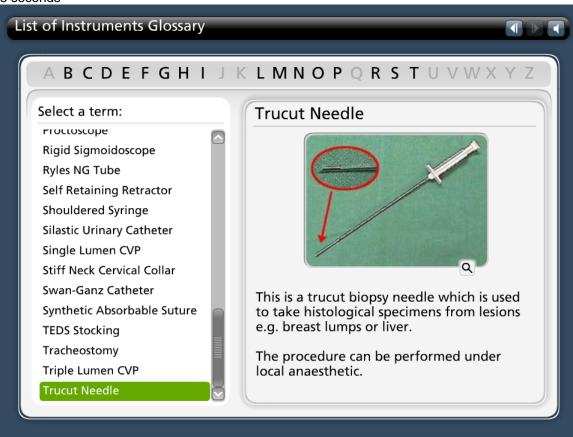
Entry Text

Central venous cannulas are inserted in the superior vena can usually via either the internal jugular or subclavian veins.

They can be single or triple lumen lines. They are primarily used to measure the central venous pressure. They can also be used for the insertion of drugs e.g. amiodarone, dopamine or chemotherapy.

Trucut Needle

5 seconds



Entry Text

This is a trucut biopsy needle which is used to take histological specimens from lesions e.g. breast lumps or liver.

The procedure can be performed under local anaesthetic.