

GLOSSARY OF MEDICAL TERMS

Term	Definition
Ablation	The removal of material from the surface of an object by vaporization, chipping, or other erosive process.
Abnormal cerebral venous drainage	Blood is drained from the brain through a network of veins & venous sinuses ('lakes'). Much of the blood eventually drains into the jugular veins. Blockage of a jugular vein, for example because of thrombosis after previous cannulation, results in blood finding alternative pathways.
Acetylcholine	A chemical neurotransmitter in both the peripheral nervous system (PNS) and central nervous system (CNS), facilitating the passage of the electrical potential across the gap between contiguous nerve fibres.
Acute tubular necrosis	The kidney consists of about a million microscopic units, each consisting of a glomerulus – a tuft of tiny blood vessels and a tubule – a hollow tube carrying the fluid filtered from blood which will go to make up urine. An event causing disruption and death of the cells lining the tubules and which leads to kidney failure has been termed acute tubular necrosis, although the term is now regarded as archaic.
Acyclovir or Aciclovir	An antiviral drug with specific activity against Herpes virus. Due to relative freedom from side effects, it may be used in treating unexplained neurological ('brain') disease in case virus is responsible.
Adalat	A tablet form of the drug, nifedipine. It is used in the treatment of high blood pressure & in the prevention of angina.
Adenosine	A nucleoside comprising a molecule of adenine attached to a ribose sugar molecule. Adenosine plays an important role in biochemical processes, such as energy transfer.
Adhesion	The abnormal union of two normally separate tissues.
Adrenals	The glands on top of the kidneys that produce four different hormones.
Adventitia	The outermost connective tissue covering of any organ, vessel, or other structure.
Aetiology	The cause or origin of a disease.
Agglutination	Adherence of small bodies in a fluid.
Agonist	A chemical that binds to a receptor of a cell and causes a response in that cell. Agonists often mimic the action of a naturally occurring substance.

GLOSSARY OF MEDICAL TERMS

Term	Definition
Albumin	A protein soluble in water and present in all body tissue (egg-white is mostly albumin). Albumin in the blood is important in maintaining oncotic pressure. Albumin preparations can be given intravenously to boost blood volume when dangerously low.
Ambulatory	Designed for or available to patients who are not bedridden.
Aminoacidopathy	Disorders due to a defective enzymatic step in the metabolic pathway of one or more amino acids or in a protein mediator necessary for the transport of certain amino acids in or out of cells.
Ammon's horn sclerosis	The most common type of neuropathological damage seen in individuals with temporal lobe epilepsy. This type of neuron cell loss, primarily in the hippocampus, can be observed in approximately 65% of people suffering from this epilepsy.
Ammonia	A colourless pungent gas consisting of nitrogen and hydrogen. Ammonia is a cerebrototoxicant and a high level in the blood causes a degenerative brain lesion. High blood levels of ammonia can occur in a number of diseases of the liver, in portacaval shunts, urea poisoning and liver dysfunction.
Amnesia	A condition in which memory is lost.
Amylase	Any of a group of proteins found in saliva and pancreatic juice and which assist in the conversion of starch to sugar.
Anaemia	A decrease in haemoglobin, the red pigment in blood which carries oxygen to tissues and carries away carbon dioxide.
Anaphylaxis	A serious allergic reaction that is rapid in onset and may cause death.
Anastomosis	The surgical connection of two structures, eg connections between blood vessels or between other tubular structures such as intestine.
Anatomical	Pertaining to anatomy or to the structure of the body.
Angiography	A medical imaging technique using an intravenous dye to visualize the inside, or lumen, of arteries, veins or heart.
Anoxia	An extreme form of hypoxia or "low oxygen".
Antecubital fossa	The triangular cavity at the front of the elbow that contains a tendon of the biceps muscle, the median nerve and the brachial artery.
Anterior superior iliac spine (ASIS)	The hip bones located towards the front of the body.
Antidiuretic hormone (ADH)	Also known as vasopressin, a chemical hormone produced by the hypothalamus at the base of the brain. One of its effects is to inhibit the production of urine by stimulating the kidney tubules to reabsorb some of the water otherwise destined to be passed as urine.

GLOSSARY OF MEDICAL TERMS

Term	Definition
Anti-rejection therapy	The use of certain drugs after transplantation to prevent rejection of the transplanted organ.
Anuria	Failure to produce urine, generally due to kidney failure. Production of an abnormally low volume of urine is termed oliguria.
Aorta	The largest artery in the body – arising out of the left ventricle of the heart, arching leftwards and backwards through the chest to lie alongside the backbone. It exits the chest through a gap in the diaphragm muscle and continues along the spine until it splits into the two common iliac arteries at the level of the umbilicus. Through its branches it provides arterial blood to all the organs of the body.
Apnoea	Cessation of breathing.
Apoptosis	The process of genetically programmed cell death.
Appendectomy (American English: Appendectomy)	The surgical removal of the appendix. This procedure is normally performed as an emergency intervention when a patient is suffering from inflammation of the appendix (appendicitis).
Apyrexia	Having normal human body temperature.
Aquaporins	The proteins embedded in the cell membrane which regulate the flow of water.
Aqueous solutions	Solutions containing material dissolved in water.
Arachidonic acid	A polyunsaturated fatty acid present in the membranes of body cells.
Arginine vasopressin	A synthetic form of ADH, used in the treatment of diabetes insipidus (a condition where the patient does not produce his or her own ADH).
Artefact	A false object or test result, eg when faulty preparation of a specimen for microscopic examination allows contamination and a misleading result.
Artefactual	Of or relating to an error in perception of information.
Arterial anastomosis	The surgical joining together of two arteries (or one artery that has been severed).
Arterial blood pressure	The pressure on the blood flowing through arteries. It is conventionally described by two figures eg 120/70, where the 120 is the pressure at maximum contraction of the heart ventricles (systolic pressure) and the 70 the pressure at the moment of greatest relaxation (diastolic pressure).
Arterial line	A hollow tube passed through the skin into an artery in order to sample blood, measure pressure and/or deliver injectable material.

GLOSSARY OF MEDICAL TERMS

Term	Definition
Ascites	The accumulation of fluid in the abdominal cavity.
Aspartate aminotransferase (AST)	An enzyme normally present in body serum and other tissue, particularly in that of the heart and liver.
Aspiration	The removal of a gas or fluid by suction.
Astrocyte	The star-shaped glial cells in the brain and spinal cord which perform many functions including repair of the brain and spinal cord.
Ataxic	The loss of ability to coordinate muscle movement.
Atracurium	A muscle relaxant of short to intermediate duration used by anaesthetists in surgery or intensive care. It assists intubation and artificial ventilation. It is used to relax stomach muscles and the diaphragm to permit surgery within the abdominal cavity.
Atrophy	A wasting away of an organ or part or a failure to grow to normal size in consequence of disease.
Atropine	A drug, prepared originally from the plant Belladonna, which relaxes muscles not under conscious control, particularly those of the intestines, bladder and stomach. It also reduces the production of saliva and sweat. It was used as premedication before an anaesthetic but is now rarely used for that purpose. It increases heart rate so may be used to oppose certain other anaesthetic drugs having the opposite effect.
Augmentin	A brand of the antibiotic co-amoxiclav. It combines amoxicillin, a derivative of penicillin and clavulinic acid which enhances its effectiveness. It can be given by injection or by mouth.
Autopsy	A post mortem assessment or examination of the body to determine the cause of death.
Axon	A long, slender projection of a nerve cell, or neuron, that conducts electrical impulses away from the neuron's cell body or soma.
Azathioprine	A drug prescribed to transplant recipients to inhibit rejection of the transplanted tissue. It is one of a group of drugs called immunosuppressants.
Basal cistern	A wide cavity where the arachnoid (a layer of membranes that contain the central nervous system) extends between the two temporal lobes.

GLOSSARY OF MEDICAL TERMS

Term	Definition
Basal ganglia	A group of cell collections (nuclei) in the brain. Situated at the base of the forebrain and strongly connected with the cerebral cortex, thalamus and other brain areas, they are associated with a variety of functions, including voluntary motor control and procedural learning.
Baxter's solution	Solutions used in peritoneal dialysis.
Bergman glia	See Glial.
Bilateral fundal haemorrhages	Fundal haemorrhage is a sign of trauma or damage to the blood vessels at the back of the eye. It is indicative of a lack of oxygen or a catastrophic fall in blood pressure. Bilateral means 'on both sides of the body.'
Bilateral Papilloedema	Swelling of the optic discs and diagnostic of severe raised intracranial pressure
Bilateral reimplantation of ureters	Ureters are the muscular tubes, one on each side of the body, which carry urine from the kidney to the bladder. When a kidney is transplanted, its ureters have to be sewn into the recipient's bladder or reimplanted.
Blood gas analyser	A device used to measure the partial pressures of oxygen and carbon dioxide in a blood sample. It also measures the acidity of blood and gives an indication of the concentrations of electrolytes (chemicals such as sodium) and haemoglobin. It is often used as a 'near-patient' device as well as in laboratory use.
Blood groups	The four main groups are O, A, B and AB
Bolus	A single dose given rapidly, most usually referred to in intravenous use.
Bone profile	A blood test analysing chemicals and providing information about the quality of bones. Important in the treatment of renal failure where calcium loss occurs.
Boyd's equation	A rapid method of calculating body surface area from height and weight and read from a chart. Surface area is often used to calculate drug dosage, especially in children.
Brachiocephalic vein	A vein which supplies blood to the right arm, head and neck.
Brain-stem death	Brain damage causing irreversible loss of brain function and rendering the individual incapable of life without the aid of a ventilator.
Brain stem death test	A series of tests performed by two doctors, some hours apart, to confirm brain stem death.

GLOSSARY OF MEDICAL TERMS

Term	Definition
British National Formulary (BNF)	A publication of the British Medical Association & Royal Pharmaceutical Society of Great Britain listing all drugs available for use and detailing the licensed reasons for use, side-effects, contraindications, dosages and methods of administration.
Bronchiolitis	Inflammation of the bronchioles.
Bronchopneumonia	Inflammation of the lungs.
Broviac line	An intravenous catheter most often used for the administration of medication and the withdrawal of blood for analysis. Broviac lines may remain in place for extended periods and are used when long-term intravenous access is required.
Bulbar function	The function of the cranial nerves IX, X, XI and XII.
Calcification	The deposit of calcium salts in the body tissue, normally the bones and teeth.
Cannula	A short, narrow hollow tube which can be inserted into a blood vessel and used to take samples or deliver medication. If a cannula becomes dislodged allowing fluids to escape and enter tissue outside a blood vessel, then it must be removed and replaced.
Capillary	The terminal vessels uniting the arterial with the venous systems of the body.
Capillary refill	The rate at which blood refills empty capillaries. It may be measured by holding the hand higher than the heart and pressing the soft pad of a finger until it turns white and noting the time to re-colour once pressure is released. Normal capillary refill time (crt) is less than 2 seconds.
Cardiac arrest	A sudden cessation of cardiac function resulting in loss of effective circulation.
Cardiac resuscitation	An emergency procedure involving external cardiac massage and artificial respiration in an attempt to restore circulation of the blood and so prevent death or brain damage from lack of oxygen.
Cardiomegaly	A medical condition wherein the heart is enlarged.
Carina	The point of division of the main airway.
Carotid artery	One of two paired arteries (left and right) supplying the head and neck with oxygenated blood.
Catarrh	A disorder of inflammation of the mucous membranes.

GLOSSARY OF MEDICAL TERMS

Term	Definition
Catecholamines	Molecules with a nucleus consisting of benzene with two hydroxyl side groups and a side-chain amine. They include dopamine and the “fight-or-flight” hormone adrenaline released in response to stress.
Catheter	Hollow tubes, longer than cannulas, which are inserted into the body, eg cardiac catheters which are passed along a vein into the heart, suprapubic catheters which are inserted above the pubic bone into the bladder to drain urine, urethral catheters passed into the urethra, ureteric catheters which are passed from the bladder up the ureters to inject material or sample urine from the kidney.
Cefotaxime sodium (Claforan)	An antibiotic used in the treatment of infections of the respiratory tract.
Central nervous system (CNS)	The brain and spinal cord.
Central venous line	A cannula or catheter passed into a large vein, often in the neck and threaded up into the vena cava, the major vein draining into the heart. The line can be used to judge heart and circulation function by measuring pressures.
Central venous pressure (CVP)	A measure of the pressure of blood in one of the main veins draining into the heart (superior or inferior vena cava). It is measured through a central venous line and is affected by various factors, including whether or not the circulation requires more fluid for the heart to pump blood effectively or whether the circulation is overloaded. An understanding of CVP is of value to anaesthetists in adjusting intravenous fluid replacement.
Cerebellar tonsil	A rounded lobule on the under surface of each cerebellar hemisphere.
Cerebellum	A region of the brain having an important role in motor control and cognitive function.
Cerebral	Of or relating to the brain or cerebrum.
Cerebral autoregulation	An adaptive mechanism that plays an important role in maintaining an appropriate blood pressure within vessels supplying brain tissue.

GLOSSARY OF MEDICAL TERMS

Term	Definition
Cerebral oedema	An excess of fluid within and around brain cells. It has many causes, including infections such as meningitis, a prolonged epileptic fit or starvation of the brain's oxygen supply. It can result from Hyponatraemia. Because the brain is within a rigid skull, any increase in its volume in consequence of oedema causes increased pressure on the brain which in turn, restricts the amount of venous blood draining from the brain and further increases the oedema. The eventual result is that parts of the brain are forced by the pressure down through the foramen magnum, the hole in the base of the skull, impairing blood supply to the brainstem and leading to loss of control over the heart, blood pressure and breathing. Sudden death may result.
Cerebral palsy	An umbrella term encompassing a group of non-progressive, non-contagious motor conditions which cause physical disability in human development.
Cerebral perfusion pressure (CPP)	The net pressure gradient causing blood flow to the brain (brain perfusion).
Cerebral venous sinus thrombosis (CVST)	A rare form of stroke that results from thrombosis (a blood clot) of the dural venous sinuses, which drain blood from the brain. Symptoms may include headache, abnormal vision, any of the symptoms of stroke and seizures. Intracranial pressure may rise causing papilloedema (swelling of the optic disc).
Cerebrospinal fluid (CSF)	A clear, colourless, body fluid, that occupies the subarachnoid space and the ventricular system around and inside the brain and spinal cord. In essence, the brain "floats" in it.
Cerebrovascular disease	A group of conditions affecting the circulation of blood to the brain.
Cervical cord	That part of the spinal cord situate in the neck.
Chemoreceptor	A sensory receptor that converts chemical signals into electrical potential. In more general terms, chemoreceptors detect certain chemical stimuli in the environment.
Cheyne-Stokes respiration	An abnormal pattern of breathing characterized by progressively deeper and sometimes faster breathing, followed by a gradual decline and then a temporary stop called an apnea. The pattern is repeated with each cycle taking between 30 seconds and 2 minutes.
Chiari malformation	A malformation of the brain consisting of a downward displacement of the cerebellar tonsils through the foramen magnum (the opening at the base of the skull).
Cingulate gyrus	A part of the brain situate in the medial aspect of the cerebral cortex and considered part of the limbic lobe.

GLOSSARY OF MEDICAL TERMS

Term	Definition
Circle of Willis	A circle of arteries supplying blood to the brain and named after Thomas Willis (1621–1675), an English physician.
Circulating nurse ('runner')	An operating theatre nurse who is not 'scrubbed up' and can therefore handle non-sterile material unlike the operating surgeons or the scrub nurse. The circulating nurse has many tasks, including weighing discarded swabs to assess blood loss, the connection of replacement fluid to drips and fetching equipment. The circulating nurse can also assess or measure the amount of blood or other fluids draining from catheters etc.
Circulatory arrest	An alternative phrase for 'cardiac arrest'.
Circulatory resuscitation	See 'cardiac resuscitation'.
Cirrhosis	A consequence of chronic liver disease characterized by replacement of liver tissue by fibrosis, scar tissue and nodules leading to loss of liver function.
Claforan	An antibiotic used in the treatment of severe infection of the lung, throat, ear or urinary tract.
Clonus	A succession of intermittent muscular contractions and relaxations usually resulting from a sustained stretching stimulus and often a sign of brain or spinal cord disease.
Clotting	The formation of a jellylike substance within a blood vessel causing a stoppage of the blood flow, also called coagulation.
Coagulation screen	A standard set of blood tests performed in a haematology laboratory to detect abnormality in the blood clotting system.
Cockcroft-Gault formula	A method of calculating creatinine clearance (see below) from the blood creatinine level and the individual patient's age, height and weight.
Cogwheel rigidity	The tension in a muscle which gives way in little jerks when the muscle is passively stretched.
Cold ischaemic time ('CIT')	Ischaemia means a deficient blood supply which can lead to cell damage. If a tissue is kept cold, it can withstand ischaemia for longer than at body temperature. It is therefore important when performing a transplant operation to keep the donor organ cold. The cold ischaemic time is relevant in assessing the viability of a donor organ. The CIT is calculated from the time of removal from the donor to time of insertion into the recipient and anastomosis of the arteries.
Colloid	A substance evenly and microscopically dispersed throughout another substance.

GLOSSARY OF MEDICAL TERMS

Term	Definition
Coma	A profound state of unconsciousness associated with depressed cerebral activity from which the individual cannot be aroused.
Common iliac arteries	Two large arteries originating from the aortic bifurcation at the level of the 4 th lumbar vertebra.
Common iliac vein	The left and right common iliac veins lie on either side of the pelvis, and meet in the lower back, at the level of the fifth lumbar vertebra, to form the inferior vena cava, the main vein returning blood from the legs & lower trunk to the heart.
Co-morbidity	The presence of one or more disorders (or diseases) in addition to a primary disease or disorder or the effect of such additional disorders or diseases.
Congenital	Existing at or dating from birth.
Congenital nephrotic syndrome	A generic term for several conditions characterised by abnormally functioning glomeruli in the kidneys and which are present at birth.
Congenital obstructive uropathy	Any condition present at birth in which drainage of urine from the kidney is obstructed at a point between the kidney pelvis and urethra.
Coning/coned (Otherwise known as 'transforaminal herniation')	A shorthand term used to describe the downward displacement of the brain stem into the foramen magnum (the hole in the base of the skull). It is caused by raised intracranial pressure and can kill.
Contractile Proteins	The proteins responsible for the contraction of muscle tissue.
Convulsion	An involuntary contraction or series of contractions of the voluntary muscles, also called a seizure.
Corpus callosum	A wide, flat bundle of neural fibres beneath the cortex connecting the left and right cerebral hemispheres and facilitating inter-hemispheric communication.
Cortex	The tissues forming the outer part of an organ e.g. the cerebral cortex of the brain.
Cranial	Adjective relating to the cranium or skull.
C-reactive protein (CRP)	A globulin found in the blood in some cases of inflammation.
Creatinine	A product of protein which can be measured in blood and urine. The higher the blood creatinine (and the lower the urinary creatinine) the poorer the kidney function. By calculating the 'creatinine clearance' a measure of kidney function can be obtained.

GLOSSARY OF MEDICAL TERMS

Term	Definition
Cross-matching	A method of comparing a patient's blood or tissue with that of a potential donor to ensure organ compatibility.
Crystalloid	A substance that in solution can pass through a semipermeable membrane and be crystallized. The physical opposite of a crystalloid is a colloid, which does not dissolve and does not form true solutions.
CT (computerised tomography) scan	An imaging technique relying on a computerised analysis of multiple x-rays, taken at different levels and reconstructed to depict a two- or three-dimensional image.
Cushing response	A physiological nervous system response to increased intracranial pressure (ICP) resulting in widening pulse pressure, irregular breathing and a reduction of the heart rate. It is usually seen in the terminal stages of acute head injury and may indicate imminent brain herniation.
Cyanosis	The appearance of a blue or purple coloration of the skin or mucous membranes due to reduced oxygen levels within the tissues close to the skin surface.
Cyclase	An enzyme that catalyses a chemical reaction to form a compound.
Cycles of dialysis	In peritoneal dialysis, fluid is run into the peritoneal cavity (inside of the abdomen) left for a time and then run out again. The process is repeated with each repetition being referred to as a cycle.
Cyclimorph	Medication containing morphine and cyclizine. Morphine belongs to a group of strong painkilling medicines called opioids and cyclizine is an anti-sickness medicine.
Cyclizine	An antihistamine drug used to treat nausea, vomiting and dizziness.
Cyclosporine	An immunosuppressant drug used in organ transplantation to prevent rejection.
Cystatin C	A protein which when measured in a blood sample provides an accurate assessment of kidney function.
Cytology	The medical and scientific study of cells.
Cytomegalovirus (CMV) titre	A common virus but one which rarely causes disease in healthy people. It is, however, potentially dangerous for those whose immune system is not working well, either from disease or the use of immunosuppressive drugs eg those who have received transplants. To determine if a transplant donor or recipient has been infected, the concentration of antibody to the virus can be measured. This is called CMV titre.
Cytoscopy	An examination of the inside of the bladder and urethra.

GLOSSARY OF MEDICAL TERMS

Term	Definition
Decerebrate movement	The cerebrum is the part of the brain controlling all voluntary activity. If the cerebrum is not functioning adequately as a result of disease, toxin, seizures etc. characteristic muscle spasms can result in movement of an individual, intermittently or continuously into abnormal posture.
Decompensation	Inability of the heart to maintain adequate circulation, manifested by difficulty in breathing, venous engorgement and oedema.
Deep white matter	Brain tissue composed of myelin-coated nerve cell fibres. White matter carries information between the nerve cells in the brain and the spinal cord. The inner portion of the cerebrum is composed of white matter.
Dehydration	A deficiency of fluid in the body caused by insufficient intake, excessive output or both. Minor degrees of dehydration are common in illness and may be of no consequence. However an increase in dehydration, especially in combination with abnormality of blood chemistry (eg high or low sodium) may result in a deterioration of various body functions.
Dentate nucleus	The largest single structure linking the cerebellum to the rest of the brain. It is located within the deep white matter of each cerebellar hemisphere.
Desmopressin acetate/DDAVP	A drug used to regulate urine production.
Dextrose	An alternative term for 'glucose'.
Dextrostix	A blood test used to measure levels of sugar in the bloodstream.
Dialysate	A fluid used for peritoneal dialysis (see Cycles).
Diastole	The period of time when the heart fills with blood after systole (contraction).
Diazepam (Diazemuls)	A benzodiazepine (psychoactive) drug commonly used in the treatment of anxiety, insomnia and seizures. Diazepam can be administered as a slow intravenous injection or as a continuous intravenous ('IV') infusion.
Diencephalon lesion	Any tissue abnormality in that part of the brain which includes the thalamus.
Diffuse oedema	Oedema is an abnormal accumulation of fluid within the body. It can be localised or involve the whole body.
Dilutional hyponatraemia	See hyponatraemia

GLOSSARY OF MEDICAL TERMS

Term	Definition
Dioralyte	A proprietary powder containing glucose and salts in concentrations which, when dissolved in water, represent the best way of restoring by mouth fluids lost through diarrhoea, vomiting etc.
Disseminated intravascular coagulation (DIC)	A medical condition which develops when the normal balance between bleeding and clotting is disturbed.
Distension	The state of being distended or swollen.
Diuresis	Urine production as an aspect of fluid balance.
Dopamine	A drug used in resuscitation and intensive care and given by IV infusion. It is a heart stimulant and in low doses may increase the blood supply to vital organs by dilating blood vessels.
Double or triple lumen line	A cannula or catheter with two or three separate channels allowing separate routes for sampling, measurement and drug delivery.
Dura mater or dura	The outermost of the three layers of the meninges surrounding the brain and spinal cord.
Dysplasia	An abnormality in the development of tissue or an entire organ.
Dysplastic kidneys	Kidneys containing abnormal tissue. The condition arises before birth and the kidneys are often very small and function poorly.
Dysuria	Painful or difficult urination.
Effacement	The shortening or thinning of a tissue.
Electroencephalography (EEG)	The recording of electrical activity across the scalp.
Electrolytes	The elements of the common salts in blood ie sodium, potassium, chloride and bicarbonate.
Embolus	Any detached travelling intravascular mass carried by circulation, which is capable of clogging arterial capillary beds.
Emesis	Vomiting.
Encephalitis	The inflammation or infection of the brain usually caused by a viral or bacterial infection.
Encephalopathy	Brain disease, damage, or malfunction. Encephalopathy can present a very broad spectrum of symptoms ranging from memory loss or subtle personality change to dementia, seizures, coma or death.
Endonucleases	The enzymes that cleave the bond within a polynucleotide chain.

GLOSSARY OF MEDICAL TERMS

Term	Definition
Endoscopy	An examination inside the body using an endoscope, an instrument used to examine the interior of a hollow organ or cavity of the body. Unlike most other medical imaging devices, endoscopes are inserted directly into the organ.
Endothelium	The thin layer of cells that line the interior surface of blood and lymphatic vessels.
Endotracheal tube	A catheter that is inserted into the trachea for the primary purpose of establishing and maintaining a patent airway.
Enteral Feeding	The act of giving a patient a liquid, low residue food through a naso- or oro-gastric feeding tube.
Enteroviruses	A family of viruses which tend to invade the central nervous system through the gut.
Eosinophilic	The staining of certain tissues or cells, after they have been washed with eosin, a dye.
Epidemiology	That branch of medicine dealing with the study of the causes, distribution and control of disease within populations.
Epidural	A form of regional analgesia involving an injection of drugs through a catheter placed into the epidural space.
Epilepsy	A recurrent and paroxysmal disorder of sudden onset and spontaneous cessation caused by occasional, sudden, excessive, rapid and local discharge of nerve cells in the grey matter (cortex) of the brain.
Epileptogenic	Capable of producing epileptic seizures.
Erythrocyte	A red blood cell.
Erythropoietin	The hormone that regulates red blood cell production.
Excitotoxicity	The pathological process by which nerve cells are killed by excessive stimulation by neurotransmitters such as glutamate.
Expiration	The movement of air out of the bronchial tubes and through the airways. Breathing out.
External iliac artery	Each of the two common iliac arteries (see above) divide into two in order to form the external iliac arteries which run from the lower back to the groin where they continue as femoral arteries.
Extracellular fluid	The fluid outside body cells. That within blood vessels is intravascular and the remainder is interstitial.
Extra-ocular	Relating to the six muscles that control the movements of the eye.

GLOSSARY OF MEDICAL TERMS

Term	Definition
Extraperitoneal procedure	An operation in which the peritoneal cavity is not entered. The peritoneum is a membrane which envelopes the inner surface of the abdomen.
Exudation	The process by which some of the constituents of blood pass slowly through the walls of small blood vessels in the course of inflammation.
Faecolith	A hard mass of faecal matter.
Femoral artery	A general term for the large arteries in the thigh.
Fentanyl	A potent, synthetic narcotic analgesic with a rapid onset and short duration of action.
Fibrinogen	A soluble plasma glycoprotein, synthesised by the liver, which is converted into fibrin during blood coagulation.
Fixed, dilated pupils	The pupils of the eyes contract and dilate in response to light and the distance of focus. Severe damage to the brain stem results in a failure in these responses and the pupils remain large.
Fixing of the brain	The process by which the brain is treated in a solution of formalin for up to two weeks in order to assist neuropathological examination.
Flumazenil	A medicine used to reverse the effects of benzodiazepines after sedation, general anesthesia or overdose.
Fluoroscopy	An imaging technique commonly used to obtain real-time moving x-ray images of internal body structures.
Foley catheter	A flexible tube passed through the urethra and into the bladder.
Foramen magnum	A large hole in the base of the skull. It where the brainstem merges into the upper part of the spinal cord.
Fractional excretion rate	A rate calculated as the proportion of sodium passing through the kidney and filtered into the urine. It is useful in evaluating acute kidney failure.
Free radicals	Where radicals are atoms, molecules, or ions with unpaired electrons or an open shell configuration, free radicals may have positive, negative, or zero charge. With some exceptions, the unpaired electrons cause radicals to be highly chemically reactive.
Free water	The theoretical proportion of water in blood or urine which can be recognised or calculated as containing no dissolved solutes.
Frontal white matter	The nerve fibres within the frontal lobe of the brain.
Full blood picture	A laboratory blood test to determine the proportions of all the components of blood.

GLOSSARY OF MEDICAL TERMS

Term	Definition
Fundoplication	Suturing the fundus of the stomach around the gastroesophageal junction to treat gastroesophageal reflux. It can be performed by open surgery or laparoscopy.
Fundoscopy	A test permitting examination of the inside the fundus of the eye and other structures using an ophthalmoscope (or funduscope).
Fundus	The place on the retina opposite the pupil through which nerve fibres and blood vessels traverse the retina.
Ganglion	A biological tissue mass, most commonly a mass of nerve cell bodies.
Gastroenteritis	Infection or irritation of the digestive tract.
Gastroesophageal reflux disease	The chronic symptoms of or mucosal damage caused by stomach acid rising from the stomach into the oesophagus.
Gastrointestinal losses	The loss of fluid and electrolytes from the gut, usually by the production of faeces or, in abnormal circumstances, by vomiting and/or diarrhoea.
Gastro-intestinal tract	The tubular passage of mucous membrane extending from the mouth to the anus.
Gastrostomy tube & button	A plastic tube inserted through the wall of the abdomen into the stomach for feeding. The tube ends at a flat disc sewn onto the abdomen (the button) to which a feeding tube can be attached.
Gentamycin	An antibiotic, given by intravenous or intramuscular injection, used in the treatment of significant infection by certain bacteria, such as pseudomonas and klebsiella.
Glasgow Coma Score	An internationally accepted measure of consciousness, the lower the score the lower the level of consciousness.
Glial	The non-neuronal cells that provide support and protection for neurons in the brain and for those neurons in other parts of the nervous system such as in the autonomous nervous system.
Gliosis	The proliferation of astrocytes in damaged areas of the central nervous system.
Glomerular filtration rate (GFR)	The rate at which the kidneys filter out fluid free from fats, protein or cells is termed the GFR and is a measure of the adequacy of kidney function.
Glomerulus	One of the 2 million filtering units in the kidney into which blood comes into contact.
Glutamate	Alternative word for glutamic acid which is a non-essential amino acid. In neuroscience, glutamate is an important neurotransmitter and plays an important role in learning and memory.

GLOSSARY OF MEDICAL TERMS

Term	Definition
Glycolysis	The metabolic pathway converting glucose into pyruvate (an organic acid).
Glycopyrrolate	An atropine-like drug used to increase heart rate, commonly to oppose the action of certain other anaesthetic drugs which have the opposite effect.
Grey matter	A major component of the central nervous system, consisting of neuronal cell bodies, in contrast to white matter, which does not.
Guarding	A sign often detected during an examination for physical pain whereby the patient involuntarily contracts muscles.
Gyrus	A ridge on the cerebral cortex. It is generally surrounded by one or more sulci.
Haematemesis	The vomiting of blood.
Haematocrit	A measure of the proportion of blood which is solid (that is consisting of blood cells) and liquid (plasma) and determined by spinning a small blood sample in a centrifuge. It is used as a crude measure of hydration.
Haematoma	A localised collection of blood outside the blood vessels, usually in liquid form within the tissue. This distinguishes it from an ecchymosis, which is the spread of blood under the skin in a thin layer, commonly called a bruise.
Haemodynamics	The study of the forces and physical mechanisms concerned with the circulation of the blood.
Haemoglobin	The red pigment in blood which carries oxygen to tissues and takes away carbon dioxide.
Haemoptysis	The coughing up of blood or bloody sputum from the lungs or airway.
Haemorrhage	The escape of blood from any blood vessels, normally in response to trauma.
Haemorrhagic shock	Shock resulting from reduction of the volume of blood in the body due to haemorrhage.
Hagen–Poiseuille equation	A physical law providing the pressure drop for a fluid flowing through a long cylindrical pipe. The assumptions of the equation are that the flow is laminar, viscous and incompressible and the flow is through a constant circular cross-section which is substantially longer than its diameter.
Halothane	An inhalational general anaesthetic.

GLOSSARY OF MEDICAL TERMS

Term	Definition
Hand ventilated	The artificial ventilation produced by squeezing a rubber bag connected to a mask or tube delivering air and/or oxygen to a patient.
Hartmann's solution	An intravenous solution containing sodium chloride (salt), sodium lactate, potassium & calcium chloride. The sodium concentration is similar to that of the blood.
Hepatocyte	A cell of the main tissue of the liver.
Hepsal (Heparin sodium)	A flushing solution used to maintain the patency and prevent blockages within intravenous devices.
Herniation and compression of the brain stem	See coning.
Herpes	Any one of several viral diseases causing the eruption of small blister like vesicles on the skin or mucous membranes.
Heterogeneous	Relating to lack of uniformity of or within a substance. Its opposite is homogeneous, where there is uniformity in composition or character.
Heterozygous	The two different genes controlling a specified inherited trait.
Hindbrain	That part of the brain which includes the medulla, pons and cerebellum.
Hippocampus	A major component of the brain. It belongs to the limbic system and plays important roles in the consolidation of information from short-term memory to long-term memory.
Histological slides	Thin slices of tissue applied to a microscopic slide which are then viewed through a microscope.
Histology	The microscopic study of tissue and organs at the cellular level.
Histopathology	The microscopic examination of tissue in order to detect the manifestations of disease.
Homeostasis	The property of a system that regulates its internal environment to maintain a stable, constant condition.
Homocysteine	A non-protein amino acid.
Human leucocyte antigen (HLA)	Complex antigens, being proteins capable of inciting an immune reaction and found in most tissues of the body, are important in determining organ transplant compatibility. Incompatibility between donor and recipient HLA can cause rejection.

GLOSSARY OF MEDICAL TERMS

Term	Definition
Human plasma protein fraction (HPPF)	A mixture of albumin, other proteins and saline used in the emergency treatment of bleeding until replacement donor blood becomes available.
Hydrolysis	A chemical reaction during which molecules of water are split.
Hyperammonaemia	An abnormally high level of ammonia in the blood.
Hypercapnia	Also known as hypercarbia, a condition where there is excess carbon dioxide (CO ₂) dissolved in the blood.
Hypercarbia	See Hypercapnia above.
Hypercoagulability	An abnormality of blood coagulation that increases the risk of thrombosis (blood clots in blood vessels).
Hyperkalemia	The condition in which the concentration of the electrolyte potassium (K ⁺) in the blood is elevated.
Hypernatraemia	A concentration of sodium in the blood which is higher than normal. It is caused either by excessive salt intake or by water loss in excess of that of salt.
Hypertension	A state of raised blood pressure.
Hypertonic infusion	The delivery of an intravenous fluid which has a higher osmotic pressure than blood. Osmotic pressure develops when there are more molecules on one side of a semi-permeable membrane, such as a cell wall, than the other. The result is that water tends to flow through the membrane into the more concentrated solution until the concentrations are equal on both sides of the membrane.
Hypertonicity	The state of being hypertonic or having extreme muscular or arterial tension.
Hypervolemia (fluid overload)	The condition of an excess of fluid in the blood.
Hypocapnia	The presence of abnormally low levels of carbon dioxide in blood.
Hypoglycemia	A state produced by a lower than normal level of blood glucose.
Hypokalaemia	The condition of below normal levels of potassium in the blood serum.
Hyponatraemia	A serum concentration of sodium below the normal range which may be produced by dilution of the blood, excessive water retention, excessive sodium loss or occasionally inadequate salt intake.
Hypothalamus	The part of the fore-brain containing nerve centres for the regulation of vital processes e.g. body temperature and sexual function.
Hypothermia	A core body temperature of less than 35 degree Celsius.

GLOSSARY OF MEDICAL TERMS

Term	Definition
Hypotonic	A solution which has a greater osmotic pressure than another.
Hypovolaemia	A reduction in the volume of circulating blood causing the body to compensate by increasing the heart rate in order to pump more blood and by contracting small blood vessels to divert flow to major vessels and vital organs. Ultimately, this 'compensation' cannot be maintained and the patient goes into shock.
Hypoxia	A reduction in the amount of oxygen available in the body so as to adversely affect normal vital organ function (typically used with reference to the brain).
Hypoxic damage	The damage caused to any organ by the effect of hypoxia (see above).
Hypsarrhythmia	An abnormal pattern seen on EEG and frequently encountered in cases of infantile spasm. Diagnostic of status epilepticus.
Iatrogenic	Induced by a physician.
Idiopathic	An adjective to indicate that which <i>arises spontaneously or from an obscure or unknown cause</i> .
Ileus	An intestinal obstruction causing colic, vomiting and constipation.
Iliac fossa	The internal concavity of the iliac bone of the pelvis. It contains within it organs such as the ilium, caecum and appendix. The right iliac fossa is the most common site of pain and tenderness in acute appendicitis.
Infarcted	Tissue that has died through failure of its blood (and therefore oxygen) supply.
Infusion	The intravenous or subcutaneous injection of one of a variety of solutions used in the treatment of dehydration and/or electrolyte imbalance or as a vehicle for medication.
Ingestion	The oral taking of substances into the body.
Intercurrent	A disease or condition affecting a person already suffering from something else.
Insensible losses	Fluids lost as sweat, in the breath or in the normal stool.
Inspiration	The movement of air from the external environment through the air ways and into the alveoli of the lungs (breathing in).
Interstitial fluid	See extracellular fluid.
Intestinal colick	Associated with severe abdominal pain.
Intracellular fluid	See extracellular fluid.

GLOSSARY OF MEDICAL TERMS

Term	Definition
Intracerebral	Occurring or situated within the cerebrum.
Intracranial	Within the skull.
Intracranial hypertension	Abnormally high blood pressure within the skull.
Intracranial pressure (ICP)	The pressure inside the skull and thus within the brain tissue and cerebrospinal fluid (CSF).
Intraluminal	Within the space of an object or structure.
Intraperitoneal space	See extraperitoneal.
Intrauterine	Of or related to the uterus.
Intravascular	Of or relating to the blood vessels.
Intravenous	Inside a vein.
Intubated	The introduction of a tube (endotracheal or ET tube) through the mouth or nose and into the larynx in order to provide an airway when resuscitating or artificially ventilating a patient.
Ion	An atom or molecule in which the total number of electrons is not equal to the total number of protons, giving it a net positive or negative electrical charge.
Ipsilateral cranial nerve	The cranial nerve which is on the same side as another structure.
Ischaemia	A restriction in blood supply, generally due to factors in the blood vessels, with resultant damage or dysfunction of tissue.
Ischaemic-hypoxic damage	A brain injury resulting from reduction in blood flow (ischaemia) & lack of oxygen (hypoxia). It is usually caused by cardiac arrest or profound hypotension.
Isotonic solution	A solution with broadly the same osmolar pressure (and thus the same sodium concentration) as blood plasma.
Jugular vein	Any of several large veins of the neck which drain blood from the head.
Jugular venous pressure	The indirectly observed venous pressure wave occurring in the external jugular veins of the neck.
Ketones	Poisonous acidic chemicals produced by the body when fat instead of glucose is burned for energy.
Lactic acidosis	A physiological condition characterized by low pH in body tissues and blood accompanied by an accumulation of lactate.

GLOSSARY OF MEDICAL TERMS

Term	Definition
Laminar	Flat.
Laparotomy	The surgical opening of the abdomen.
Leigh's disease	A rare neurometabolic disorder affecting the central nervous system and characterized by movement disorders.
Leucocytes	White blood cells
Leukoaraiosis	Nonspecific changes in the cerebral white matter.
Leukoencephalopathy	Any of a group of diseases affecting the white matter of the brain.
Ligation	The creation of a ligature or suture typically tied around a vessel to seal it off.
Liver function test	Any one of several tests used to evaluate various functions of the liver, including metabolism, storage, filtration and excretion.
Lumbar	The region of the back lying lateral to the lumbar vertebrae.
Lumbar epidural	The placement of a cannula into the epidural space (near but outside the spinal cord) through which drugs can be delivered to produce anaesthesia of the lower part of the body without necessarily having to render the patient unconscious.
Lumen line	A line inserted into a tubular structure, such as an artery or intestine.
Lymph nodes	The swellings which occur at various points in the lymphatic system through which lymph (a watery fluid derived from blood and absorbed food material) drains.
Macrophages	Those cells whose role it is to engulf and digest cellular debris and pathogens.
Macroscopic	Observable by the naked eye.
Macular rash	A skin eruption where the lesions are flat and less than 1cm in diameter.
Maintenance rate	The IV fluid rate which provides for ongoing and insensible losses in a patient who is not dehydrated and not suffering other abnormal body fluid loss. It is calculated by reference to weight or body surface area.
Major surgery	(a) A surgical operation within the abdominal, pelvic, cranial, or thoracic cavities. (b) A procedure which constitutes a hazard to life or the function of an organ or of tissue. (c) Any surgical procedure that involves general anaesthesia or respiratory assistance.

GLOSSARY OF MEDICAL TERMS

Term	Definition
Mallory Weiss tear	A small tear in the distal oesophageal mucosa.
Mammillary bodies	A pair of small round bodies, located on the undersurface of the brain and forming part of the limbic system.
Mannitol	An osmotic diuretic being a solution of very high molecular weight and designed to provoke rapid excretion of free water through the kidney when given intravenously. It is used in emergency treatment of cerebral oedema and raised intracranial pressure.
McBurney's point	A site of extreme sensitivity in acute appendicitis and situated in the normal area of the appendix.
Mean Arterial Pressure (MAP)	The average arterial blood pressure in an individual during a single cardiac cycle.
Measles	An infection caused by a virus giving rise to a characteristic skin rash known as an exanthem.
Mediastinum ('mediastinal')	A non-delineated group of structures in the thorax and surrounded by loose connective tissue.
Medulla oblongata	The lower half of the brainstem.
Medullary	Of or relating to the medulla (inner core) if any body part or organ.
Medullary Cystic (kidney disease)	An inherited kidney disorder characterized by cysts in both kidneys and tubulointerstitial sclerosis, leading to end-stage renal disease.
Membrane pump	A diaphragm pump.
Meninges	The three membranes that envelop the brain and spinal cord.
Meningitis	An infection or inflammation of the meninges (see above).
Meningococcal	Of or relating to the meningococcus bacterium, which causes cerebrospinal meningitis.
Meningoencephalitis	A condition which simultaneously both resembles meningitis, which is an infection or inflammation of the meninges and encephalitis, which is an infection or inflammation of the brain.
Mesenchyme	A type of undifferentiated loose connective tissue. The term mesenchyme refers to the morphology of embryonic cells.
Mesenteric adenitis	Inflammation of any of the several folds of the peritoneum which connect the intestines to the dorsal wall.
Metabolic acidosis	A pH imbalance in which the body has accumulated excess acid and has inadequate bicarbonate to neutralize it.
Metabolic coupling	The transfer between tissue cells in contact of low molecular weight metabolites such as amino acids.

GLOSSARY OF MEDICAL TERMS

Term	Definition
Metabolic disease	Any of the diseases or disorders that disrupt normal metabolism ie the process of converting food to energy on a cellular level.
Metabolic regulation	The process of metabolism which allows organisms to respond and interact with their environment.
Metabolism	The chemical reactions occurring in living organisms to sustain life.
Methylprednisolone	A synthetic drug typically used for its anti-inflammatory effects.
Microbiology	The branch of biology concerned with the study of microorganisms, including bacteria and viruses.
Microglia	A type of cell that is the resident of the brain and spinal cord and acts as the first and main form of active immune defence in the central nervous system.
Microvascular	Of or relating to the small blood vessels.
Midazolam	A short-acting drug in the benzodiazepine (psychoactive) class used in the treatment of acute seizures, insomnia for inducing sedation before medical procedures.
Mitochondrion (plural mitochondria)	A membrane-enclosed organelle found in most eukaryotic cells. Mitochondria are sometimes described as "cellular power plants" because they generate adenosine triphosphate (ATP) which is used as a source of chemical energy.
Mmol/l	Millimoles per litre. A millimole is one thousandth of a mole. A mole is the amount of any substance that contains 60,000,000,000,000,000,000,000 molecules or atoms.
Monro-Kellie principle	The hypothesis that the cranial compartment is incompressible and the volume inside the cranium is fixed. The cranium and its constituents (blood, CSF, & brain tissue) create a state of volume equilibrium so that any increase in volume of one of the cranial constituents must be compensated by a decrease in the volume of another.
Multivariate	Of or relating to a number of different variations.
Mumps	An acute inflammatory contagious disease caused by a paramyxovirus and characterized by swelling of the salivary glands and sometimes also of the pancreas, ovaries or testes.
Myelin	An electrically insulating material that forms a layer or myelin sheath, usually around only the axon of a neuron. It is essential for the proper functioning of the nervous system.
Myelinolysis	A neurological disease caused by severe damage of the myelin sheath.

GLOSSARY OF MEDICAL TERMS

Term	Definition
Myogenic	Of or giving rise to the formation of muscle tissue.
Na ⁺ and K ⁺ electrodes	The parts of a piece of laboratory apparatus which measure concentrations of sodium (Na ⁺) and potassium (K ⁺).
Nail bed stimuli	Pressure to the nail bed provokes pain. An individual's response depends upon brain function, so the test is used to assess the severity of coma.
Necrosis	The premature death of cells and living tissue, caused by factors external to the cell or tissue.
Neonatal	Of or relating to the first 28 days of an infant's life.
Neonate	Refers to an infant in the first 28 days after birth.
Neostigmine	A drug used by anaesthetists to reverse the action of certain muscle relaxants (e.g. atracurium). It acts within a minute of being injected intravenously and lasts 20-30 minutes. It is used at the end of an operation to enhance recovery.
Nephrogenic diabetes insipidus	A condition in which the kidney is unable to respond to the hormone vasopressin (ADH). Patients cannot retain water so are at risk of dehydration. It is usually congenital and is characterised by excessive passage of urine (polyuria) and thirst (polydipsia) leading to episodes of hypernatraemia, dehydration, fever, constipation and vomiting.
Nephrology	The branch of medicine concerned with the study and management of kidney disease.
Nephrons	The 2 million individual microscopic filtering units of the kidneys which consist of glomeruli and tubules.
Nephrostogram	A radiograph of the kidney after a contrast agent has been administered through a nephrostomy tube.
Nephrostomy	An artificial opening created between the kidney and the skin which allows for the drainage of urine directly from the upper part of the urinary system.
Neuroblastoma	A malignant growth comprising embryonic nerve cells.
Neuroimaging	Non-invasive methods of visualizing the central nervous system, especially the brain, by various imaging modalities.
Neurology	The branch of medical practice concerned with the study of the nervous system and its disorders.
Neuromuscular	Of or relating to nerves and muscles.

GLOSSARY OF MEDICAL TERMS

Term	Definition
Neuromuscular blockade	The process by which drugs are delivered to induce temporary muscle paralysis. Always given in conjunction with drugs to induce sleep and prevent pain.
Neuron	An electrically excitable cell that processes and transmits information by electrical and chemical signalling.
Neuronal migration defect (or disorder)	A congenital brain abnormality caused by the abnormal migration of neurons in the developing brain and nervous system.
Neurones	Also known as a nerve cell, this is a basic cellular building block of the nervous system which contains billions of neurones.
Neuropathology	The study of diseased nervous system tissue, usually conducted by small surgical biopsies or brain autopsy.
Neuropathy	Damage to nerves of the peripheral nervous system.
Neuropeptides	Any of several types of molecules found in brain tissue, composed of short chains of amino acids including endorphins and vasopressin.
Neuroradiology	The branch of radiology concerned with diagnosing diseases of the nervous system.
Neurosurgery	Any surgery involving the brain, spinal cord or peripheral nerves.
Neutrophils	White blood cells with cytoplasmic granules that consume harmful bacteria, fungi and other foreign materials.
Nifedipine	A medicine used to lower hypertension and treat angina (chest pain).
Non-convulsive / non-fitting Status Epilepticus	A series of rapidly repeating seizures without convulsive motor activity. Consciousness is not regained between seizures.
Non-pulsatile	The term 'pulsatile' indicates a state of rhythmic pulsation e.g. the heart beat. A non-pulsatile wave form implies interruption to the expected rhythm pattern.
Norepinephrine	Also called noradrenaline it is a molecule with multiple roles including those of hormone and a neurotransmitter.
Normotensive	Of or relating to normal values of blood pressure.
Nuclei	The control centre of a cell containing the cell's chromosomal DNA.
Nucleolysis	The process by which the nucleus of a displaced intervertebral disc is dissolved by disease.
Nutrison	A nutritional supplement containing protein, carbohydrates, fats, vitamins & minerals which provides 750 kilocalories per 500 mls.

GLOSSARY OF MEDICAL TERMS

Term	Definition
Obstetrics	The branch of medicine concerned with pregnancy and childbirth, including the study of the physiologic and pathologic function of the female reproductive tract & the care of the mother and foetus throughout pregnancy, childbirth and the recuperative period following delivery.
Obstructive uropathy	A condition in which the flow of urine is blocked, causing it to back up and injure one or both kidneys.
Occipital horn syndrome	A deficiency in copper excretion causing skeletal deformity.
Occipital lobe	The visual processing centres situated at the back of the cerebral hemispheres of the brain.
Oedema or Oedematous	The excessive accumulation of serous fluid in the intercellular spaces of tissue.
Oliguria	A significant reduction from normal in the volume of urine passed.
Ondanestron	An antiemetic for the treatment of nausea and vomiting.
Opioid	A psychoactive chemical that works by binding to opioid receptors providing pain relief.
Orchidopexy	A surgical procedure to move an undescended testicle into the scrotum and permanently fix it there.
Organelle	A specialised part of a cell with a specific function and usually separately enclosed within its own lipid bilayer.
Organic acid	An acid containing one or more carbon atoms.
Organic aciduria	Excessive excretion of one or more organic acids in the urine.
Ornithine transcarbamylase (OTC) deficiency	A rare metabolic urea-cycle disorder. The urea cycle is a series of five liver enzymes that rid the body of ammonia. When one of these enzymes is missing or deficient, ammonia accumulates in the blood and travels to the brain, causing coma, brain damage and death.
Osmolality	A measure of the osmoles (the number of moles of a chemical compound that contribute to a solution's osmotic pressure) of solute per kilogram of solvent (osmol/kg or Osm/kg).
Osmolarity	Osmolarity is an estimation of the osmolar concentration of plasma and is proportional to the number of particles per litre of solution; it is expressed as mmol/L.
Osmosis	The passage of water molecules through a semi-permeable membrane such as a cell wall. This occurs when one fluid contains fewer molecules of dissolved solids than the other.

GLOSSARY OF MEDICAL TERMS

Term	Definition
Osmotic disequilibrium syndrome	Where the osmotic equilibrium normally present between two fluid compartments is no longer present.
Osmotic fluid shift	The movement of water across a semi permeable membrane which has the result of tending to equalise the osmotic pressure across the membrane.
Osmotic myelinolysis	A neurological disease caused by severe damage to the myelin sheath of nerve cells in the brainstem.
Osmotic oedema	Oedema caused through osmosis.
Otic	Of or relating to, or located near to, the ear.
Oxidative	Alternative term for redox- which describes all chemical reactions in which atoms have their oxidation state changed.
Oxygen saturation	Oxygen is carried in the blood bound to haemoglobin. If all the available haemoglobin is attached to oxygen then that represents 100% saturation. If the patient is deprived of oxygen so that blood mixes with arterial blood, then the saturation will fall. Saturation is normally above 95% and offers a guide to the adequacy of a patient's oxygenation.
Oxygenation	Saturation with oxygen.
Pancreatitis	Inflammation of the pancreas.
Papilloedema	Swelling of the optic disc due to raised intra-cranial pressure.
Paraventricular	Alongside a ventricle..
Paravertebral plexus	A network of nerves creating a nerve trunk travelling along the length of the vertebral column.
Parenchymal	The bulk of a substance.
Parenteral	Taken into the body or administered in a manner other than through the digestive tract eg intravenous or intramuscular injection.
Parietal	Anything pertaining to the wall of a cavity.
Pathogenesis	The mechanism by which a disease is caused.
Pathology	The science of the causation and effect of disease.
Pathophysiology	The physiological processes associated with disease or injury.
PCO2	An abbreviation for the partial pressure of carbon dioxide. It is commonly measured in blood to determine the adequacy of respiration.

GLOSSARY OF MEDICAL TERMS

Term	Definition
Peduncle	A stem, through which a mass of tissue is attached to a body eg cerebral peduncles.
Peptides	Short polymers of amino acid monomers linked by peptide bonds. They are distinguished from proteins on the basis of size, typically containing less than 50 monomer units.
Percutaneous nephrolithotomy	A surgical procedure to remove stones from the kidney by way of a small puncture incision.
Perfusion	The transfer of fluid through a tissue eg blood through a kidney.
Peribronchial thickening	The build-up of excess fluid or mucus in the small airway passages of the lung causing localized lung collapse.
Perinatal	The period immediately before and after birth.
Peripheral perfusion	The amount of blood circulating in small arteries, arterioles and capillaries. If the circulation is placed under stress and insufficient blood is pumped then these small blood vessels close down in order to preserve blood supply to vital organs.
Perirenal fat	A structure between the renal fascia and renal capsule of the kidney.
Perisylvian Syndrome	An extremely rare neurological disorder characterized by partial paralysis of muscles on both sides of the face, tongue, jaws and throat giving rise to difficulties in speaking, swallowing and/or epilepsy.
Peritoneal dialysis	Dialysis is an intervention whereby surplus fluid and waste in the blood is removed, should the kidneys be unable to perform this task.
Peritoneal dialysis catheter	A plastic tube inserted through skin and muscle into the peritoneal cavity. Dialysis takes place through this catheter.
Peritoneal dialysis cyclor PAC-X	A machine which automatically performs the cycles of peritoneal dialysis allowing patients to undergo treatment overnight and so reducing interference with daytime activity.
Peritonitis	Inflammation of the peritoneum.
Periumbilical	Located near the central area of the abdomen
Perivascular	The periphery of the circulatory system and typically the blood vessels.
pH	A measure of the acidity or basicity of an aqueous solution. Pure water is said to be neutral, with a pH close to 7.0 at 25 °C (77 °F). Solutions with a pH less than 7 are said to be acidic and solutions with a pH greater than 7 are basic or alkaline. Blood pH is a guide to cell functioning.

GLOSSARY OF MEDICAL TERMS

Term	Definition
Phenotype	An individual's characteristics as determined by the interaction between his genotype and the environment.
Phenytoin sodium	A commonly used antiepileptic.
Phonology	The discipline of linguistics concerned with speaking.
Physiological	Pertaining to the normal functioning of an organ as governed by the interaction between its physical and chemical conditions.
Pial	Of or relating to the pia mater or pia, the delicate innermost layer of the meninges (the membranes surrounding the brain & spinal cord).
Plantar reflex	A reflex elicited when the sole of the foot is stimulated with a blunt instrument. Whilst normally a downward response, an upward movement may indicate disease of the brain or spinal cord.
Pneumonic	Pertaining to pneumonia, an infection of the lung.
Pneumothorax	Each lung is coated with a membrane (pleura) which is continuous over the inner surface of the chest (thorax). As the lungs expand & contract with breathing, the two layers of the pleura slide over each other and there is no real space between them. If the lung is punctured air enters this potential space and because it is under pressure, the lung under it collapses. This is termed pneumothorax (<i>'air in the chest cavity'</i>).
Polyuria/Polyuric	The production of an excessive amount of urine as seen with chronic renal failure, diabetes mellitus or diabetes insipidus.
Pons in toto	A portion of the hindbrain connecting the cerebral cortex to the medulla oblongata. It also serves as a communications and coordination centre between the two hemispheres of the brain.
Post-mortem	An examination of the dead body to determine the cause of death.
Posterior cranial fossa	A part of the intracranial cavity, located between the foramen magnum and tentorium cerebelli containing the brainstem and cerebellum.
Posterior reversible encephalopathy syndrome (PRES)	A syndrome characterised by headache, confusion, seizures and visual loss. It may occur in consequence of a number of causes.
Postictal Acute Encephalopathy	A sudden degenerative disease of the brain which appears post-seizure.
Post-ictal	Following a seizure
Prednisone (prednisolone)	A potent steroid medication given by mouth for its anti-inflammatory and/or immunosuppressive properties. The intravenous version is methylprednisolone.

GLOSSARY OF MEDICAL TERMS

Term	Definition
Prodrome	An early symptom (or set of symptoms) which might indicate the onset of a specific disease before more definite symptoms occur.
Prolene	A synthetic suture used for skin closure and general soft tissue approximation and ligation.
Prophylactic	Any medical or public health procedure undertaken to prevent, rather than treat a disease.
Protease	Any enzyme that conducts proteolysis ie the protein catabolism by hydrolysis of the peptide bonds linking amino acids together in the chain of the protein.
Proteinuria	The presence of excessive amounts of protein in the urine.
Pseudolaminar necrosis	The uncontrolled death of cells in the cerebral cortex of the brain. It is seen in the context of cerebral hypoxic-ischemic insults e.g. strokes.
Pulmonary	Of, relating to, or affecting the lungs.
Pulmonary interstitial Oedema	An oedema caused when the capacity of the lymphatics to drain the interstitial fluid is exceeded.
Pulmonary oedema	The presence of excessive fluid within the lung tissue.
Purkinje cells	A class of neurons located in the cerebellar cortex.
Pyelogram	A procedure for obtaining x-ray images of the urinary tract. A radio-opaque medium is injected into a vein and when excreted by the kidneys it shows on x-rays. Any abnormality in the structure or foreign body is outlined by the dye.
Pyknosis	The irreversible condensation of the nucleus of a cell undergoing necrosis
Pyloric stenosis	A narrowing of the passage between the stomach and the small intestine. The condition affecting infants during the first weeks of life can be surgically corrected.
Pyrexia (or fever)	A fever characterised by an elevation of temperature above the normal range of 36.5–37.5°C.
Pyruvic acid	An organic acid having an important role in several metabolic pathways.
Radial artery	The artery that arises from the brachial artery at the level of the neck of the radius. It is felt in the wrist as ‘the pulse.’
Radiology	A medical specialty employing the use of imaging to both diagnose and treat disease.
Raised intracranial pressure	See cerebral oedema

GLOSSARY OF MEDICAL TERMS

Term	Definition
Rarefaction	The reduction of a medium's density or the opposite of compression.
Rebound	A reverse response occurring upon withdrawal of a stimulus.
Rebound tenderness	A clinical sign detectable upon physical examination of the abdomen. It refers to pain upon <i>removal</i> of pressure rather than the <i>application</i> of pressure to the abdomen.
Recannalise	The process of restoring flow to or reuniting an interrupted bodily tube e.g. an artery.
Red blood cells (erythrocytes)	Bi-concave non-nucleated cells containing the red pigment haemoglobin which carries oxygen and carbon dioxide between the lungs and the body tissues.
Red cell distribution width (RDW)	A measure of the variation in size of red blood cells.
Rehydration	The process of restoring water balance to the body tissues and fluids. Rehydration can be by oral intake or by the intravenous infusion of fluids.
Renal	Relating to the kidney.
Renal & extra renal losses	Fluid leaving the body as urine is renal loss and all other losses (sweat, vapour in breath, fluid in faeces etc) are extrarenal.
Renal arteries	The vessels which emerge from the aorta to supply blood to the kidneys. Sometimes there is more than one such artery leading to each kidney.
Renal dysplasia	See dysplastic kidneys
Renal tubule	See acute tubular necrosis.
Reperfusion	Damage to tissue caused when blood supply returns to tissue after a period of ischemia or lack of oxygen. The absence of oxygen and nutrients from blood during the ischemic period creates a condition whereby the restoration of circulation results in inflammation and oxidative damage.
Replacement rate (for IV fluids)	In the calculation of intravenous fluid rates it is usual to replace abnormal losses already experienced, for example by vomiting; to allow for the normal fluids required by the body and to make up for continuing abnormal losses, for example by diarrhoea. These are respectively, replacement, maintenance and continuing losses.
Respiratory arrest	The cessation of breathing.
Respiratory pressure waves	The component of a pulsatile pressure wave provoked by the lungs expanding and contracting.

GLOSSARY OF MEDICAL TERMS

Term	Definition
Respiratory rate	The rate at which air passes into and out of the lungs. This occurs 18 times a minute in a healthy adult at rest.
Resuscitation	Methods of revival for a patient in cardiac or respiratory failure.
Reticular formation	That part of the brain concerned with the waking/sleeping cycle and the filtering of incoming stimuli.
Retromandibular vein	A vein formed by the union of the superficial temporal and maxillary veins which descends in the substance of the parotid gland beneath the facial nerve.
Reye's syndrome	A metabolic disorder principally affecting the liver and brain, marked by the rapid development of life-threatening neurological symptoms.
Right & left fundi	A fundus (pleural fundi) usually refers the interior surface of the eye opposite the lens and includes the retina and optic disc. It can be viewed through an ophthalmoscope.
Rotavirus	A genus of viruses of the family Reoviridae having a wheel-like appearance and causing acute infantile gastroenteritis and diarrhoea.
Routes of Medication	The method by which medication is administered to a patient eg <i>Topical</i> where a substance is applied to a localized area of the body, <i>Oral</i> being through the mouth or <i>Per Rectum</i> , through the rectum.
Salaam attacks (or infantile spasms)	A rare type of epilepsy usually starting in the first eight months of life.
Schwartz formula	A method of calculating glomerular filtration rate (see above) in a child with reference to blood levels of creatinine and height.
Sclerosis	A hardening of tissue or other anatomical features.
Scoliosis	A condition in which there is curvature of the spine.
Scrub nurse	An operating theatre nurse who has access to the instruments and the exposed parts of the body ('the operative field'). Accordingly and in order to be sterile, they 'scrub' their hands and arms prior to surgery, wear a sterile gown and gloves and are masked. They may not touch any unsterile area during the procedure.
Sentinel Event	Any unanticipated event in a healthcare setting resulting in death or serious physical or psychological injury to a patient which is unrelated to the natural course of illness.
Sepsis	A bacterial infection in the bloodstream or body tissues.
Septicaemia	A systemic disease caused by the multiplication of microorganisms in the blood. Also called blood poisoning or septic fever.

GLOSSARY OF MEDICAL TERMS

Term	Definition
Serology	The scientific study of blood serum and other bodily fluids. Used in practice to refer to the diagnostic identification of antibodies in the serum.
Sickle cell disease	A group of inherited blood disorders characterized by chronic anaemia, acute episodes of limb or joint pain and occurring with complications due to associated organ and tissue damage.
Sodium chloride 0.18% / dextrose 4%	A solution for IV use containing 30 mmol/litre of sodium and chloride or one-fifth of the concentration in 'natural body fluids' such as blood.
Sodium measurement (mmol/litre)	The concentration of sodium in solution is expressed as the number of milliosmoles in each litre (mOsmol/L). An osmole is a unit used to define chemicals which can contribute to osmosis and represents the number of osmotically active particles which, when dissolved in 22.4 L of solvent at 0 degrees Centigrade, exert an osmotic pressure of 1 atmosphere. A milliosmole is 1/1000 of an osmole.
Sodium thiopentone (STP)	A rapid-onset short-acting drug used to induce general anaesthesia.
Sodium valproate	An anti-convulsive drug.
Sphenopalatine artery	An artery of the head.
Status epilepticus	Repeated epileptic fits without return to consciousness in between. Breathing stops between each fit and the body is deprived of oxygen causing damage to the brain.
Stenosis	An abnormal narrowing in a blood vessel or other tubular organ or structure.
Stereomicroscope	An optical microscope, often referred to as the "light microscope" to magnify small samples.
Sternomastoid	A paired muscle in the superficial layers of the anterior portion of the neck. It acts to flex and rotate the head.
STP	Abbreviation of sodium thiopentone, a drug used to induce anaesthesia intravenously. Also an acronym for Standard Temperature & Pressure.
Striatum	A subcortical part of the forebrain.
Stroke	The sudden and localised death of brain cells due to inadequate blood flow.
Subacute	A description applied to a disease, the duration of which persists between the acute and chronic.

GLOSSARY OF MEDICAL TERMS

Term	Definition
Subarachnoid	The space within the brain between the arachnoid membrane and the pia mater (the delicate innermost layer of the meninges).
Subclavian	The area beneath the clavicle (collar bone).
Subclinical	Without clinical presentation
Subcutaneous	Any part of the body found beneath the skin.
Sub-dural empyema	An intracranial focal collection of purulent material located between the dura mater and the arachnoid mater
Subependymal zone	The cell layer surrounding the lateral ventricles in the brain.
Subpial	Within the space of the brain that separates the pia from the underlying neural tissue.
Subventricular	A paired brain structure situated throughout the lateral walls of the lateral ventricles of the brain.
Sulci	Depressions or fissures in the surface of an organ, especially the brain.
Superior sagittal sinus	A space located within the head along the attached margin of falx cerebri. It allows blood to drain from the lateral aspects of anterior cerebral hemispheres to the confluence of sinuses.
Supraorbital	The region immediately above the eye sockets.
Suprapubic	Relates to the abdomen in its lower part, immediately above the pubic bones.
Suprapubic catheter	See Catheter
Surgical cut-down	A minor surgical procedure whereby a small incision is made in the skin and the underlying tissues are separated so as to expose a blood vessel and so enable the insertion of a cannula into the vessel.
Synapse	A junctional structure in the nervous system that permits a neuron to pass an electrical or chemical signal to another cell.
Syncope	A short loss of consciousness caused by a temporary lack of oxygen in the brain.
Syncytium	A multinucleate cell which can result from multiple cell fusions of uninuclear cells (i.e. cells with a single nucleus).

GLOSSARY OF MEDICAL TERMS

Term	Definition
Syndrome of inappropriate antidiuretic hormone secretion (SIADH)	The Antidiuretic hormone (ADH) is produced by the pituitary gland and has the effect of inhibiting urine production and causing water retention. It is released in response to a range of stimuli including damage to the brain, lung disease, individual drugs, surgery, trauma and in relation to certain glandular disorders. The effect of a SIADH is retention of fluid leading to falls in blood osmolality and blood sodium levels relative to the amount of water present. This will result in dilutional hyponatraemia.
Syntax	The study of the principles and rules for constructing phrases and sentences in natural languages. The term <i>syntax</i> is also used to refer directly to the rules and principles that govern the sentence structure of language.
Tachypnoea	Rapid breathing.
Temporal	Referring or relating to the muscles, bone or blood vessels around the temple.
Tentorium	The internal framework of supporting tissue within the skull formed by ingrowths of the exoskeleton.
Tetraplegic	Paralysis of all four limbs, also known as quadriplegic.
Thalamus	One of two masses of grey matter (brain cells or neurons) lying on either side of the third ventricle of the brain. Important for sensory impulses.
Theatre runner	See Circulating Nurse.
Thoracic	Relating to the chest.
Thromboembolism	A clot in the blood that blocks a blood vessel.
Thrombosis	The formation of a blood clot within the vessels or heart.
Titre	The concentration of a substance in a solution or the strength of such a substance determined by titration.
Tonic	Characterised by continuous tension or contraction of muscles, as a convulsion or spasm.
Tonsillectomy	The surgical removal of the tonsils.
Torsion	Where a cord or vessel twists thereby cutting off blood supply to a particular area of the body.
Toxicology	The scientific study of poisons, their detection, effects and methods of counteraction.
Toxin	A poison, especially a protein or conjugated protein produced by certain animals, higher plants and pathogenic bacteria.

GLOSSARY OF MEDICAL TERMS

Term	Definition
Trachea	The medical term for 'windpipe'.
Transducer	Any part of the body which converts one form of energy into another.
Transuretero-ureterostomy	A ureterostomy is a surgical operation in which the ureter is brought to the body surface to drain, often because of an obstruction in its lower part or in the bladder. If the operation is performed through an endoscope passed through the urethra and bladder into the ureter it is a transureteric operation.
Trigeminal nerve (the fifth cranial nerve)	A nerve containing both sensory and motor fibres. It is responsible for sensation in the face and certain motor functions such as biting, chewing and swallowing.
Tympanometry	An examination used to test the condition of the middle ear and the mobility of the eardrum and/or the conduction bones by creating variations of air pressure in the ear canal.
Uncal	Pertaining to the uncus, being the hook-like anterior end of the hippocampal gyrus on the temporal lobe of the brain.
Upper respiratory infection	Any infection of the upper respiratory tract.
Upregulation	The increase of a cellular component.
Uraemia	The illness accompanying kidney failure (also called renal failure), confirmed by an increase in blood urea, a nitrogenous waste product associated with the failure of this organ.
Urea	A crystalline substance of the chemical formula $\text{CO}(\text{NH}_2)_2$, derived from protein. It is the chief waste product discharged from the body in the urine.
Urea cycle defect	A disorder caused by a deficiency of one of the enzymes in the urea cycle responsible for removing ammonia from the blood stream.
Ureteric catheter	See Catheter
Ureteric stents	A semi rigid hollow tube which can be placed in a hollow organ, such as the ureter so as to bypass or prevent obstruction.
Ureterostomy	The creation of a stoma (a new, artificial outlet) for a ureter or kidney. The procedure is performed to divert the flow of urine away from the bladder when the bladder is absent or not functioning.
Ureters	The tubes which carry urine from the kidneys to the bladder.
Urethral catheter	See Catheter
Urethral valve	An obstructing membrane in the posterior male urethra occurring as an abnormality in development.

GLOSSARY OF MEDICAL TERMS

Term	Definition
Urinalysis	A contraction of urine analysis, or tests for pH (acidity) or the presence of protein, sugar or ketones.
Urinary tract	The passage from the pelvis of the kidney through the ureters, bladder and urethra to the external urinary opening.
Urinary tract infection (UTI)	An infection of one or more structures in the urinary system.
Uropathy	A disease of the urinary system.
Vacuolation	A small cavity in the cytoplasm of a cell, bound by a single membrane and containing water, food, or metabolic waste.
Valium	See 'diazepam'.
Vancomycin	An antibiotic infused intravenously in the treatment of serious infections.
Varicella	A highly infectious viral disease, known commonly as chickenpox.
Vascular	Relating to the blood vessels.
Vascular anastomosis	Connecting two blood vessels (or the cut ends of one vessel) together.
Vasoconstriction	The narrowing of the blood vessels resulting from contraction of the muscular wall of the vessels.
Vasodilation	The widening of blood vessels resulting from relaxation of smooth muscle cells within the vessel walls.
Vasopressin	A hormone secreted by the posterior lobe of the pituitary gland that acts to constrict blood vessels and raise blood pressure. It reduces the excretion of urine and is also called antidiuretic hormone.
Vena cava (pl. venae cavae)	Two large vessels which open into the right atrium of the heart and return venous blood from the whole body (except the lungs). That which drains vessels from the head, neck and upper limbs is called the superior vena cava and that draining from the trunk and lower limbs is the inferior vena cava.
Venous blood	The blood found in the veins.
Venous sinus	A large vein or channel for the circulation of venous blood.
Ventilation	A procedure, usually carried out in an intensive care unit, by which a device called a 'ventilator' takes over a patient's breathing.
Ventilatory support	Breathing assistance to enable sufficient air entry into their lungs, commonly achieved by the use of a mechanical ventilator delivering oxygen and air through an endotracheal tube.

GLOSSARY OF MEDICAL TERMS

Term	Definition
Ventricle	The pumping chambers of the heart.
Ventricular system	A set of structures containing cerebrospinal fluid in the brain. It is continuous with the central canal of the spinal cord.
Vesicoureteral reflux	An abnormal movement of urine from the bladder into ureters or kidneys.
Vessel occlusion	A blockage in a blood vessel usually with a clot. An occluded vessel creates eddies in the normally laminar flow of blood currents.
Virology	The study of viruses and viral diseases.
Viscosity	A measure of the resistance of a fluid deformed by either shear or tensile stress, but commonly and for fluids only, viscosity is descriptive of "thickness" or "internal friction".
Vitreous humour	The clear gel that fills the space between the lens and the retina of the eyeball.
Voltarol (diclofenac)	A proprietary brand of non-steroidal anti-inflammatory drug taken to reduce inflammation and as an analgesic to reduce pain.
White blood cells (leucocytes)	The cells within the blood which contain no haemoglobin and are therefore colourless. They are important in the prevention and response to infection.
White cell count (WCC)	A blood test which determines the number of white blood cells in a blood sample.
Zeroing	A monitor such as that measuring central venous pressure (CVP) is conventionally operated so that zero represents the level of the right atrium, the chamber into which the venae cavae return blood. Should that level change, for example if the bed or trolley on which the patient lies is raised or lowered, then the device has to be adjusted or rezeroed to maintain the zero point.