accommodation; anode (anodal); anterior; axial; symbol for ampere and mass number.

AAA ABDOMINAL AORTIC ANEURYSM.

abatement a decrease in the severity of a pain or a symptom.

abdomen the cavity between the diaphragm and the pelvis, lined by a serous membrane, the peritoneum, and containing the stomach, intestines, liver, gallbladder, spleen, pancreas, kidneys, suprarenal glands, ureters and bladder. For descriptive purposes, its area can be divided into nine regions (see Figure). Acute a. any abdominal condition urgently requiring treatment, usually surgical. Pendulous a. a condition in which the anterior part of the abdominal wall hangs down over the pubis. Scaphoid (navicular) a. a hollowing of the anterior wall so that it presents a concave rather than convex contour.

abdominal pertaining to the abdomen. A. aorta that part of the aorta below the diaphragm. A. aortic aneurysm a dilatation of the abdominal aorta. Men are most at risk and all men are invited for an AAA screening test at 65 years involving a simple ultrasound. Also known as TRIPLE A screening. A. breathing deep breathing; hyperpnoea. A. examination a systematic examination of the abdomen by inspection, palpation and auscultation carried out by midwives during pregnancy and after delivery. The purpose is to determine the equality of uterine size with the calculated period of gestation and later in the pregnancy to determine the position of the fetus. Postnatally the examination is used to ascertain that the uterus is regaining its former non-pregnant size and position. A. reflex reflex contraction of abdominal wall
muscles observed when skin is lightly stroked. A. section incision through the abdominal wall. A. thrust (formerly called the Heimlich manoeuvre) see Appendix 2.

abdominoperineal pertaining to the abdomen and the perineum. A. excision an operation performed through the abdomen and the perineum for the excision of the rectum or bladder. Often done as a synchronized operation by two surgeons, one working at each approach.

abdominoplasty also known as a tummy tuck, is a cosmetic surgery procedure to remove fat and excess loose skin to improve the shape of the abdominal area.

abduce to abduct or to draw away.

abducent leading away from the midline. A. muscle the external rectus muscle of the eye, which rotates it outward. A. nerve the cranial nerve that supplies this muscle.

abductor a muscle that draws a limb away from the midline of the body. The opposite of adductor.

aberrant taking an unusual course. Used of blood vessels and nerves.

aberration deviation from the normal. In optics, failure to focus rays of light. Mental a. mental disorder with a deviation from linear or normal thinking.

ability the power to perform an act, either mental or physical, with or without training. A. test a test that measures a person’s level of performance or estimates future performance. Sometimes also known as an intelligence test, achievement test or aptitude test. Innate a. the ability with which a person is born.

ablation removal or destruction, by surgical or radiological means, of neoplasms or other body tissue.

abnormal varying from what is regular or usual.

ABO system see BLOOD GROUPS.

abort 1. to terminate a process or disease before it has run its normal course. 2. to remove or expel from the womb an embryo or fetus before it is capable of independent existence.

abortifacient an agent or drug that may induce abortion.

abortion 1. premature cessation of a normal process. 2. emptying of the pregnant uterus before the end of the 24th week or a miscarriage (the preferred term). 3. the product of such an abortion. Complete a. one in which the contents of the uterus are expelled intact. Criminal a. the termination of a pregnancy for reasons other than those permitted by law (i.e., danger to mental or physical health of mother or child or family) and without medical approval. Incomplete a. one in which some part of the fetus or placenta is retained in the uterus. Induced a. the intentional emptying of the uterus. Inevitable a. abortion where bleeding is profuse and accompanied by pains, the cervix is dilated and the contents of the uterus can be felt. Missed a. one where all signs of pregnancy disappear and later the uterus discharges a blood clot surrounding a shrunken fetus, i.e., a caruncous mole. Septic a. abortion associated with infection. Therapeutic (legal) a. one induced on medical advice because the continuance of the pregnancy would involve risk to the life of the pregnant woman, or injury to the physical or mental health of the pregnant woman or any existing children of her family, greater than if the pregnancy were terminated; or because there is a substantial risk that if the child were born it would suffer from such physical or mental abnormalities as to be seriously handicapped (1967 Abortion Act, as amended by the Human Fertilization and Embryology Act Amendments 1990 and 2008). Threatened a. the appearance of signs of premature expulsion of the fetus; bleeding is slight, the cervix is closed. Tubal a. the termination of a tubal pregnancy caused by rupture of the uterine tube.

abrasion a superficial injury, where the skin or mucous membrane is
rubbed or torn, sometimes called a graze. *Corneal* a. this can occur when the surface of the cornea has been removed, e.g., by a scratch or other injury.

**abreaction** the reliving of a painful experience, with the release of repressed emotion.

**abruptio placentae** premature detachment of the placenta, causing maternal shock.

**abscess** a collection of pus in a cavity. Caused by the disintegration and replacement of tissue damaged by mechanical, chemical or bacterial injury. *Alveolar* a. an abscess in a tooth socket. *Brodie’s* a. a bone abscess, usually on the head of the tibia. *Cold* a. the result of chronic tubercular infection and so called because there are few, if any, signs of inflammation. *Psoas* a. a cold abscess that has tracked down the psoas muscle from caries of the lumbar vertebrae. *Subphrenic* a. one situated under the diaphragm.

**absorbent** 1. able to take in, or suck up and incorporate. 2. a tissue structure involved in absorption. 3. a substance that absorbs or promotes absorption.

**absorption** 1. in physiology, the taking up by suction of fluids or other substances by the tissues of the body. 2. in psychology, great mental concentration on a single object or activity. 3. in radiology, uptake of radiation by body tissues.

**abstinence** a refraining from the use of or indulgence in food, stimulants or coitus. *A. syndrome* withdrawal symptoms.

**abstract** a brief, comprehensive summary of a research study or other academic report.

**abuse** misuse, maltreatment, or excessive use—may be physical, sexual, psychological or neglect. Can apply to any group of people, e.g., the vulnerable, children, women, people with learning disabilities or the elderly. May also apply to the misuse of power, authority, drugs and other substances, e.g., solvents and equipment.

**abusive head injury** commonly called shaken baby syndrome resulting in traumatic brain injury in infants and young children.

**acanthosis nigricans** darkened, thickened patches of skin that develop around the groin, neck and axilla. Patches can sometimes be itchy and may indicate underlying disease.

**acarus** a genus of small mites. *A. scabiei* (former term for *Sarcoptes scabiei*) the cause of scabies.

**acataphasia** loss of the ability to express connected thought, resulting from a cerebral lesion.

**acceleration** 1. An increase in the speed or velocity of an object or reaction. 2. An increase in the fetal heart-beat of at least 15 beats per minute over the baseline rate for at least 15 seconds.

**access to health care records** there are three pieces of legislation which govern access to patient health care records. Patients (or in the case of deceased patients, their representative) can apply for access to health care records, unless it is considered that serious physical or mental harm to the patient may result or where information would be disclosed relating to a third party who has not consented.

**accessory** supplementary. *A. nerve* the 11th cranial nerve. It is made up of two portions: the cranial and the spinal.

**accident and emergency** sometimes referred to as casualty, the emergency department or trauma medicine. A setting for dealing with problems which require immediate attention and where patients can be directed or referred by a general practitioner or the emergency services.

**acclimatization** the ability of the body to adapt physiologically to changes in the environment. Taking exercise in a hotter climate than the body is used to will lead to increased sweating with
lower sodium levels in an attempt to cool the body but which may lead to dehydration. Climbing, for example, at a high altitude can produce altitude sickness with low oxygen levels in the blood, associated with increased cardiac output and respiratory effort. Athletes participating in sport events at international venues held in hot climates or at high altitudes will require training to adapt to the physiological adjustments that will affect the athletic performance.

accommodation  adjustment. In ophthalmology, the term refers specifically to adjustment of the ciliary muscle, which controls the shape of the lens. Negative a. the ciliary muscle relaxes and the lens becomes less convex, giving long-distance vision. Positive a. the ciliary muscle contracts and the lens becomes more convex, giving near vision.

accountable  liable to be held responsible for a course of action. A qualified nurse has a duty of care according to law; in nursing, being accountable refers to the responsibility the qualified nurse takes for prescribing and initiating nursing care. Nurses are accountable to their patients, their peers and their employing authority, according to the Code for Nurses and Midwives. Registered practitioners are accountable at all times for their actions, on or off duty and whether engaged in current practice or not. Accountability is also identified as one of the three foundations of public service. Everything done by those who work in the NHS must be able to stand the test of parliamentary scrutiny, public judgements on propriety and professional codes of conduct.

accreditation  1. to officially recognize someone as having particular status or being qualified to perform particular activity. 2. An acknowledgement of a person’s responsibility or achievement of something. 3. The granting of approval to an institution that meet a satisfactory level of organizational achievement. A. for Prior Experiential Learning (APEL) credit gained for non-academic work (clinical or work experience) that can be used to give credit to academic course work and programmes of study in colleges and universities. A. for Prior Learning abbreviated APL or APCL (accreditation for prior certificated learning). A system used by academic institutions and other establishments to grant credit for previous academic achievements. Usually used to gain credit transfer between institutions leading to academic qualifications.

accretion  growth. The accumulation of deposits, e.g., of salts to form a calculus in the bladder. In dentistry, the growth of tartar on the teeth.

acculturation  the process by which a person absorbs the beliefs, values and customs of another culture, usually through direct contact, e.g., migrants resident in another country.

ACE inhibitors  a group of drugs used in the treatment of hypertension. Their name, angiotensin converting enzyme inhibitors, explains part of their mode of action, although it is thought that some of their other actions may also be important in reducing blood pressure.

acet-  combining form denoting acid. From the Latin acetum, vinegar.

acetabuloplasty  an operation performed to improve the depth and shape of the hip socket in correcting congenital dislocation of the hip or in treating osteoarthritis of the hip.

acetabulum  the cup-like socket in the innominate bone, in which the head of the femur moves.

acetate  a salt of acetic acid.

acetoacetic acid  diacetic acid. A product of fat metabolism. It occurs in excessive amounts in diabetes and starvation, giving rise to acetone bodies in the urine.

acetonemia  the presence of acetone bodies in the blood.
Acetone a colourless inflammable liquid with a characteristic odour. Traces are found in the blood and in normal urine. A. bodies ketones found in the blood and urine of uncontrolled diabetic patients and also in acute starvation as a result of the incomplete breakdown of fatty and amino acids. 

Acetonuria the presence of an excess quantity of acetone bodies in the urine, giving it a peculiar sweet smell.

Acetyl coenzyme A active form of acetic acid, to which carbohydrates, fats and amino acids not needed for protein synthesis are converted.

Acetylcholine a chemical transmitter that is released by some nerve endings at the synapse between one neurone and the next or between a nerve ending and the effector organ it supplies. These nerves are said to be cholinergic, e.g., the parasympathetic nerves and the lower motor neurones to skeletal muscles. Acetylcholine is rapidly destroyed in the body by cholinesterase.

Achalasia failure of relaxation of a muscle sphincter causing dilatation of the part above, e.g., of the oesophagus above the cardiac sphincter.

Ache a dull continuous pain.

Achilles Greek mythological hero who could be wounded only in the heel. A. tendon tendo calcaneus, connecting the soleus and gastrocnemius muscles of the calf to the heel bone (os calcis). Tapping the Achilles tendon normally produces the Achilles reflex or ankle jerk.

Achlorhydria the absence of free hydrochloric acid in the stomach. May be found in pernicious anaemia, pellagra and gastric cancer.

Acholia lack of secretion of bile.

Acholuria deficiency or lack of bile in the urine.

Acholuric pertaining to acholuria. A. jaundice jaundice without bile in the urine.

Achondroplasia an inherited condition in which there is early union of the epiphysis and diaphysis of long bones. Growth is arrested resulting in short stature.

Achromasia 1. lack of colour in the skin. 2. absence of normal reaction to staining in a tissue or cell.

Achromatopsia complete colour-blindness caused by disease or trauma. It may be congenital.

Achylia absence of hydrochloric acid and enzymes in the gastric secretions. A. gastrica a condition in which gastric secretion is reduced or absent.

Acid 1. sour or sharp in taste. 2. a substance which, when combined with an alkali, will form a salt. Any acid substance will turn blue litmus paper red. Individual acids are given under their specific names. A. alcohol-fast descriptive of stained bacteria that are resistant to decolourization by both acid and alcohol. A.–base balance the normal ratio between the acid ions and the basic or alkaline ions required to maintain the pH of the blood and body fluids. Most of the body’s metabolic processes produce acids as their end products, but a somewhat alkaline body fluid is required as a medium for vital cellular activities. Therefore chemical exchanges of hydrogen ions must take place continuously in order to maintain a state of equilibrium. An optimal pH (hydrogen ion concentration) between 7.35 and 7.45 must be maintained; otherwise, the enzyme systems and other biochemical and metabolic activities will not function normally.

Acidaemia abnormal acidity of the blood, which contains an excess of hydrogen ions in which the pH of the blood falls below 7.35.

Acidity 1. sourness or sharpness of taste. 2. the state of being acid.

Acidosis a pathological condition resulting from accumulation of acid or depletion of the alkaline reserve (bicarbonate content) in the blood and body tissues, and characterized by increase in hydrogen ion concentration (decrease in pH to below 7.30). Metabolic a.
acidosis resulting from accumulation in the blood of ketoacids (derived from fat metabolism) at the expense of bicarbonate, thus diminishing the body’s ability to neutralize acids. Occurs in diabetic ketoacidosis, lactic acidosis and failure of renal tubules to reabsorb bicarbonate. 

Respiratory acidosis resulting from ventilatory impairment and subsequent retention of carbon dioxide. Carbon dioxide accumulates in the blood and unites with water to form carbonic acid. Occurs with severe birth asphyxia and other respiratory conditions affecting the newborn and in adults with depression of the respiratory centre of the brain due to cerebral disease or drugs.

Acidotic 1. pertaining to acidosis. 2. a person suffering from acidosis.

Acinus a minute saccule or alveolus of a compound gland, lined by secreting cells. The secreting portion of the mammary gland consists of acini.

Acme 1. the highest point. 2. the crisis of a fever when the symptoms are fully developed.

Acne an inflammatory condition of the sebaceous glands in which blackheads (comedones) are usually present together with papules and pustules. A. keratitis inflammation of the cornea associated with acne rosacea. A. rosacea a redness of the forehead, nose and cheeks due to chronic dilatation of the subcutaneous capillaries, which may become permanent with the formation of pustules in the affected areas. A. vulgaris form that occurs commonly in adolescents and young adults, affecting the face, chest and back.

Acneiform resembling acne.

Acousma the hearing of imaginary sounds.

Acoustic relating to sound or the sense of hearing. A. neuroma a benign tumour of the brain. The tumour grows on the acoustic nerve and can affect hearing and balance. Whilst the tumours are generally slow growing they can become large if not treated. Also known as vestibular schwannoma.

Acquired pertaining to disease, habits or immunity developed after birth; not inherited.

Acquired immune deficiency syndrome (AIDS) see AIDS.

Acrocephalia a malformation of the head, in which the top is pointed.

Acromegaly a chronic condition producing gradual enlargement of the hands, feet, and bones of the head and chest. Associated with overactivity of the anterior lobe of the pituitary gland in adults.

Acromioclavicular pertaining to the joint between the acromion process of the scapula and the lateral aspect of the clavicle.

Acromion the outward projection of the spine of the scapula, forming the point of the shoulder.

Acroparaesthesia condition in which pressure on the nerves of the brachial plexus causes numbness, pain and tingling of the hand and forearm.

Acrophobia extreme or irrational fear of height.

Acrosclerosis a combination of Raynaud’s disease and scleroderma that affects the hands, feet, face or chest.

Acrosome part of the head of a spermatozoon containing enzymes that break down the cell membrane of the ovum and allow penetration.

ACTH adrenocorticotrophic hormone; corticotrophin.

Actin the protein of myofibrils responsible for contraction and relaxation of muscles.

Actinic keratoses also known as solar keratoses rough patches of skin caused by sun exposure over a prolonged period of time.

Actinomycosis a genus of the actinobacteria class of bacteria which may give rise to actinomycosis.
actinomycosis a rare chronic infective disease chiefly affecting the lung and jaw, and more rarely the intestine and pelvis.

action the accomplishment of an effect, whether mechanical or chemical, or the effect so produced. A. research a method of undertaking social research that incorporates the researcher’s involvement as a direct and deliberate part of the research, i.e., the researcher acts as a change agent. Cumulative a. the sudden and markedly increased action of a drug after administration of several doses. Reflex a. an involuntary response to a stimulus conveyed to the nervous system and reflected to the periphery, passing below the level of consciousness (see also reflex).

activator a substance, hormone or enzyme that stimulates a chemical change, although it may not take part in the change. In chemistry, a catalyst. For example, yeast is the activator in the process by which sugar is converted into alcohol; the digestive secretions are activated by hormones to carry out normal digestion.

active causing change; energetic. A. immunity an immunity in which individuals have been stimulated to produce their own antibodies. A. labour the normal progress of the birth process, including uterine contractions, dilation of the cervix to at least 3–4 cm and the descent of the fetus into the birth canal. A. listening the act of alert, intentional hearing and demonstration of an interest in what a person has to say through verbal signs, non-verbal gestures and body language. A. movements movements made by the patient, as distinct from passive movements. A. principle the ingredient in a drug that is primarily responsible for its therapeutic action. A. transport the movement of ions or molecules across the cell membranes and epithelial layers, usually against a concentration gradient, resulting directly from the expenditure of metabolic energy. Under normal circumstances more potassium ions are present within the cell and more sodium ions extracellularly. The process of maintaining these normal differences in electrolytic composition between the intracellular fluids is active transport. The process differs from simple diffusion or osmosis in that it requires the expenditure of metabolic energy.

activities of daily living (ADL) those activities usually performed in the course of a person’s normal daily routine, such as eating, cleaning teeth, washing and dressing: forms part of a health assessment.

activities of living (ALs) those activities which meet the physical, psychological and social needs of the individual, e.g., eating, elimination, communication, breathing, expressing sexuality, working, play, etc.

activity theory describes a psycho-social process whereby ageing people disengage from some activities of their earlier life and replace these with other hobbies and pastimes, according to their changing physical abilities and economic situation.

activity tolerance the amount of physical activity tolerated by a patient. It may be assessed in patients with cardiac or chronic respiratory disease. Graded exercise, including walking, cycling and going up and down stairs, may be used to rebuild confidence during the convalescent phase after any serious illness or injury as an important part of any rehabilitation programme.

actomyosin muscle protein complex; the myosin component acts as an enzyme which causes the release of energy.

acuity sharpness. A. of hearing an acute perception of sound. A. of vision clear focusing ability.

acupressure a system of complementary medicine in which pressure is applied to various points on the body to stimulate the innate self-healing
capacity of the individual. See ACUPUNCTURE, SHIATSU.

**acupuncture** a Chinese medical system which aims to diagnose illness and promote health by stimulating the body’s self-healing powers. The insertion of special needles into specific points along the ‘meridians’ of the body is used for the production of anaesthesia, the relief of pain and the treatment of certain conditions.

**acute** a term applied to a disease in which the attack is sudden, severe and of short duration. **A. respiratory distress syndrome (ARDS)** a severe form of acute lung function failure which occurs after an event such as trauma, inhalation of a toxic substance or septic shock. There is severe breathlessness and a dangerous reduction in the supply of oxygen to the blood. **A. stress disorder** an anxiety disorder that is usually transient which occurs within 4 weeks following exposure or involvement to a traumatic event. The staff of the emergency services may be affected, e.g., following a major road traffic incident.

**acyclic** occurring independently of a natural cycle of events (such as the menstrual cycle).

**Adam’s apple** the laryngeal prominence, a protrusion of the front of the neck formed by the thyroid cartilage.

**adamantine** pertaining to the enamel of the teeth.

**adaptation** 1. the process of modification that a living organism undergoes when adjusting itself to new surroundings or circumstances. 2. a function of the stimulus to which the individual is exposed and of the individual’s accommodation to the situation. The adaptation response may relate to physiological needs, role, ‘self’ concept and interdependence. 3. the process of overcoming difficulties and adjusting to changing circumstances. 4. used in ophthalmology to mean the adjustment of visual function according to the ambient illumination. **Colour a.** 1. changes in visual perception of colour with prolonged stimulation. 2. adjustment of vision to degree of brightness or colour tone of illumination. **Dark a.** adaptation of the eye to vision in reduced illumination. **Light a.** adaptation of the eye to vision in bright illumination (photopia), with reduction in the concentration of the photosensitive pigments of the eye.

**addict** a person exhibiting addiction.

**addiction** 1. the taking of drugs or alcohol leading to physiological and psychological dependence with a tendency to increase use. 2. the state of being devoted to a particular activity or interest, e.g., gambling, exercise or computer games to the exclusion of the normal activities of daily living. See DEPENDENCE and DRUG ADDICTION.

**Addison’s disease** T. Addison, British physician, 1793–1860. Deficiency disease of the suprarenal cortex. There is wasting, brown pigmentation of the skin and extreme debility. Also known as primary adrenal insufficiency or hypo-adrenalism.

**additives** substances added to improve, enhance or preserve something. **Food a.** used in the food industry to preserve and make the food look more attractive; these are given serial numbers, e.g., E102 (tartrazine) E200 (sorbic acid). Some additives may produce an allergic reaction in some people and a few are thought to be implicated in behavioural problems in children.

**adducent** leading towards the midline. **A. muscle** the medial rectus muscle of the eye, which turns it inwards.

**adductor** a muscle that draws a limb towards the midline of the body. The opposite of abductor.

**adenine** one of the purine bases found in DNA.

**adenitis** inflammation of a gland, also referred to as LYMPHADENITIS.

**adenoid** small lumps of tissue at the back of the nose, above the roof of the mouth. Part of the immune system.
Only present in children and by the age of 7–8 years the adenoids start to shrink. They disappear by adulthood.

**adenoidectomy** the surgical removal of adenoid tissue from the nasopharynx.

**adenoma** a benign growth involving glandular tissue including the adrenal glands, the thyroid, prostate and pituitary glands. Whilst usually benign they can become cancerous.

**adenomyosis** a condition in which the endometrium of the uterus breaks through the muscle wall of the uterus usually resulting in painful and profuse periods.

**adenopathy** enlargement of any gland, especially those of the lymphatic system.

**adenosine** a nucleoside consisting of adenine and D-ribose (a pentose sugar).

* A. triphosphate (ATP) a compound containing three phosphoric acids. It is present in all cells and serves as a store for energy.

**adenovirus** a virus of the Adenoviridae family. Many types have been isolated, some of which cause respiratory tract infections, while others are associated with conjunctivitis, epidemic keratoconjunctivitis or gastrointestinal infection.

**ADH** antidiuretic hormone. Vasopressin.

**adhesion** union between two surfaces normally separated. Usually the result of inflammation when fibrous tissue forms, e.g., peritonitis may cause adhesions between organs. A possible cause of intestinal obstruction.

**adhesions** capsulitis see FROZEN SHOULDER.

**adipose** of the nature of fat. Fatty.

**adiposity** the state of being too fat. Obesity.

**adiposogenital dystrophy** a condition occurring in adolescent boys with increased body fat accompanied by underdevelopment of the genitalia and altered secondary sexual characteristics caused by damage to the HYPOTHALAMUS usually as a result of a tumour or infection. Also known as FROHLICH'S SYNDROME.

**aditus** an opening or passageway; often applied to that between the middle ear and the mastoid antrum.

**adjustment** in psychology, the ability of a person to adapt to changing circumstances or environment.

**adjuvant** 1. any treatment used in conjunction with another to enhance its efficacy. 2. a substance administered with a drug to enhance its effect.

**ADL** activities of daily living.

**Adler’s theory** A. Adler, Austrian psychiatrist, 1870–1937. The theory that neuroses develop as a compensation for feelings of inferiority, either social or physical.

**adolescence** the period between puberty and maturity. In the male, 14–25 years. In the female, 12–21 years.

**adopt** 1. to take a person, especially another’s child, into a legal relationship as one’s own. 2. to choose to follow a course of action.

**adoption** the legal procedure by which a child is transferred from its natural parents to adopting parents. Regulated by law, the child’s welfare is paramount. Local authorities offer advice and social work support and may act as an adoption agency, and there are also private and charitable agencies registered with the local authority.

**adrenal** 1. near the kidneys. 2. a triangular endocrine gland situated above each kidney.

**adrenalectomy** surgical excision of an adrenal gland.

**adrenaline** a hormone secreted by the medulla of the adrenal gland. Has an action similar to normal stimulation of the sympathetic nervous system: (a) causing dilatation of the bronchioles; (b) raising the blood pressure by constriction of surface vessels and stimulation of the cardiac output; (c) releasing glycogen from the liver. It is therefore used to treat such conditions as asthma, collapse and hypoglycaemia. It acts as a haemostat in local anaesthetics.
adrenergic pertaining to nerves that release the chemical transmitter noradrenaline in order to stimulate the muscles and glands they supply.

adrenocorticotrophin adrenocorticotropic hormone (ACTH); secreted by the anterior lobe of the pituitary body. Stimulates the adrenal cortex to produce cortisol. See CORTICOTROPHIN.

adrenogenital relating to both the adrenal glands and the gonads. A. syndrome a condition of masculinization caused by overactivity of the adrenal cortex resulting in precocious puberty in the male infant and masculinization in the female. Both sexes are liable to Addisonian crises.

adrenolytic a drug that inhibits the stimulation of the sympathetic nerves and the activity of adrenaline.

adsorbent a substance that has the power of attracting gas or fluid to itself, e.g., charcoal.

adsorption the power of certain substances to attach gases or other substances in solution to their surface and so concentrate them there. This is made use of in chromatography.

adult mature. A mature person.

adulteration addition of an impure, cheap or unnecessary ingredient to cheat with, cheapen or falsify a preparation.

advance care planning discussions about the wishes and preferences for end of life care which are documented and shared with permission with relevant agencies and individuals.

advance decision sometimes also referred to as advanced decision to refuse treatment, advance directive or a living will is a written declaration made by a mentally competent person, which sets out their wishes with regard to life-prolonging medical interventions if they are incapacitated by an irreversibly disease or are terminally ill which prevents them making their wishes known to health professionals at the time. See LIVING WILL.

advanced life support (ALS) resuscitation techniques used during a cardiac arrest that follows on from basic life support. They include defibrillation and the administration of appropriate drugs. Paediatric advanced life support (PALS) is a structured and algorithm method of life support for children with severe medical emergencies. See Appendix 2.

advanced trauma life support (ALS) a set of protocols recommended for use by doctors and paramedics when dealing with seriously injured people at the scene of an accident. The immediate treatment of shock from reduced blood volume by the infusion of fluids is an integral component of the life support regime.

advancement in surgery, an operation to detach a tendon or muscle and reattach it further forward. Used in the treatment of strabismus and plastic surgery.

adventitia the outer coat of an artery or vein.

advocacy the process whereby a nurse or health care professional provides a patient and/or the family with information to enable them to make informed decisions relating to the care situation. The nurse is then able to support the patient’s decision vis-à-vis other professionals and also to incorporate the informed decisions into care planning.

A-EQUIP a model of clinical supervision for midwives. Abbreviation for advocating for education and quality improvement.

aeration supplying with air. Used to describe the oxygenation of blood which takes place in the lungs.

aerobe an organism that can live and thrive only in the presence of oxygen.

aerobic exercise physical exercises for which the degree of effort is such that it can be maintained for long periods without undue breathlessness. The aim of this form of exercising is to increase the effectiveness of the
heart and lungs and the supply of oxygen to the tissues of the body.

**aeropathy** commonly called ‘the bends’ (decompression sickness).

**aerophagy** the excessive swallowing of air.

**aerosol** finely divided particles or droplets. *A. sprays* used in medicine to humidify air or oxygen, or for the administration of drugs by inhalation.

**aetiology** the science of the causes of disease.

**afebrile** without fever.

**affect** in psychiatry, the feeling experienced in connection with an emotion or mood.

**affection** 1. a morbid condition or disease state. 2. a warm feeling for someone or something.

**affective** pertaining to the emotions or moods. *A. psychoses* major mental disorders in which there is grave disturbance of the emotions.

**afferent** conveying towards the centre. *A. nerves* the sensory nerve fibres that convey impulses from the periphery towards the brain. *A. paths* or *tracts* the course of the sensory nerves up the spinal cord and through the brain. *A. vessels* arterioles entering the glomerulus of the kidney, or lymphatics entering a lymph gland. See EFfERENT.

**affiliation** the judicial decision about the paternity of a child with a view to the issue of a maintenance order.

**affinity** in chemistry, the attraction of two substances to each other, e.g., haemoglobin and oxygen.

**afibrinogenaemia** absence of fibrinogen in the blood. The clotting mechanism of the blood is impaired as a result.

**African tick fever** disease caused by a spirochaete, *Borrelia duttonii*. Transmitted by ticks. See RELAPSING FEVER.

**afterbirth** a lay expression used to describe the placenta, cord and membranes expelled after childbirth.

**afterimage** a visual impression that remains briefly after the cessation of sensory stimulation.

**afterpains** the pains due to uterine contraction after childbirth.

**agammaglobulinaemia** a condition in which there is a lack of gammaglobulin in the blood. The patients are therefore susceptible to infections because of an inability to form antibodies.

**aganglionosis** see HIRSCHSPRUNG’S DISEASE.

**agar** a gelatinous substance prepared from seaweed. Used as a culture medium for bacteria and as a laxative because it absorbs liquid from the digestive tract and swells, so stimulating peristalsis.

**age** 1. the duration, or the measure of time, of the existence of a person or object. 2. to undergo change as a result of the passage of time. *Chronological a.* the actual measure of time elapsed since a person’s birth. *Gestational a.* an expression of age of a developing fetus, usually given in weeks. It is measured from the date of the mother’s last menstrual period, and so is approximately 2 weeks longer than time from conception. *Mental a.* the age level of intellectual ability of a person as gauged by intelligence tests. *Age-related macular degeneration.* See MACULA.

**age-associated memory impairment** with age short-term memory declines; most elderly people learn to overcome and compensate for this deficit. However, for some it may be a considerable problem in daily living. Memory loss associated with dementia is often due to Alzheimer’s disease or cerebral vascular disease. See DEMENTIA and Alzheimer’s disease.

**age spots** with increasing age skin blemishes appear; most commonly they are seborrhoeic keratoses, which are brown or yellow and can occur anywhere on the body. Also common with increasing age are freckles, red pinpoint blemishes on the trunk and solar keratoses due to overexposure to the sun. Treatment is usually unnecessary except occasionally for solar keratoses.
which may eventually progress to skin cancer.

**ageing** the structural changes that take place with time and are not caused by accident or disease. Heredity is an important determinant of life expectancy, but factors such as smoking, an excessive intake of alcohol, obesity, poor diet and insufficient exercise can all contribute to physical and mental deterioration. **A. population** as the number of older people increase, the demand for health care increases. Expectations for health care delivery and provision too are changing as patients become increasingly knowledgeable about their health.

**ageism** the systematic discrimination against people on the grounds of age, based on stereotyping of the elderly as helpless, infirm, confused, requiring health care and supportive social services.

**Agenda for Change** the grading and pay system for NHS staff with the exception of doctors, dentists and some very senior managers.

**agenesis** failure of a structure to develop properly.

**agent** any substance or force capable of producing a physical, chemical or biological effect. *Alkylating a.* a cytotoxic preparation. *Chelating a.* a chemical compound that binds metal ions. *Wetting a.* a substance that lowers the surface tension of water and promotes wetting.

**agglutination** collecting into clumps, particularly of cells suspended in a fluid and of bacteria affected by specific immune serum. *A. test* a means of aiding diagnosis and identification of bacteria. If serum containing known agglutinins comes into contact with the specific bacteria, clumping will take place (*see Widal REACTION*). **Cross a.** a simple test to decide the group to which blood belongs (*see BLOOD GROUPS*).

**agglutinin** any substance causing agglutination (clumping together) of cells, particularly a specific antibody formed in the blood in response to the presence of an invading agent. Agglutinins are proteins (*IMMUNOGLOBULIN*) and function as part of the immune mechanism of the body. When the invading agents that bring about the production of agglutinins are bacteria, the agglutinins produced bring about agglutination of the bacterial cells.

**agglutinogen** any substance that, when present in the bloodstream, can cause the production of specific antibodies or agglutinins.

**aggregation** the massing together of materials, as in clumping. **Familial a.** the increased incidence of cases of a disease in a family compared with that in control families. **Platelet a.** the clumping together of platelets, which may be induced by a number of agents, such as thrombin and collagen.

**aggression** animosity or hostility shown towards another person or object as a response to opposition or frustration.

**agitation** 1. shaking. 2. mental distress causing extreme restlessness.

**aglutition** difficulty in the act of swallowing. Dysphagia.

**agnosia** an inability to recognize objects because the sensory stimulus cannot be interpreted, in spite of the presence of a normal sense organ.

**agonist** the prime mover. A muscle opposed in action by another (the antagonist).

**agony** extreme suffering, either mental or physical.

**agoraphobia** a fear of being in situations where escape might be difficult or help would not be available if things go wrong.

**agranulocyte** a white blood cell without granules in its cytoplasm. The term includes monocytes and lymphocytes.

**agranulocytosis** a condition in which there is a marked decrease or complete absence of granular leukocytes in the blood, leaving the body defenceless
against bacterial invasion. May result from: (a) the use of toxic drugs; (b) irradiation. Characterized by a sore throat, ulceration of the mouth and pyrexia. It may result in severe prostration and death.

agrapha absence of the power of expressing thought in writing. It arises from a lack of muscular coordination or as a result of motor dysfunction.

ague malaria.

AHP allied health professional.

AID artificial insemination of a woman with donor semen.

AIDS acquired immunodeficiency syndrome. The late symptomatic stage of chronic disease caused by human immunodeficiency virus (HIV) infection which progressively impairs the body’s cell-mediated immune responses to infections and cancers. This results in serious ‘opportunistic infections’ caused by microorganisms that do not usually cause illness in people with a healthy immune system, e.g., Pneumocystis jirovecii pneumonia (PCP), or cancers such as Kaposi’s sarcoma (KS) and lymphoma. Additionally, this late stage of HIV disease is characterized by a high and rising level (viral load) of CD4+ T lymphocytes in the plasma. Prior to AIDS, many HIV-infected people experience a variety of recurrent signs and symptoms, including lymphadenopathy, night sweats, diarrhoea, weight loss, malaise, oropharyngeal or vaginal candidiasis (thrush), and herpes zoster (shingles). Formerly known as the AIDS-related complex, this stage is now generally referred to as early symptomatic HIV disease (as opposed to AIDS which is also known as late symptomatic HIV disease).

AIH artificial insemination of a woman with her partner’s semen.

ailment any minor disorder of the body.

air a mixture of gases that make up the earth’s atmosphere. It consists of non-active nitrogen 79%; oxygen 21%, which supports life and combustion; traces of neon, argon, hydrogen, etc.; and carbon dioxide 0.03%, except in expired air, when 6% is exhaled as a result of diffusion that has taken place in the lungs. Air has weight and exerts pressure, which aids in syphonage from body cavities. A.-bed a rubber mattress inflated with air. A. embolism an embolism caused by air entering the circulatory system. A. hunger a form of dyspnoea in which there are deep sighing respirations, characteristic of severe haemorrhage or acidosis. Residual a. air remaining in the lungs after deep expiration. Stationary a. that retained in the lungs after normal expiration. Supplemental a. the extra air forced out of the lungs with expiratory effort. Tidal a. that which passes in and out of the lungs in normal respiratory action.

airway 1. the passage by which the air enters and leaves the lungs. 2. a mechanical device (tube) used for securing unobstructed respiration during general anaesthesia or on other occasions when the patient is not ventilating or exchanging gases properly. It may be passed through the mouth or nose. The tube prevents a flaccid tongue from resting against the posterior pharyngeal wall and causing obstruction of the airway (see Figure).

akinesia loss of muscle power. This may be the result of a brain or spinal cord lesion or, temporarily, of anaesthesia.

akinetetic relating to states or conditions where there is lack of movement.

alalia loss or impairment of the power of speech due to muscle paralysis or a cerebral lesion.

alacrima a deficiency or absence of the secretion of tears.

alanine an amino acid formed by the ingestion of dietary protein. A. transaminase (ALT) a transaminase found in plasma and the liver which catalyses the two parts of the alanine cycle.
albinism a condition in which there is congenital absence of pigment in the skin, hair and eyes. It may be partial or complete.

albino a person affected with albinism.

albumin 1. any protein that is soluble in water and moderately concentrated salt solutions and is coagulable by heat, e.g., egg white. 2. serum albumin; a plasma protein, formed principally in the liver and constituting about four-sevenths of the 6%–8% protein concentration in the plasma. Albumin is a very important factor in regulating the exchange of water between the plasma and the interstitial compartment (space between the cells). A drop in the amount of albumin in the plasma results in an increase in tissue fluid, which, if severe, becomes apparent as oedema. Albumin serves also as a transport protein.

albuminuria the presence of albumin in the urine, occurring e.g., in renal disease, in most feverish conditions and sometimes in pregnancy. Orthostatic or postural a. a non-pathological form that affects some individuals after prolonged standing but disappears after bedrest for a few hours.

alcohol a volatile liquid distilled from fermented saccharine liquids and forming the basis of wines and spirits. The official (British Pharmacopoeia) preparation of ethyl alcohol (ethanol) contains 95% alcohol and 5% water. Used: (a) as an antiseptic; (b) in the preparation of tinctures; (c) as a perspective for anatomical specimens. Taken internally, it acts as a temporary heart stimulant, and in large quantities as a depressant poison. It has some value as a food, 30 ml brandy producing about 400 J. Absolute a. that which contains not more than 1% by weight of water. A.-fast pertaining to bacteria that, once having been stained, are resistant to decolorization by alcohol. A. related disorders A variety of physical and mental disorders associated with prolonged and excessive consumption of alcohol including hepatitis, cirrhosis, some cancers, e.g., of the oesophagus, larynx and throat. Heavy alcohol consumption in pregnancy increases the risk of miscarriage and fetal alcohol syndrome. Alcoholics are more likely to suffer from personality changes, depression and to develop dementia. Many alcoholics suffer from a poor diet and are prone to nutritional deficiency. See WERNICKE–KORSAKOFF SYNDROME. A. withdrawal syndrome a group of symptoms that develop in a person suffering from alcoholism within 6–24 hours of taking the last drink of alcohol. The symptoms include restlessness, tremors, loss of appetite, nausea, vomiting, insomnia, disorientation, seizures and delirium tremens. Treatment involves sedation, improving nutrition, counselling and social support.

alcoholic 1. pertaining to alcohol. 2. a person addicted to excessive, uncontrolled alcohol consumption. This results in loss of appetite and vitamin B
deficiency, leading to peripheral neuritis with eye changes and cirrhosis of the liver and to progressive deterioration in the personality.

**alcoholism** the state of poisoning resulting from alcoholic addiction.

**aldosterone** a compound, isolated from the adrenal cortex, that aids the retention of sodium and the excretion of potassium in the body, and by so doing aids the maintenance of electrolyte balance. A. antagonists a group of drugs which block the action of aldosterone.

**aldosteronism** an excess secretion of aldosterone caused by an adrenal neoplasm. The serum potassium is low and the patient has hypertension and severe muscular weakness.

**aleukaemia** an acute condition in which there is an absence or deficiency of white cells in the blood.

**Alexander technique** F.M. Alexander, Australian actor and physiotherapist, 1869–1955. A process of psychophysical postural re-education. Body posture is believed to affect physical and psychological wellbeing and the postural re-education process aims to assist individuals in monitoring how they consciously use their bodies to promote good health.

**alexia** a form of aphasia in which there is an inability to recognize written or printed words. Word blindness.

**algorithm** a process or set of rules used in calculations, e.g., of medications, or for other problem solving. Computer programs are the most familiar examples of algorithms in everyday use.

**alienation** a feeling of estrangement or separation from others or from self. A symptom of schizophrenia. Sufferers often believe that they are under the control of someone else. See DEPERSONALIZATION.

**alignment** the state of being arranged in a line, i.e., in the correct anatomical position.

**aliment** food or nourishment.

**alimentary** relating to the system of nutrition. A. canal alimentary tract. The passage through which the food passes, from mouth to anus. A. system the alimentary tract together with the liver and other organs concerned in digestion and absorption. A. tract alimentary canal.

**alimentation** the giving or receiving of nourishment. The process of supplying the patient’s need for nutrition.

**alkalaemia** an increase in the alkali content of the blood. See ALKALOSIS.

**alkali** a substance capable of uniting with acids to form salts, and with fats and fatty acids to form soaps. Alkaline solutions turn red litmus paper blue. A. reserve the ability of the combined buffer systems of the blood to neutralize acid. The pH of the blood is normally slightly on the alkaline side, between 7.35 and 7.45. The principal buffer in the blood is bicarbonate; the alkali reserve is essentially represented by the plasma bicarbonate concentration.

**alkaline** having the reactions of an alkali. A. phosphatase an enzyme localized on cell membranes that hydrolyses phosphate esters, liberating inorganic phosphate, and has an optimal pH of about 10.0. Serum alkaline phosphatase activity is elevated in obstructive jaundice and bone disease.

**alkalinity** 1. the quality of being alkaline. 2. the combining power of a base, expressed as the maximum number of equivalents of acid with which it reacts to form a salt.

**alkaloid** one of a group of active nitrogenous compounds that are alkaline in solution. They usually have a bitter taste and are characterized by powerful physiological activity. Examples are morphine, cocaine, atropine, quinine, nicotine and caffeine. The term is also applied to synthetic substances that have structures similar to plant alkaloids, such as procaine.

**alkalosis** an increase in the alkali reserve in the blood. It may be
confirmed by estimation of the blood carbon dioxide content and treated by giving normal saline or ammonium chloride intravenously to encourage the excretion of bicarbonate by the kidneys.

**alkylating agent** a drug that damages the deoxyribonucleic acid (DNA) molecule of the nucleus of the cell. Many are nitrogen mustard preparations; they are used in cancer chemotherapy.

**all-or-none law** principle that states that in individual cardiac and skeletal muscle fibres there are only two possible reactions to a stimulus: either there is no reaction at all or there is a full reaction, with no gradation of response according to the strength of the stimulus. Whole muscles can grade their response by increasing or decreasing the number of fibres involved.

**allantos** a membranous sac projecting from the ventral surface of the fetus in its early stages. It eventually helps to form the placenta.

**allele** allelomorph. One of a pair of genes that occupy the same relative positions on homologous chromosomes and produce different effects on the same process of development.

**allelomorph** allele.

**Allen Test** is used to test the blood supply to the hand, specifically the patency of the radial and ulnar arteries. It is performed prior to radial arterial sampling or cannulation.

**allergen** a substance that can produce an allergy or manifestation of an immune response.

**allergic rhinitis** a common condition where there is inflammation of the inside of the nose caused by an allergen such as pollen, dust, mould or animal skin.

**allergy** a hypersensitivity to some foreign substances that are normally harmless but which produce a violent reaction in the patient. Asthma, hay fever, angioneurotic oedema, migraine and some types of urticaria and eczema are allergic states. *See ANAPHYLAXIS.*

**allograft** an organ or tissue transplanted from one person to another of a dissimilar genotype but of the same species. *Non-viable a.* skin, taken from a cadaver, which cannot regenerate. *Viable a.* living tissue transplanted. *See HOMOGRAFT.*

**alloimmunization** the immune response to donated blood, bone marrow or transplanted organ; rhesus-negative pregnant women with a rhesus-positive fetus can become alloimmunized following a sensitizing event, e.g., antepartum haemorrhage or miscarriage, through the development of antibodies that target the foreign material, causing haemolytic disease of the newborn.

**allopathy** the practice of conventional medicine, i.e., with drugs having opposite effects to the symptoms.

**alopecia** baldness. Loss of hair. The cause of simple baldness is not yet fully understood, although it is known that the tendency to become bald is limited almost entirely to males, runs in certain families and is more common in certain racial groups than in others. Baldness is often associated with ageing. *A. areata* hair loss in sharply defined areas, usually the scalp or beard. *Cicatricial a., a. cicatrisata* irreversible loss of hair associated with scarring, usually on the scalp. Also known as scarring alopecia. *Male-pattern a.* loss of scalp hair, genetically determined and androgen-dependent, beginning with frontal recession and progressing symmetrically to leave ultimately only a sparse peripheral rim of hair.

**alpha** the first letter of the Greek alphabet, a. *A. cells* cells found in the islet of Langerhans in the pancreas. They produce the hormone glucagon. *A. fetoprotein (AFP)* a plasma protein originating in the fetal liver and gastrointestinal tract. The serum AFP level is used to monitor the effectiveness of cancer treatment; the amniotic fluid AFP level is used in the prenatal diagnosis of neural tube defects. *A.*
**receptors** tissue receptors associated with the stimulation (contraction) of smooth muscle.

**alternative medicine** a form of medicine differing from conventional health care. Consists of a range of treatments essentially based upon a holistic approach to health and well-being, including homeopathy, aromatherapy, hypnosis, acupuncture and others. These therapies fall into three categories: touch and movement, medicinal and psychological. Commonly called complementary therapies (see COMPLEMENTARY).

**altitude sickness** condition caused by hypoxia that occurs as a result of lower oxygen pressure at high altitudes before acclimatization to the increased altitude. See ACCLIMATIZATION.

**altruism** a sense of unconditional concern for the welfare of others.

**aluminium** symbol Al. A silver-white metal with a low specific gravity, compounds of which are astringent and antiseptic. A. hydroxide compound used as an antacid in the treatment of gastric conditions.

**alveolar** concerning an alveolus, or air sac of the lung. A. air air found in the alveoli.

**alveolitis** inflammation of the alveoli. *Extrinsic allergic a.* inflammation of the alveoli caused by inhalation of an antigen, such as pollen.

**Alzheimer’s cells** A. Alzheimer, German neurologist, 1864–1915. 1. giant astrocytes with large prominent nuclei found in the brain in hepatolenticular degeneration and hepatic comas. 2. degenerated astrocytes.

**Alzheimer’s disease** a progressive form of neuronal degeneration in the brain and the most common cause of dementia in people of all ages. It is more common in older than younger people and is not just a form of senile dementia, as was originally thought. The degeneration of neurones is accompanied by changes in the brain’s biochemistry. At the moment, there is no cure for Alzheimer’s disease but medication is available to help relieve some of the symptoms. Other aspects of treatment are the provision of appropriate health and social care, together with ongoing support for their families.

**amalgam** a compound of mercury and other metals. *Dental a.* now rarely used for filling teeth.

**amaurosis** loss of vision, resulting from a systemic cause without damage to the eye. The visual loss may be partial or complete, and is usually temporary.

**ambidextrous** equally skilful with either hand.

**ambivalence** the existence of contradictory emotional feelings towards an object, commonly of love and hate for another person. If these feelings occur to a marked degree they lead to psychological disturbance.

**amblyopia** dimness of vision without any apparent lesion of the eye. Uncorrectable by optical means.

**ambulant** able to walk.

**ambulatory** having the capacity to walk. *A. treatment or care* health services provided on an outpatient or day care basis.

**amelioration** improvement of symptoms; a lessening of the severity of a disease.

**amenorrhoea** absence of menstruation. *Primary a.* the non-occurrence of the menses. *Secondary a.* the cessation of the menses, after they have been established, owing to disease or pregnancy.

**ametropia** defective vision. A general word applied to incorrect refraction.

**Ames Test** a biological assay to assess the mutagenic potential of chemical compounds. A positive test indicates that the chemical is mutagenic and therefore may act as a carcinogen, since cancer is often linked to mutation.

**amino acid** a chemical compound containing both NH₂ and COOH groups. The end product of protein digestion.
**Essential amino acids**

<table>
<thead>
<tr>
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<th>Essential amino acids</th>
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<tbody>
<tr>
<td>1</td>
<td>Threonine</td>
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<td>2</td>
<td>Lysine</td>
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<tr>
<td>3</td>
<td>Methionine</td>
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<td>4</td>
<td>Valine</td>
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<td>5</td>
<td>Phenylalanine</td>
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<td>6</td>
<td>Leucine</td>
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<td>7</td>
<td>Tryptophan</td>
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<tr>
<td>8</td>
<td>Isoleucine</td>
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<tr>
<td>9</td>
<td>Histidine</td>
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Essential a. one required for replacement and growth but which cannot be synthesized in the body in sufficient amounts and must be obtained in the diet (see Table). Histidine is also essential in childhood. Non-essential a. a. one necessary for proper growth but that can be synthesized in the body and is not specifically required in the diet.

**Aminoglycoside** any of a group of bacterial antibiotics, derived from various species of *Streptomyces*, that interfere with the function of bacterial ribosomes. The aminoglycosides include gentamicin, tobramycin, streptomycin, tobramycin, amikacin, kanamycin and neomycin. They are used to treat infections caused by gram-negative organisms and are classified as bactericidal agents because of their interference with bacterial replication. All the aminoglycoside antibiotics are highly toxic, requiring monitoring of blood serum levels and careful observation of the patient for early signs of toxicity, particularly ototoxicity and nephrotoxicity.

**Amitosis** multiplication of cells by simple division or fission.

**Ammonia** NH₃. A naturally occurring compound of nitrogen and hydrogen formed by the decomposition of proteins and amino acids. Converted into urea by the liver.

**Amnesia** partial or complete loss of memory. **Anterograde a.** loss of memory of events that have taken place since an injury or illness. **Retrograde a.** loss of memory for events prior to an injury. It often applies to the time immediately preceding an accident.

**Amniocentesis** the withdrawal of fluid from the uterus through the abdominal wall by means of a syringe and needle (see Figure) with guided ultrasound. It is primarily used in the diagnosis of chromosome disorders in the fetus and in cases of hydramnios. Mothers who are rhesus-negative should be given a reduced dose of anti-D immunoglobulin after the procedure to prevent them making antibodies.

**Amniography** radiography of the gravid uterus.

**Amnion** the innermost membrane enveloping the fetus and enclosing the liquor amnii, or amniotic fluid.

**Amniotic** pertaining to the amnion. **A. fluid** the albuminous fluid contained in the amniotic sac. Liquor amnii.

**Amoeba** a minute unicellular protozoan. It is able to move by pushing out parts of itself (called pseudopodia). Capable of reproduction by amitotic fission. Infection of the intestines by *Entamoeba histolytica* causes ‘amoebic dysentery’.

**Amoebiasis** infection with amoeba, particularly *Entamoeba histolytica*.

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**AMNIOCENTESIS**
amoebic pertaining to, caused by, or of the nature of an amoeba. *A. abscess* an abscess cavity of the liver resulting from liquefaction necrosis due to entrance of *Entamoeba histolytica* into the portal circulation in amoebiasis; amoebic abscesses may affect the lung, brain and spleen. *A. dysentery* a form of dysentery caused by *Entamoeba histolytica* and spread by contaminated food, water and flies; called also amoebiasis. Amoebic dysentery is mainly a tropical disease but many cases occur in temperate countries. Symptoms are diarrhoea, fatigue and intestinal bleeding. Complications include involvement of the liver, liver abscess and pulmonary abscess.

amoeboid resembling an amoeba in structure or movement.

amorphous without definite shape. The term may be applied to fine powdery particles, as opposed to crystals.

amphiarthrosis a form of joint in which the bones are joined together by fibrocartilage, e.g., the junctions of the vertebrae.

amphoric pertaining to a bottle. Used to describe the sound sometimes heard on auscultation over cavities in the lungs, which resembles that produced by blowing across the mouth of a bottle.

ampoule a small glass or plastic phial in which sterile drugs of specified dose for injection are sealed.

ampulla the flask-like dilatation of a canal, e.g., of a uterine tube.

amputation surgical removal of a limb or other part of the body, e.g., the breast.

amputee a person who has had one or more limbs amputated.

amylase an enzyme that reduces starch to maltose. Found in saliva (ptyalin) and pancreatic juice (amylopsin).

amyloid 1. pertaining to starch. 2. a waxy starch-like material that is a complex protein forming in tissues and organs leading to disturbance of function, called amyloidosis.

amylopsin an enzyme found in the pancreas. Amylase.

amylum [L.] starch.

amyotonia atonic condition of the muscles.

anabolic relating to anabolism. *A. compound* a substance that aids in the repair of body tissue, particularly protein. Androgens may be used in this way.

anabolism the building up or synthesis of cell structure from digested food materials. See metabolism.

anacidity decrease in normal acidity.

anaclitic denoting the dependence of the infant on the mother or mother substitute for its sense of wellbeing.

*A. choice* a psychoanalytical term for the adult selection of a loved one who closely resembles one’s mother (or another adult on whom one depended as a child).

*A. depression* severe and progressive depression found in children who have lost their mothers and have not found a suitable substitute.

anacrotism an abnormal pulse wave tracing embodying a secondary expansion.

anaemia deficiency in either quality or quantity of red corpuscles in the blood that reduces the oxygen carrying capacity of the blood, giving rise especially to symptoms of anoxaemia. There is pallor, breathlessness on exertion, with palpitations, lassitude, headache, giddiness and often a history of poor resistance to infection. Anaemia may be due to many different causes. Increasingly, with the advent of electronic cell counters, anaemia is now classified according to the morphological characteristics of the erythrocytes. *Aplastic a.* the bone marrow is unable to produce red blood corpuscles. A rare condition. *Deficiency a.* any type that is due to the lack of the necessary factors for red cell formation, e.g., hormones or vitamins. *Haemolytic a.* a variety in which there is excessive destruction of red blood corpuscles caused by antibody formation in the
anaerobe  a microorganism that can live and thrive in the absence of free oxygen. These organisms are found in body cavities or wounds where the oxygen tension is very low. Examples are the bacilli of tetanus and gas gangrene.

anaesthesia  loss of feeling or sensation in a part or in the whole of the body, usually induced by drugs. Basal a. basal narcosis. Loss of consciousness, although supplemental drugs have to be given to ensure complete anaesthesia. Epidural a. injection into the extradural space between the vertebral spines and beneath the ligamentum flavum. General a. unconsciousness produced by inhalation or injection of a drug. Inhalation a. drugs or gas are administered by a face mask or endotracheal tube to cause general anaesthesia. Intravenous a. unconsciousness is produced by the introduction of a drug into a vein. Local a. local analgesia. Nerve conduction is blocked by injection of a local anaesthetic, or by freezing with ethyl chloride or by topical application. Spinal a. injection of anaesthetic agent into the spinal subarachnoid space.

anaesthetic  a drug causing anaesthesia.

anaesthetist  a person who is medically qualified to administer an anaesthetic and in the techniques of life support for the critically ill or injured.

anal  pertaining to the anus. A. eroticism sexual pleasure derived from anal functions. A. fissure see FISSURE. A. fistula see FISTULA. A. stage the second stage of a child’s psychosexual development, characterized by the child’s sensual interest in the anal area and the passing or retention of faeces.

analectic  a drug that stimulates the central nervous system.

analgesia  insensibility to pain, especially the relief of pain without causing unconsciousness. Patient-controlled a. a preset dose of analgesic, which the patient controls according to need. In-built safety measures prevent accidental overdose.

analgesic  1. relating to analgesia. 2. a remedy that relieves pain. A. cocktail an individualized mixture of drugs used to control pain.

analogue  1. an organ with a different structure and origin to but the same function as another one. 2. a compound with a similar structure to another but differing in respect of a particular element.

analysis  1. the act of determining the component parts of a substance. 2. in psychiatry, a method of trying to understand the complex mental processes, experiences and relationships with other individuals or groups of individuals to determine the reasons for an individual’s behaviour. A. of covariance (ANCOVA) a statistic that measures differences among group means and uses a statistical technique to equate the groups under study in relation to another given variable. A. of variance (ANOVA) a statistic that tests whether
groups differ from each other, rather than testing each pair of means separately. ANOVA considers the variation among all groups.

**anaphase** part of the process of mitosis or meiosis.

**anaphylaxis** anaphylactic shock. A severe reaction, often fatal, occurring in response to drugs, e.g., penicillin, but also to bee stings and food allergy, e.g., nuts, in sensitive individuals. The symptoms are severe dyspnoea, rapid pulse, profuse sweating and collapse.

**anaplasia** a change in the character of cells, seen in tumour tissue.

**anarthria** inability to articulate speech sounds owing to a brain lesion or damage to peripheral nerves innervating articulatory muscles.

**anastomosis** 1. in surgery, any artificial connection of two hollow structures, e.g., gastroenterostomy. 2. in anatomy, the joining of the branches of two blood vessels.

**anatomy** the science of the structure of the body.

**Ancylostoma** hookworm. A genus of nematode roundworms which may inhabit the duodenum and cause extreme anaemia and malnutrition. **A. duodenale** a hookworm very widespread in tropical and subtropical areas.

**androgen** one of a group of hormones secreted by the testes and adrenal cortex. They are steroids which can be synthesized and produce the secondary male characteristics and the building up of protein tissue. **A. insensitivity syndrome** (AIS) a rare genetic condition that affects the development of a child’s genitals and reproductive organs.

**android** resembling a man. **A. pelvis** a female pelvis shaped like a male pelvis with a wedge-shaped entrance and narrow anterior segment.

**anergy** 1. specific immunological tolerance in which T cells fail to respond normally. The state can be reversed. 2. tiredness, lethargy, lack of energy.

**aneurine** thiamin. An essential vitamin involved in carbohydrate metabolism.

The main sources are unrefined cereals and pork. Vitamin B1.

**aneurysm** a local dilatation of a blood vessel, usually an artery. Atherosclerosis is responsible for most arterial aneurysms; any injury to the arterial wall can predispose to the formation of a sac. Smoking is the strongest risk factor in developing aortic aneurysm. The pressure of blood causes it to increase in size and rupture is likely. Surgery, either open or endovascular, can prevent rupture, see **ABDOMINAL AORTIC ANEURYSM**. **Dissecting a.** a condition in which a tear occurs in the aortic lining when the middle coat is necrosed and blood gets between the layers, stripping them apart. **Fusiform a.** a spindle-shaped arterial aneurysm. **Saccular a.** a dilatation of only a part of the circumference of an artery.

**angina** a tight strangling sensation or pain. **A. cruris** intermittent claudication. Severe pain in the leg after walking. **A. pectoris** cardiac pain that occurs on exertion owing to insufficient blood supply to the heart muscles. **Vincent’s a.** infection and ulceration of the tonsils by a spirochaete, *Borrelia vincentii*, and a bacillus, *Bacillus fusiformis*.

**angiocardiography** radiological examination of the heart and large blood vessels by means of cardiac catheterization and an opaque contrast medium.

**angiography** radiological examination of the blood vessels using an opaque contrast medium.

**angioma** a benign tumour composed of dilated blood vessels.

**angioedema** a type of reaction; most commonly caused by an allergy, characterized by well-defined swellings or weals of sudden and rapid onset in the skin, throat, mouth, eyes and other areas. Fatal oedema of the glottis may occur resulting in a medical emergency. See **OEDEMA**.

**angioplasty** surgery of a narrowed artery to promote the normal flow of blood. **Balloon a.** technique in which a catheter with an elastic, flexible
(balloon-like) tip that can be inflated to widen the narrowed blood vessel, e.g., in the heart. Usually a stent is inserted to keep the artery open. Stents have now been developed coated in slow-release drugs that reduce further risk of arterial narrowing. See STENT.

angiosarcoma a malignant vascular growth.

angiospasm a spasmodic contraction of an artery, causing cramping of the muscles.

angiotensin a substance that raises the blood pressure. It is a polypeptide produced by the action of renin on plasma globulins. Hypertensin.

anhidrosis marked deficiency in the secretion of sweat.

anhidrotic an agent that decreases perspiration. An adiaphoretic.

anhydraemia deficiency of water in the blood.

aniline a chemical compound derived from coal tar, used for making anti-septic dyes. It is an important cause of serious industrial poisoning and methaemoglobinemia.

anima 1. the soul. 2. Jung’s term for the unconscious, or inner being, of the individual, as opposed to the personality presented to the world (persona). In Jungian psychoanalysis, the more feminine soul or feminine component of a man’s personality.

anion a negatively charged ion which travels towards the anode, e.g., chloride (Cl\(^-\)), carbonate (CO\(_3\)^{2-}\). See CATION.

anisocoria lack of part or the whole of the iris.

anisocytosis inequality in the size of the red blood cells.

anisometropia a marked difference in the refractive power of the two eyes.

ankle the joint between the leg and foot, formed by the tibia and fibula articulating with the talus.

ankle-brachial pressure index (ABPI) The measurement of the ratio of systolic blood pressure at the ankle measured by a Doppler ultrasound probe to that measured at the brachial artery to quantify the degree of arterial occlusion in the leg. Forms an important part of a leg ulcer assessment regarding the patient’s suitability for compression bandaging.

ankyloblepharon adhesions and scar tissue on the ciliary borders of the eyelids, giving the eye a distorted appearance.

ankylosing spondylitis a long-term condition in which there is inflammation of the spine and other areas of the body leading to back pain and stiffness, pain and swelling of other parts of the body and extreme tiredness. The cause is unknown but there may be a genetic link.

ankylosis consolidation, immobility and stiffness of a joint as a result of disease.

annular ring-shaped.

anoci-association the exclusion of pain, fear and shock in surgical operations, brought about by means of local anaesthesia and basal narcosis.

anodyne 1. pain-relieving or relaxing. 2. a drug or other treatment that relieves pain.

anomaly considerable variation from normal.

anomie a feeling of hopelessness and lack of purpose.

Anopheles a genus of mosquito. Many are carriers of the malarial parasite and infect humans by their bite. Other species transmit filariasis.

anophthalmia congenital absence of a seeing eye.

anorexia loss of appetite for food. A. nervosa a condition in which there is complete lack of appetite, with extreme emaciation. It is owing to psychological causes and most commonly occurs in young women with poor self esteem and fear of obesity associated with a distorted body image, leading them to perceive themselves as fat and to take extreme forms of dietary control in order to lose weight.

anosmia loss of the sense of smell.
anovular applied to the absence of ovulation. Usually refers to uterine bleeding when there has been no ovulation, the result of taking contraceptive pills.
anoxaemia complete lack of oxygen in the blood.
anoxia lack of oxygen to an organ or tissue.
antacid a substance neutralizing acidity, particularly of the gastric juices.
antagonist 1. a muscle that has an opposite action to another, e.g., the biceps to the triceps. 2. in pharmacology, a drug that inhibits the action of another drug or enzyme, e.g., methotrexate is a folic acid antagonist. 3. in dentistry, a tooth in one jaw opposing one in the other jaw.
anteflexion a bending forward, as of the body of the uterus. See retroflexion.
antenatal before birth. A. care care provided by midwives, GPs and obstetricians during pregnancy to ensure that the fetal and maternal health are satisfactory. Deviations from normal can be detected and treated early. The mother can be prepared for labour and parenthood and health education offered.
antepartum shortly before birth, i.e., in the last 3 months of pregnancy. A. haemorrhage bleeding occurring before parturition. See placenta praevia.
anterior situated at or facing towards the front. The opposite of posterior. A. capsule the anterior covering of the lens of the eye. A. chamber of the eye the space between the cornea in front and the iris and lens behind.
anterograde extending or moving forwards.
anteversion the forward tilting of an organ, e.g., the normal position of the uterus. See retroversion.
anthelmintic (anthelminthic) 1. destructive to worms. 2. an agent destructive to worms.
anthracosis a disease of the lungs, caused by inhalation of coal dust. A form of pneumoconiosis. ‘Miner’s lung’.
anthracosis an acute, notifiable, infectious disease due to Bacillus anthracis, acquired through contact with infected animals or their by-products. A worldwide zoonosis, anthrax is now very uncommon in the UK.
anthropoid resembling a human. A. pelvis female pelvis in which the anteroposterior diameter exceeds the transverse diameter.
anthropology the study of human beings that focuses on origins, historical and cultural development, and races. Cultural a. that branch of anthropology that is concerned with individuals and their relationship to others and to their environment. Medical a. biocultural discipline concerned with both the biological and sociocultural aspects of human behaviour, and the ways in which the two interact to influence health and disease. Physical a. that branch of anthropology that concerns the physical and evolutionary characteristics of human beings.
anthropometry the science that deals with the comparative measurement of parts of the human body, such as height, weight, body fat, etc.
anti-D immunoglobulin anti-rhesus antibody which is given by intramuscular injection to a rhesus-negative woman within 72 hours of delivery of her infant or following termination of her pregnancy, miscarriage or invasive investigations such as amniocentesis, to prevent haemolytic disease of the newborn in the next pregnancy. Anti-D is also available to all rhesus-negative women as antenatal prophylaxis. See rhesus factor.
anti-inflammatory a drug that reduces or acts against inflammation. May belong to one of several groups.
antibacterial a substance that destroys or suppresses the growth of bacteria.
antibiotic substances (e.g., penicillin), produced by certain bacteria and fungi, that prevent the growth of, or destroy, other bacteria. A. resistance
the evolution and survival, as a result of worldwide antibiotic misuse, of bacteria undergoing the process of natural selection, despite the use of antibiotics to which they were once sensitive.

**antibody** also known as immunoglobulin, an antibody is one of a group of these glycoprotein molecules found either on the cell surface of B lymphocytes (membrane antibody) where they act as antigen receptors, or produced and secreted by B lymphocytes that have been stimulated and transformed by an antigen into plasma cells. Secreted antibodies are found in blood, serum and in other body fluids and tissues. Antibodies react and combine with specific antigens during humoral immune responses, forming immune complexes. Antibodies are an important component of acquired (learned) immunity. There are five different types, or classes of antibody, each named by the abbreviation for immunoglobulin (lg) and a letter of the alphabet, i.e., IgM, IgG, IgA, IgD, IgE. IgG (also called gamma-globulin) is the most abundant of the five classes of antibody and is the major immunoglobulin in the secondary humoral immune response.

**anticholinergic** a drug that inhibits the action of acetylcholine.

**anticholinesterase** an enzyme that inhibits the action of the enzyme acetylcholinesterase, thereby potentiating the action of acetylcholine at postsynaptic receptors in the parasympathetic nervous system, thus allowing return of normal muscle contraction.

**anticoagulant** a substance that prevents or delays the blood from clotting, e.g., warfarin. New anticoagulants are available and are becoming increasingly more common, e.g., rivaroxaban, dabigatran which require less frequent blood monitoring.

**anticonvulsant** a substance that will arrest or prevent convulsions. Anticonvulsant drugs such as phenytoin are used in the treatment of epilepsy and other conditions in which convulsions occur.

**antidepressant** one of a group of drugs which elevate mood, often diminish anxiety and increase coping behaviour. Tricyclic antidepressants and selective serotonin uptake inhibitors are the most commonly used in treatment of depression. These drugs are usually successful in relieving the symptoms of depression, but may take 2–3 weeks before any improvement is noted. Antidepressant drugs are not addictive, but abrupt withdrawal may result in physical symptoms and should be avoided. Monoamine oxidase inhibitors (MAOIs) are used in the treatment of panic disorders and bipolar depression.

**anti-discriminatory practice** the professional policies, practice and provisions that actively seek to reduce institutional discrimination experienced by individuals and groups, particularly on the grounds of age, race, gender, disability, social class or sexual orientation. Anti-discriminatory practice can utilize particular the Equalities Act 2010 to challenge discrimination.

**antidiuretic** a substance that reduces the volume of urine excreted. A hormone (ADH) a hormone which is secreted by the posterior pituitary gland. Vasopressin.

**antidote** an agent that counteracts the effect of a poison.

**antiembolic** against embolism. Antiembolic hose/stockings are worn to prevent the formation or decrease the risk of deep vein thrombosis, especially in patients after surgery or those confined to bed.

**antiemetic** a drug that prevents or overcomes nausea and vomiting.

**antifungal** a preparation effective in treating fungal infections.

**antigen** any substance, bacterial or otherwise, which in suitable conditions can stimulate the production of an immune response.

**antihaemophilic** see COAGULATION FACTOR CONCENTRATE.
antihistamine any one of a group of drugs which block the tissue receptors for histamine. They are used to treat allergic conditions, e.g., drug rashes, hay fever and serum sickness, and include promethazine.

antihypertensive 1. effective against hypertension. 2. an agent that reduces high blood pressure.

antimalarial against malaria. Drugs that are used both in the treatment of an attack and for prophylaxis. All visitors to malarial countries should take preventative antimalarial drugs. Expert advice should be sought regarding the appropriate drug and dose. See MALARIA.

antimetabolite one of a group of chemical compounds which prevent the effective utilization of the corresponding metabolite, and interfere with normal growth or cell mitosis if the process requires that metabolite.

antineoplastic effective against the multiplication of malignant cells.

antiperistalsis contrary contractions which propel the contents of the intestines backwards and upwards.

antiperspirant a substance applied to the body as a lotion, cream or spray to reduce sweating. Use can sometimes result in irritation especially if the skin is broken.

antiphospholipid syndrome (APS) also known as Hughes syndrome. An immune disorder causing increased risk of blood clots.

antipruritic an external application or drug that relieves itching.

antipyretic an agent that reduces fever.

antisepsis the prevention of infection by destroying or arresting the growth of harmful microorganisms.

antiseptic 1. preventing sepsis. 2. any substance that inhibits the growth of bacteria, in contrast to a germicide, which kills bacteria outright.

antiserum animal or human blood serum which contains antibodies to infective organisms or to their toxins. The serum donor must have previously been infected with the identified organism.

antisocial against society. A. behaviour in psychiatry, the refusal of an individual to accept the normal obligations and restraints imposed by the community upon its members.

antispasmodic any measure used to prevent or relieve the occurrence of muscle spasm.

antitoxin a substance produced by the body cells as a reaction to invasion by bacteria, which neutralizes their toxins. See IMMUNITY.

antitussive 1. effective against cough. 2. an agent that suppresses coughing.

antivenin an antitoxic serum to neutralize the poison injected by the bite of a snake or insect.

antiviral 1. acting against viruses. 2. a drug that is effective against viruses causing disease, e.g., aciclovir.

antrum a cavity in bone. Mastoid a. the tympanic antrum, which is an air-conditioning cavity in the mastoid portion of the temporal bone. Maxillary a. antrum of Highmore. The air sinus in the upper jawbone.

anuria cessation of the secretion of urine.

anus the extremity of the alimentary canal, through which the faeces are discharged. Imperforate a. one where there is no opening because of a congenital defect.

anxiety a chronic state of tension, which affects both mind and body. A. neurosis see NEUROSIS.

anxiolytic a substance, such as diazepam or pentobarbital, used for relief of anxiety. Anxiolytics may quickly cause dependence and are not suitable for long-term administration.

aorta the large artery rising out of the left ventricle of the heart and supplying blood to all the body. Abdominal a. that part of the artery lying in the abdomen. Arch of the a. the curve of the artery over the heart. Thoracic a. that part which passes through the chest.

Mastoid a.

Maxillary a.

antrum of Highmore.

antrum

aorta

Abdominal a.

Thoracic a.
**aortic** pertaining to the aorta. **A. incompetence** owing to previous inflammation the aortic valve has become fibrosed and is unable to close completely, thus allowing backward flow of blood (*a. regurgitation*) into the left ventricle during diastole. **A. stenosis** a narrowing of the aortic valve. **A. valve** the valve between the left ventricle of the heart and the ascending aorta, which prevents the backward flow of blood through the artery.

**aortography** radiographic examination of the aorta. A radio-opaque contrast medium is injected into the blood to render visible lesions of the aorta or its main branches.

**APACHE** abbreviation for Acute Physiology And Chronic Health Evaluation. A classification system for indicating severity of illness in intensive care patients.

**apathy** an appearance of indifference, with no response to stimuli or display of emotion.

**aperient** a drug that produces an action of the bowels. A laxative.

**aperistalsis** lack of peristaltic movement of the intestines.

**Apert’s syndrome** E. Apert, French paediatrician, 1868–1940. A congenital abnormality in which there is fusion at birth of all the cranial sutures, in addition to syndactyly (webbed fingers).

**apex** the top or pointed end of a cone-shaped structure. **A. beat** the beat of the heart against the chest wall which can be felt during systole. **A. of the heart** the end closing the left ventricle. **A. of the lung** the extreme upper part of the organ.

**Apgar score** V. Apgar, American anaesthetist, 1909–1974. A system used in the assessment of the newborn: reflex irritability and colour. The Apgar score is assessed 1 minute after birth and again at 5 minutes. Most healthy infants score 9 at birth. A score below 7 would indicate cause for concern (see Table).

**APEL** see ACCREDITATION.

**APH** antepartum haemorrhage.

**aphagia** loss of the power to swallow.

**aphakia** absence of the lens of the eye. Aphacia.

**aphasia** a communication disorder owing to brain damage; characterized by complete or partial disturbance of language comprehension, formulation or expression. Partial disturbance is also called dysphasia. **Broca’s a.** disorder in which verbal output is impaired, often owing to STROKE, and in which verbal communication may be affected as well. Speech is slow and laboured and writing is often impaired. **Developmental a.** a childhood failure to acquire normal language when deafness, learning difficulties, motor disability or severe emotional disturbance are not causes.

**aphonia** inability to produce sound. The cause may be organic disease of the larynx or may be purely functional.

**aphrodisiac** a drug which excites sexual desire.

<table>
<thead>
<tr>
<th>Sign</th>
<th>Score</th>
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<tbody>
<tr>
<td><strong>Appearance</strong></td>
<td>Blue/pale Body pink, extremities blue Pink</td>
</tr>
<tr>
<td><strong>Pulse rate</strong></td>
<td>Absent Below 100 Above 100 Cries</td>
</tr>
<tr>
<td><strong>Grimace</strong></td>
<td>None Grimace (on stimulation) Cries</td>
</tr>
<tr>
<td><strong>Activity</strong></td>
<td>Limp Some (flexion of extremities) Active</td>
</tr>
<tr>
<td><strong>Respiration</strong></td>
<td>Absent Weak cry, hypoventilation Strong cry</td>
</tr>
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</table>
aphthae small ulcers surrounded by erythema on the inside of the mouth (aphthous ulcers).
apical pertaining to the apex of a structure.
apicectomy excision of the root of a tooth. Root resection.
APL see ACCREDITATION.
aplasia incomplete development of an organ or tissue or absence of growth.
aplastic without power of development. A. anaemia see ANAEMIA.
apnoea cessation of respiration. A. mattress a mattress designed to sound an alarm if the infant lying on it ceases breathing. A. monitor designed to give an audible signal when a certain period of apnoea has occurred. A. of prematurity apnoeic periods occurring in the respiration of newborn infants in whom the respiratory centre is immature or depressed. Cardiac a. the temporary cessation of breathing caused by a reduction of the carbon dioxide tension in the blood, as seen in Cheyne–Stokes respiration. Sleep a. transient attacks of failure of autonomic control of respiration, becoming more pronounced during sleep.
apocrine pertaining to modified sweat glands that develop in hair follicles, such as are mainly found in the axillary, pubic and perineal areas.
aponeurosis a sheet of tendon-like tissue which connects some muscles to the parts that they move.
apophysis a prominence or excrescence, usually of a bone.
apoplexy a sudden fit of insensibility, usually caused by rupture of a cerebral blood vessel or its occlusion by a blood clot producing coma and paralysis of one side of the body. Rarely used term for a stroke.
apparition a hallucinatory vision, usually the phantom appearance of a person. A spectre.
apparition a hallucinatory vision, usually the phantom appearance of a person. A spectre.
appraisal a formal review, usually annually, of a health care professional’s performance by a trained appraiser in order to provide feedback on past performance, identifying progress made and together agreeing future goals and objectives.
apprehension a feeling of dread or fear.
approved name the non-proprietary or generic name for a drug. The approved name should always be used in prescribing except where the bioavailability may vary between brands.
apraxia the inability to perform correct movements because of a brain lesion and not because of sensory impairment or loss of muscle power in the limbs. Oral a. inability to perform
volitional movements of the tongue and lips in the absence of paralysis or paresis. Involuntary movements may, however, be observed, e.g., patients may purse their lips in order to blow out a match.

**aptitude** the natural ability or capacity to acquire mental and physical skills. *A. test* the evaluation of a person’s ability for learning certain skills or carrying out specific tasks.

**apyrexia** the absence of fever.

**aqua** [L.] water. *A. destillata* distilled water.

**aqueduct** a canal for the passage of fluid. *A. of Sylvius* the canal connecting the third and fourth ventricles of the brain.

**aqueous** watery. *A. humour* the fluid filling the anterior and posterior chambers of the eye.

**Arachis** a genus of leguminous plants used in various preparations such as earwax softeners and skin medications.

**arachnodactyly** abnormally long and thin fingers and toes. A congenital condition.

**arachnoid** 1. resembling a spider’s web. 2. a web-like membrane covering the central nervous system between the dura and pia mater.

**arborization** the branching terminations of many nerve fibres and processes.

**arbovirus** one of a large group of viruses transmitted by insect vectors (arthropod-borne), e.g., mosquitoes, sandflies or ticks. The diseases caused include many types of encephalitis, also yellow, dengue, sandfly and Rift Valley fevers.

**arcus** [L.] bow, arch. *A. senilis* an opaque circle appearing round the edge of the cornea in old age.

**ARDS** acute respiratory distress syndrome.

**areola** 1. a space in connective tissue. 2. a ring of pigmentation, e.g., that surrounding the nipple.

**arginase** an enzyme of the liver that splits arginine into urea and ornithine.

**arginine** an essential amino acid produced by the digestion of protein. It forms a link in the excretion of nitrogen, being hydrolysed by the enzyme arginase.

**Argyll Robertson pupil** D. Argyll Robertson, British ophthalmologist, 1837–1909. See PUPIL.

**Arnold–Chiari malformation** J. Arnold, German pathologist, 1835–1915; H. Chiari, German pathologist, 1851–1916. Herniation of the cerebellum and elongation of the medulla oblongata; occurs in hydrocephalus associated with spina bifida. Also known as CHIARI MALFORMATION.

**aromatherapy** the therapeutic use of specially prepared essential or aromatic oils obtained from the different parts of plants, including the flowers, leaves, seeds, wood, roots and bark. The oils may be diluted for use in massage, baths or infusions.

**arousal** a state of alertness and increased response to stimuli.

**arrector pili** a small muscle attached to the hair follicle of the skin. When contracted it causes the hair to become erect, producing the appearance known as gooseflesh.

**arrest** a cessation or stopping. *Cardiac a.* cessation of ventricular contractions. *Developmental a.* discontinuation of a child’s mental or physical development at a certain stage. *Respiratory a.* cessation of breathing. See Appendix 2.

**arrhenoblastoma** a rare ovarian tumour that secretes male hormones and causes virilization.

**arrhythmia** variation from the normal rhythm, e.g., in the heart’s action. *Sinus a.* an abnormal pulse rhythm due to disturbance of the sinoatrial node, causing quickening of the heart on inspiration and slowing on expiration.

**art therapy** the use of the creative arts as a medium to encourage patients to express their feelings when unable to do so verbally.

**artefact** something that is man-made or introduced artificially.
arterial blood gases (ABGs) normally present in arterial blood include oxygen, carbon dioxide and nitrogen. Measurements of the partial pressures of oxygen and carbon dioxide together with the blood’s pH provide important information on the oxygen saturation of the haemoglobin and acid–base state of the blood indicating the adequacy of ventilation in critical care situations.

arteriectomy the removal of a portion of artery wall, usually followed by anastomosis or a replacement graft. See ARTERIOPLASTY.

arteriography radiography of arteries after the injection of a radio-opaque contrast medium.

arterioplasty the reconstruction of an artery by means of replacement or plastic surgery.

arteriosclerosis a gradual loss of elasticity in the walls of arteries due to thickening and calcification. It is accompanied by high blood pressure, and precedes the degeneration of internal organs associated with old age or chronic disease.

arteriotomy an incision or puncture into an artery.

arteriovenous both arterial and venous; pertaining to both artery and vein, e.g., an arteriovenous aneurysm, fistula or shunt for haemodialysis.

arteritis inflammation of an artery. Giant cell a. a variety of polyarteritis resulting in partial or complete occlusion of a number of arteries. The carotid arteries are often involved. Temporal a. occlusion of the extracranial arteries, particularly the carotid arteries.

artery a tube of muscle and elastic fibres, lined with endothelium, which distributes blood from the heart to the capillaries throughout the body.

arthralgia neuralgic pains in a joint.

arthrectomy excision of a joint.

arthritis inflammation of one or more joints. Movement in the joint is restricted, with pain and swelling. Arthritis and the rheumatic diseases in general constitute the major cause of chronic disability in the UK. Acute rheumatic a. rheumatic fever. Osteo- a. (DJD) a degenerative condition attacking the articular cartilage and aggravated by an impaired blood supply, previous injury or overweight, mainly affecting weight-bearing joints and causing pain. Rheumatoid a. a chronic inflammation, usually of unknown origin. The disease is progressive and incapacitating, owing to the resulting anklylosis and deformity of the bones. Usually affects the elderly. A juvenile form is known as STILL’S DISEASE.

arthroclasia the breaking down of adhesions in a joint to produce freer movement.

arthrodosis the fixation of a movable joint by surgical operation.

arthrography the examination of a joint by means of X-rays. An opaque contrast medium may be used.

arthrogryposis 1. a congenital abnormality in which fibrous anklylosis of some or all of the joints in the limbs occurs. 2. a tetanus spasm.

arthroplasty plastic surgery for the reorganization of a joint. Charnley’s a. see MCKEE FARRAR a. Cup a. reconstruction of the articular surface, which is then covered by a vitallium cup. Excision a. excision of the joint surfaces affected, so that the gap thus formed then fills with fibrous tissue or muscle. Girdlestone a. an excision arthroplasty of the hip. McKee Farrar a. replacement of both the head and the socket of the femur; Charnley’s a. is similar. Replacement a. partial removal of the head of the femur and its replacement by a metal prosthesis.

arthroscope an endoscope for examining the interior of a joint.

arthroscopy keyhole surgery used to diagnose and treat joint problems.

articuliar pertaining to a joint.

articulation 1. a junction of two or more bones. 2. the enunciation of words.
artificial not natural. *A. feeding* 1. the giving of food other than by placing it directly in the mouth. It may be provided via the mouth, using an oesophageal tube; the food may be introduced into the stomach through a fine tube via the nostril (the nasal route); an opening through the abdominal wall into the stomach (i.e., a gastrostomy) may allow direct introduction; or food may be injected intravenously (*see parenteral*). 2. in reference to the feeding of infants, giving food other than human milk. *A. insemination* the insertion of sperm into the uterus by means of syringe and cannula instead of coitus. The husband’s, partner’s or donor semen may be used. *A. kidney* a dialysis machine to remove unwanted waste materials from the patient with acute or chronic renal failure. *See* hae-modialysis. *A. respiration* a means of resuscitation from asphyxia. *A. tears* sterile solutions designed to maintain the moisture of the cornea when the latter is abnormally dry due to inadequate tear production. Methylcellulose is a common ingredient.

arytenoid resembling the mouth of a pitcher. *A. cartilages* two cartilages of the larynx; their function is to regulate the tension of the vocal cords attached to them.

asbestos a fibrous non-combustible silicate of magnesium and calcium that is a good non-conductor of heat. There are three types of asbestos fibre—white, brown and blue—that were widely used in the building industry. White fibre was the most commonly used and blue and brown fibres the most dangerous to health. In many countries there are now strict regulations controlling the use of asbestos (which has declined), including its removal from buildings. Contact with asbestos over a prolonged period may result in asbestosis, bronchial and laryngeal cancer and mesothelioma.

asbestosis a form of pneumoconiosis (chronic lung disease), due to the inhalation of asbestos fibres causing scarring of the lung tissue. It results in breathlessness and leads to respiratory failure. It may be latent for many years. *See* mesothelioma.

ascariasis the condition in which roundworms are found in the gastrointestinal tract. Treatment is with anthelmintic drugs to eliminate the infestation.

ascites free fluid in the peritoneal cavity. It may be the result of local inflammation or venous obstruction, or be part of a generalized oedema.

ascorbic acid vitamin C. This acid is found in many vegetables and fruits and is an essential dietary constituent for humans. Vitamin C is destroyed by heat and deteriorates during storage. It is necessary for connective tissue and collagen fibre synthesis and promotes the healing of wounds. Deficiency causes scurvy.

asepsis freedom from pathogenic microorganisms.

aseptic free from sepsis. *A. technique* a method of carrying out sterile procedures so that there is the minimum risk of introducing infection. Achieved by the sterility of equipment and a non-touch technique.

asexual without sex. *A. reproduction* the production of new individuals without sexual union, e.g., by cell division or budding.

asparaginase an enzyme that catalyses the deamination of asparagine; used as an antineoplastic agent against cancers, e.g., acute lymphocytic leukaemia, in which the malignant cells require exogenous asparagine for protein synthesis.

aspartame a synthetic compound of two amino acids (L-aspartyl-L-phenylalanine methyl ester) used as a low-calorie sweetener. It is 180 times as sweet as sucrose (table sugar); the amount equal in sweetness to a teaspoon of sugar contains 0.1 calorie (4.2 J). Aspartame does not promote the formation of dental caries. It
should be avoided by patients with phenylketonuria.

**aspartate transaminase (AST)** an enzyme released when the liver or muscles are damaged. Levels of AST are measured as markers of liver health.

**aspect** that part of a surface facing in a particular direction. *Dorsal a.* that facing and seen from the back. *Ventral a.* that facing and seen from the front.

**aspergillosis** a bronchopulmonary disease in which the mucous membrane is attacked by the fungus *Aspergillus*.

*Aspergillus* a genus of fungi. *A. fumigatus* a common cause of aspergillosis, found in soil and manure.

**aspermia** absence of sperm.

**asphyxia** a deficiency of oxygen in the blood and an increase in carbon dioxide in the blood and tissues. Symptoms include irregular and disturbed respirations, or a complete absence of breathing, and pallor or cyanosis. Asphyxia may occur whenever there is an interruption in the normal exchange of oxygen and carbon dioxide between the lungs and the outside air. Common causes are drowning, electric shock, lodging of a foreign body in the air passages, inhalation of smoke and poisonous gases and trauma to or disease of the lungs or air passages. Treatment includes immediate remedy of the situation (*see* RESPIRATION (ARTIFICIAL) and Appendix 2) and removal of the underlying cause whenever possible.

**aspiration** 1. the act of inhaling. 2. the drawing off of fluid from a cavity by means of suction.

**assault** unlawful personal attack or trespass upon another person including threatening words.

**assay** a quantitative examination to determine the amount of a particular constituent of a mixture, or of the biological or pharmacological potency of a drug.

**assent** agreement to undergo medical care and treatment that is obtained from an adult or child who is legally incompetent to consent.

**assertiveness** a form of behaviour characterized by a confident declaration or affirmation of a statement without need of proof. To assert oneself is to compel recognition of one’s rights or position without either aggressively transgressing the rights of another and assuming a position of dominance, or submissively permitting another to deny one’s rights or rightful position. *A. training* instruction and practice in techniques for dealing with interpersonal conflicts and threatening situations in an assertive manner, avoiding the extremes of aggressive and submissive behaviour.

**assessment** 1. the critical analysis and valuation or judgement of the status or quality of a particular condition, situation or other subject of appraisal. In the nursing process, assessment involves the gathering of information about the health status of the patient/client, analysis and synthesis of the data, and the making of a clinical nursing judgement. The outcome of the nursing assessment is the establishment of a nursing *diagnosis*, the identification of the nursing problems and establishing a nursing care plan. 2. an examination set by an examining authority to test a candidate’s skills and knowledge.

**assimilation** the process of transforming food so that it can be absorbed and utilized as nourishment by the tissues of the body.

**association** coordination of function of similar parts. *A. fibres* nerve fibres linking different areas of the brain. *A. of ideas* a mental impression in which a thought or any sensory impulse will call to mind another object or idea connected in some way with the former. *Free a.* a method employed in psychoanalysis in which the patient is encouraged to express freely whatever comes to mind. By this method material that is in the unconscious can be recalled.
associative play  a form of play in which a group of children participate in similar activities without formal organization or direction.

asthenia  lack of energy or strength. Debility. Loss of tone.

asthenic  description of a type of body build: a pale, lean, narrowly built person with poor muscle development.

asthenopia  eye strain likely to arise in long-sighted people when continual effort of accommodation is required for close work.

asthma  paroxysmal dyspnoea characterized by wheezing and difficulty in expiration. The illness often commences in childhood but can commence at any age and in about half of the children affected it may be outgrown. Bronchial a. attacks of dyspnoea in which there is wheezing and difficulty in expiration due to muscular spasm of the bronchi. The attacks may be precipitated by hypersensitivity to foreign substances, air pollution, exertion or infection, or associated with emotional upsets. There is often a family history of asthma or other allergic condition. Management involves avoidance of known allergens and treatment is with bronchodilators with or without corticosteroids, usually via an aerosol. Other drug therapies used include sodium cromoglycate useful in preventing exercise-induced asthma and inhaled anticholinergic drugs may also be used to assist bronchodilation. An asthmatic person with an acute attack that does not respond to initial drug therapy should be referred to hospital for immediate assessment and treatment. Cardiac a. attacks of dyspnoea and palpitation, arising most often at night, associated with left-sided heart failure and pulmonary congestion. Treatment is with diuretic therapy.

astigmatism  inequality of the refractive power of an eye, due to curvature of its corneal meridians. The curve across the front of the eye from side to side is not quite the same as the curve from above downwards. The focus on the retina is then not a point but a diffuse and indistinct area. May be congenital or acquired.

astringent  an agent causing contraction of organic tissues, thereby checking secretions, e.g., silver nitrate.

astrocytoma  a malignant tumour of the brain or spinal cord. It is slow-growing. A glioma.

asymmetry  inequality in size or shape of two normally similar structures or of two halves of a structure normally the same.

asymptomatic  without symptoms.

asynery  lack of coordination of structures which normally act in harmony.

asystole  absence of heartbeat. Cardiac arrest.

at risk  whereby an individual or population may be vulnerable to a particular disease, hazard or injury. At risk situations are those involving possible problems that may be preventable with appropriate intervention, or, if they should occur, treatment.

ataraxia  a state of detached serenity with depression of mental faculties or impairment of consciousness.

ataxia, ataxy  failure of muscle coordination resulting in irregular jerky movements, and unsteadiness in standing and walking from a disorder of the controlling mechanisms in the brain, or from inadequate input to the brain from joints and muscles. Hereditary a. Friedreich’s ataxia.

atelectasis  a collapsed or airless state of the lung, which may be acute or chronic and may involve all or part of the lung: (a) from imperfect expansion of pulmonary alveoli at birth (congenital a.); (b) as the result of disease or injury.

atheroma  an abnormal mass of fatty or lipid material with a fibrous covering, existing as a discrete, raised plaque within the intima of an artery.

atherosclerosis  a condition in which the fatty degenerative plaques of atheroma are accompanied by arteriosclerosis, a narrowing and hardening of the vessels.
athetosis a recurring series of slow, writhing movements of the hands, usually affecting people with cerebral palsy.

**Athlete's foot** a fungal infection between the toes, easily transmitted to other people. See *TINEA*.

atlas the first cervical vertebra, articulating with the occipital bone of the skull.

atmosphere 1. the gases that surround the earth, extending to an altitude of 16 km. 2. the air or climate of a particular place, e.g., a smoking atmosphere. 3. mental or moral environment, tone or mood.

atomizer an instrument by which a liquid is divided to form a fine spray or vapour (nebulizer).

atony lack of tone, e.g., in the muscle detrusor of the bladder resulting in incontinence.

atopy a state of hypersensitivity to certain antigens. There is an inherited tendency that includes asthma, eczema and hay fever.

**ATP** adenosine triphosphate.

atresia absence of a natural opening or tubular structure, e.g., of the anus or vagina; usually a congenital malformation.

atrial relating to the atrium. **A. fibrillation** overstimulation of the atrial walls so that many areas of excitation arise and the atrioventricular node is bombarded with impulses, many of which it cannot transmit, resulting in a highly irregular pulse. **A. flutter** rapid regular action of the atria. The atrioventricular node transmits alternative impulses or one in three or four. The atrial rate is usually about 300 beats per minute. **A. septal defect** the non-closure of the foramen ovale at the time of birth, giving rise to a congenital heart defect.

atrioventricular pertaining to the atrium and ventricle. **A. bundle** see BUNDLE OF HIS. **A. node** a node of neurogenic tissue situated between the atrium and ventricle and transmitting impulses. **A. valves** the bicuspid and tricuspid valve on the left and right sides of the heart, respectively.

**atrium** pl. atria. 1. a cavity, entrance or passage. 2. one of the two upper chambers of the heart. Formerly called auricle.

atrophy wasting of any part of the body, owing to degeneration of the cells, from disuse, or lack of nourishment or nerve supply. **Progressive muscular a.** a rare form of motor neurone disease with degeneration of the lower motor neurones with wasting of muscle tissue.

**atropine** an alkaloid which inhibits respiratory and gastric secretions, relaxes muscle spasm and dilates the pupil.

**attack** an episode or onset of illness. **A. rate** number of cases of a disease in a particular group, e.g., a school, over a given period, related to the population of that group. **Transient ischaemic a.** brief attack (a few hours or less) of cerebral dysfunction of vascular origin, with STROKE-like symptoms, without lasting neurological deficit.

**attention deficit syndrome** a disorder of childhood characterized by marked failure of attention, impulsiveness and increased motor activity. Affects more boys than girls. Treatment involves medication, behaviour therapy and social support. Also known as attention deficit hyperactivity disorder (ADHD).

attenuation a bacteriological process by which organisms are rendered less virulent by culture in artificial media through many generations, exposure to light, air, etc.; it is used for vaccine preparations.

**attitude** 1. a posture or position of the body; in obstetrics, the relation of the various parts of the fetal body to one another. 2. a pattern of mental views established by cumulative prior experience.

atypical irregular; not conforming to type.
audiogram  a graph produced by an audiometer.
audiologist  an allied health professional specializing in audiology, who provides services that include: (a) evaluation of hearing function to detect hearing impairment and, if there is a hearing disorder, to determine the anatomical site involved and the cause of the disorder; (b) selection of appropriate hearing aids; and (c) training in lip reading, hearing aid use and maintenance of normal speech.
audiology  the science concerned with the sense of hearing, especially the evaluation and measurement of impaired hearing and the rehabilitation of those with impaired hearing.
audiometer  an instrument for testing hearing, whereby the threshold of the patient’s hearing can be measured.
audit  systematic review and evaluation of records and other data to determine the quality of the services or products provided in a given situation. A. trail  the process in which careful documentation of the research process makes it possible for students and other researchers to understand how any particular finding was reached. Medical a. the systematic critical analysis of the quality of medical treatment and care, including the procedures for diagnosis and treatment, the use of resources, outcomes and the resultant quality of life for the patient. Nursing a. an evaluation of structure, process and outcome as a measurement of the quality of nursing care. Concurrent audits are conducted at the time the care is being provided to clients/patients. They may be conducted by means of observation and interview of clients/patients, review of open charts, or conferences with groups of consumers and providers of nursing care. Retrospective audits are conducted after the patient’s discharge. Methods include the study of closed patient’s charts and nursing care plans, questionnaires, interviews and surveys of patients and families.
auditory  relating to the ear or to the sense of hearing.
aura  the premonition, peculiar to an individual, which often precedes an epileptic fit.
aural  referring to the ear.
auricle  1. the external portion of the ear. 2. obsolete term for the atrium.
auriscope  an instrument for examining the drum of the ear. An otoscope.
auscultation  examining the internal organs by listening to the sounds that they give out. In direct or immediate a. the ear is placed directly against the body. In mediate a. a stethoscope is used.
autism  neurodevelopment disorder characterized by impaired social interactions, verbal and non-verbal communication and restricted and repetitive behaviour. Infantile a. failure of a child to relate to people and situations, leading to complete withdrawal into a world of private fantasies.
autistic  pertaining to autism.
autistic spectrum disorder  also known as autism spectrum disorder. A range of conditions which encompass the previous diagnosis of autism, Asperger’s syndrome, pervasive developmental disorder and childhood disintegrative disorder.
autoagglutination  1. clumping or agglutination of cells by an individual’s own serum, as in autohaemagglutination. Autoagglutination occurring at low temperatures is called cold agglutination. 2. agglutination of particulate antigens, e.g., bacteria, in the absence of specific antigens.
autoantibody  an antibody formed in response to and reacting against the individual’s own tissues.
autoantigen  a tissue constituent that stimulates production of autoantibodies in the organism in which it occurs.
autoclave  a steam-heated sterilizing apparatus in which the temperature is raised by reducing the air pressure
inside; steam is injected under pressure, bringing about efficient sterilization of instruments and dishes treated in this way.

**autodigestion** dissolution of tissue by its own secretions. Autolysis.

**autoeroticism** sexual pleasure derived from self-stimulation of erogenous zones (the mouth, the anus, the genitals and the skin). See MASTURBATION.

**autogenic therapy** a complementary therapy combining self-hypnosis and relaxation.

**autogenous** generated within the body and not acquired from external sources.

**autograft** the transfer of skin or other tissue from one part of the body to another to repair some deficiency.

**autoimmune disease** condition in which the body develops antibodies to its own tissues, e.g., in autoimmune thyroiditis (Hashimoto’s disease).

**autoimmunization** the formation of antibodies against the individual’s own tissue.

**autoinfection** self-infection, transferred from one part of the body to another by fingers, towels, etc.

**autoinoculation** inoculation with a microorganism from the body itself.

**autointoxication** poisoning by toxins generated within the body itself.

**autologous** related to self; belonging to the same organism. **A. blood transfusion (ABT)** the patient donates blood before elective surgery for transfusion postoperatively. ABT may also be obtained as a blood salvage procedure during operation or postoperatively. Avoids cross-matching, compatibility and transfusion infection problems.

**autolysis** a breaking up of living tissues, e.g., as may occur if pancreatic ferment escape into surrounding tissues. It also occurs after death.

**automated auditory brainstem response** (AABR) one of two hearing tests in the Newborn Hearing Screening Programme that records brain activity in response to clicking sounds via sensors placed on the infant’s head. Those infants who fail to respond to this test are referred for a full auditory diagnostic assessment.

**automatic** performed without the influence of the will.

**automatism** performance of non-reflex acts without apparent volition, and of which the patient may have no memory afterwards, as in somnambulism.

**Post-epileptic a.** automatic acts following an epileptic fit.

**autonomic** self-governing. **A. nervous system** the sympathetic and parasympathetic nerves that control involuntary muscles and glandular secretion, over which there is no conscious control.

**autonomy** the right of personal freedom of action, which is regarded as one of the hallmarks of a profession.

**autoplasty** 1. replacement of missing tissue by grafting a healthy section from another part of the body. 2. in psychoanalysis, instinctive modification within the psychic systems in adaptation to reality.

**autopsy** postmortem examination of a body to determine the cause of death.

**autosome** any chromosome other than the sex chromosomes. In humans there are 22 pairs of autosomes and one pair of sex chromosomes.

**autosuggestion** suggestion arising in one’s self. Uncritical acceptance of an idea arising in the individual’s own mind.

**autotransfusion** reinfusion of a patient’s own blood.

**autotransplantation** transfer of tissue from one part of the body to another part.

**avascular** not vascular. Bloodless. **A. necrosis** death of bone owing to deficient blood supply, usually following an injury.

**average** 1. the value or score that is typical of a group. The result is obtained by adding several amounts together and then dividing the total by the number of amounts. Sometimes also referred to
as the mean. 2. A colloquial term used to mean ‘usual’ or ‘ordinary’.

aversion intense dislike. A. therapy a method of treating addictions by associating the craving for what is addictive with painful or unpleasant stimuli. It is rarely used.

avian influenza commonly known as bird flu, a disease of poultry and other birds caused by strains of the influenza virus that can occasionally infect people who are in close contact with infected birds. The severity of the disease depends upon the strain of the virus involved; the strain caused by the H5N1 virus is particularly virulent. At the present time, normal influenza vaccines do not protect against the H5N1 virus. See ORTHOMYXOVIRUS and swine influenza.

aviation medicine the medical specialty concerned with the effects of air travel and with the causes and treatment of health problems that may occur in flight.

avitaminosis a condition resulting from an insufficiency of vitamins in the diet. A deficiency disease.

avoidance a conscious or unconscious defence mechanism whereby an individual seeks to escape or avoid certain situations, feelings or conflicts.

avulsion the tearing away of one part from another. Phrenic a. a tearing away of the phrenic nerve. It paralyses the diaphragm on the affected side.

axilla an armpit.

axiom a statement or proposition that can be accepted without evidence as it is obviously true.

axis 1. a line through the centre of a structure. 2. the second cervical vertebra. See PLANES.

axon the process of a nerve cell along which electrical impulses travel. The nerve fibre.

axonotmesis nerve injury characterized by disruption of the axon and myelin sheath but with preservation of the connective tissue fragments, resulting in degeneration of the axon distal to the injury site; regeneration of the axon is spontaneous.

azoospermia absence of spermatozoa in the semen.

azygos something that is unpaired.

azygous vein an unpaired vein that ascends the posterior mediastinum and enters the superior vena cava.