

MEDICAL TERMS AND DRUGS

A

Ablation

A procedure for destroying heart tissue that is creating abnormal electrical impulses.

Accessory pathway

A collection of muscle fibres that bypass the normal pathway for electrical impulses going from the atria to the ventricles through the atrioventricular (AV) node.

ACE inhibitor

A pharmaceutical drug that inhibits the enzyme which converts angiotensin I to angiotensin II.

Acetylcholine

The neurotransmitter released at parasympathetic (vagus) nerve endings.

Acidosis

A condition in which the blood is excessively acidic (pH below 7.38). It is caused by an imbalance in the bicarbonate-carbonic acid buffer system that keeps the pH of blood within a very narrow range.

Acute

Of rapid onset, severe symptoms and short duration.

Adenoma

A benign tumour of epithelial origin.

Adrenaline

See epinephrine.

Adrenergic

Pertaining to the sympathetic branch of the autonomic nervous system.

Adrenergic LAF

Lone atrial fibrillation triggered by excessive sympathetic stimulation.

Adrenergic tone

The strength or vigour of the sympathetic branch of the autonomic nervous system.

ADP (adenosine diphosphate)

A compound involved in energy transfer within cells. It consists of adenine, ribose and two phosphate groups.

Afferent

Pertaining to nerves or neurons that carry impulses (information) from an organ to the brain or spinal cord (See also efferent).

Alkalosis

A condition in which the blood is excessively alkaline (pH above 7.44). It is caused by an imbalance in the bicarbonate-carbonic acid buffer system that keeps the pH of blood within a very narrow range.

Aneurysm

A bulge formed by dilation of the wall of the heart or blood vessel.

Angina pectoris

Pain in the center of the chest, which is induced by exercise and relieved by rest. Angina occurs when the demand for blood exceeds the supply and is usually caused by atherosclerosis of the coronary arteries.

Antiarrhythmic

Pharmaceutical drug designed to prevent abnormal heart rhythms or to convert abnormal rhythms to normal sinus rhythm.

Anticoagulant

Pharmaceutical drug designed to prevent blood clotting.

APC (Activated protein-C resistance)

A condition caused by the presence of a mutation of blood coagulation factor V (factor V Leiden). APC is associated with an increased risk of venous thromboembolism.

Apoptosis

Self-destruction (suicide) of individual cells to avoid a threat to the survival of the organism as a whole.

Arrhythmia

An abnormal heart rhythm.

Atherosclerosis

The development of fatty plaque and scar tissue on the inner wall of the arteries – eventually leading to obstruction of blood flow and an increased risk of thrombosis.

Arterv

A blood vessel that carries blood away from the heart.

Atria

The two upper chambers of the heart. The right atrium receives returning blood from the body and the left atrium receives oxygenated blood from the lungs.

Atrial appendages

Small pouches connected to the right and left atria. The left atrial appendage (LAA) is associated with the generation of blood clots during atrial fibrillation.

Atrial fibrillation

A chaotic movement of electrical impulses across the atria leading to a loss of synchrony between the atria and the ventricles.

Atrial flutter

An abnormal, sustained, rapid contraction of the atria. The rhythm is rapid, but regular as opposed to atrial fibrillation where it is rapid and irregular.

Atrial mapping

See Electrophysiology study

Atrial natriuretic peptide [ANP]

A hormone formed in the atria. ANP is involved in regulating blood pressure and salt and water balance in body fluids.

Atrial refractory period [ARP]

See Refractory period

Atrial thrombus

A blood clot formed in the atrium.

Atrioventricular (AV) node

A set of specialized heart cells that conducts the normal electrical impulses from the atria to the ventricles.

Auscultation

The act of listening for sounds in the body to ascertain the functioning of the heart, lungs, abdomen and other organs (usually done with a stethoscope).

Autonomic nervous system [ANS]

The part of the central nervous system that is not under conscious control (involuntary). It controls the body's internal organs including the heart and digestive system and is responsible for regulating blood pressure.

AV node ablation

Full or partial destruction (by ablation) of the AV node's ability to conduct signals between the atria and ventricles. A permanent pacemaker is required after AV node ablation.

В

Baroreceptors

Specialized muscle cells located in the walls of the heart and major arteries. They "measure" blood pressure by stretching or relaxing as blood flows past them.

Beta-blocker

A pharmaceutical drug which blocks the receptor sites for the neurotransmitters (catecholamines) used by the sympathetic (adrenergic) branch of the autonomous nervous system.

Bigeminy

An abnormal heart rhythm in which a normal heartbeat (originating from the SA node) is followed by an ectopic beat (originating outside the SA node) in rapid succession.

Biopsy

The removal of a small piece of living tissue from the body for microscopic examination. Biopsy is often carried out with a special hollow needle (needle biopsy) to minimize invasiveness and discomfort.

BMI (Body mass index)

Equals a person's weight (in kilograms) divided by height in meters squared (BMI= kg/m²). A BMI between 18.5 and 24.9 is ideal; above 25 is overweight and above 30 is obese.

Bradyarrhythmia

A slow and irregular heart rhythm.

Bradycardia

An abnormally slow heart beat.

Brain Natriuretic Peptide [BNP]

A hormone released almost exclusively from the ventricular myocardium. Elevated levels may indicate heart failure.

Bundle of His

A small bundle of specialized cardiac muscle fibres connecting the AV node with the upper part of the ventricles.

C

Calcium-channel blocker

A pharmaceutical drug that inhibits the flow of calcium ions through or across cell membranes. It decreases heart rate and workload and is used in the treatment of stroke and certain heart conditions.

Carcinoma

A malignant tumour of epithelial origin.

Cardiac catheterization

A procedure used to aid in the diagnosis of heart disease. It involves the insertion of a thin, flexible catheter in a vein in the leg, groin or arm and guiding it into the heart. A contrast medium (x-ray dye) is injected through the catheter to help in visualizing the heart chambers, arteries and valves on x-rays.

Cardiogenic

Originating in the heart

Cardiogenic emboli

Blood clots originating in the heart

Cardiomyopathy

Any disease of the heart muscle that results in diminished pumping capacity.

Cardioversion

The conversion of an irregular heart rhythm to normal sinus rhythm. Cardioversion can be done with drugs or through an electric shock administered to the chest area.

Carotid artery

The artery that carries blood from the heart to the brain. It is situated in the front of the neck.

Catecholamines

A group of chemical compounds (amines) derived from tyramine and tyrosine. The group includes epinephrine (adrenaline), norepinephrine (noradrenaline) and dopamine.

Catheter

A tube designed to be inserted into a narrow opening or hollow organ such as the urinary bladder or a vein. The catheter is used to drain fluids or to allow the insertion of special instruments used for imaging or ablation.

Catheter ablation

Destruction of tissue by the application of electrical current, usually at radio frequencies, via a catheter threaded through a vein to reach the area to be ablated (AV node, pulmonary veins, "hot spots" in the atria).

Cerebrovascular event

See Stroke.

Chronic

Persisting over a long period of time.

Circumferential Pulmonary Vein Isolation [CPVI]

An ablation procedure involving the creation of two rings of lesions in the left atrium; one completely enclosing the left pulmonary veins and another completely enclosing the right pulmonary veins; the two rings are usually joined by a linear lesion. Also known as the Pappone method.

Coagulation (of blood)

Process whereby blood is converted from a liquid to a solid state.

Comorbidity

A disease condition accompanied by one or more unrelated disease conditions.

Congestive heart failure [CHF]

Failure of the heart to pump sufficiently strongly to prevent the accumulation of fluid in the lungs. Symptoms include fatigue, shortness of breath and edema.

Coronary arteries

The arteries that supply the heart itself with oxygenated blood.

Coronary artery bypass procedure

A surgical procedure aimed at restoring blood flow in the coronary arteries by bypassing blockages using an artery or vein taken from somewhere else in the body (usually a vein from the leg).

Cortex

The outer part of the adrenal gland. Aldosterone, cortisol and DHEA (dehydroepiandrosterone) are synthesized here.

Couplet

An abnormal heart rhythm involving two ectopic beats in a row.

Deep vein thrombosis [DVT]

A condition where a blood clot is formed in a deep vein, usually in the legs.

Defibrillator

A device (often part of a pacemaker) used to terminate atrial arrhythmias by the delivery of small, precisely-timed shocks to the heart.

Depolarization

The sudden surge of ions across heart cell membranes that initiates the contraction of the heart.

Diastolic

Pertaining to the time period between fillings of the ventricles. The diastolic pressure is the lower of the two readings reported when measuring blood pressure.

Diuretic

An agent that increases the excretion of urine.

Docosahexaenoic Acid [DHA]

A main component of fish oils.

Ε

Echocardiogram

An ultrasound picture of the heart as it beats.

Ectopic beat

A heart beat that is initiated at a location other than the sinoatrial node. The junction between the left atrium and the pulmonary veins is a primary spawning ground for ectopic beats.

Edema

Swelling caused by an abnormal accumulation of fluid in body tissues.

Efferent

Pertaining to nerves or neurons that carry impulses (instructions for action) from the brain or spinal cord to a target organ or muscle.

Ejection fraction

The proportion of the blood volume in the left ventricle that is actually pumped out in each heartbeat. The proportion for a healthy heart is 50-60 per cent. A value of 40 per cent or below indicates ventricular dysfunction.

Electrical (activation) mapping

A type of electrophysiology study that makes use of a reference electrode (usually placed as a patch between the patient's shoulder blades) and a movable electrode (catheter). By measuring the impedance (resistance) between these two electrodes it is possible to obtain an image of the atrium based on electrical potentials.

Electroanatomical mapping

A type of electrophysiology study aimed at creating a 3-dimensional real-time image of the anatomical features of the atrium. It consists of an external ultra-low magnetic field emitter (location pad placed beneath the operating table), a miniature passive magnetic field sensor housed in the tip of a movable catheter, and a computer processing unit and video screen. Also known as the CARTO system.

Electrocardiogram [ECG]

A recording of the electrical activity of the heart during contraction.

Electrolyte imbalance

An imbalance in the blood or intracellular concentrations of sodium, potassium, calcium and magnesium.

Electrolytes

Chemical substances that dissociate into two or more ions when dissolved in water.

Electrophysiologist (EP)

A cardiologist specializing in heart rhythm disturbances.

Electrophysiology study

A study of the electrical and anatomical structure of the inside of the heart.

Embolic stroke

See Stroke

Embolism

A condition in which a blood clot becomes lodged in an artery and obstructs the flow of blood [embolic].

Endarterectomy

Surgical removal of the inner lining of an artery that is clogged with atherosclerotic build-up.

Endogenous

Originating from within an organism, cell or tissue.

Endothelium

The single layer of cells that line the heart, blood vessels and lymphatic vessels [endothelial].

Enzyme

A protein-based substance (catalyst) that speeds up the rate of a biological reaction without being consumed in the process.

Epidemiology

Dealing with the study of the causes, distribution and control of diseases in populations [epidemiologic].

Eicosapentaenoic Acid [EPA]

A main component of fish oils

Epithelium

Membranous tissue that covers most internal and external surfaces of the body and its organs [epithelial].

Etiology

The cause of a disease or condition.

Exogenous

Derived or developed from outside the body, originating externally.

Epinephrine

A hormone secreted by the medulla of the adrenal gland. Also known as adrenaline.

F

Factor V Leiden

A mutation in blood coagulation factor V that results in an increased tendency to blood clotting – especially deep vein thrombosis.

Familial atrial fibrillation

Atrial fibrillation that runs in families and is linked to a genetic defect.

Fibrillation

Rapid and chaotic beating of the heart.

Fibrinolysis

The process by which blood clots are removed from the circulation. It involves digestion of insoluble fibrin by the endogenous enzyme plasmin [fibrinolytic].

Focal Ablation

The original radio frequency ablation procedure in which specific active foci of aberrant impulses are located and ablated.

Foramen ovale

An opening in the interatrial septum that normally (but not always) closes after birth.

Framingham Heart Study

A large epidemiologic study begun in 1948 with the purpose of discovering the causes of heart disease and stroke. The study now involves thousands of men and women and their offspring from the town of Framingham in Massachusetts.

G

Gastrointestinal

Relating to the stomach and intestines [gastrointestinal tract].

Glucose tolerance test

A test used in the diagnosis of diabetes and impaired glucose tolerance. It measures how well the body deals with sugar (glucose).

Glycemic index

A measure of how much and how quickly glucose is released and absorbed from a carbohydrate food. Pure glucose has a value of 100.

Н

Heart block

A condition in which the electrical impulses from the atria are not conducted properly to the ventricles.

Heart failure

See Congestive heart failure.

Heart rate variability (HRV)

A measure of the beat-to-beat variability in heart rate.

Hematoma

A localized swelling of blood resulting from a break in a blood vessel.

Hemorrhagic stroke

See Stroke

Holter monitor

A portable device for measuring heart rhythm over a 24-hour period.

Homocysteine

A sulphur-containing amino acid used by the body in cellular metabolism and the manufacture of proteins.

Hyperhomocysteinemia

An elevated blood level of homocysteine.

Hyperlipidemia

An excess of fats or lipids in the blood.

Hypertension

A blood pressure that is persistently above the upper limit of the reference range (140/90).

Hyperthyroidism

An overactive thyroid gland. The condition is characterized by increased metabolic rate, high blood pressure and a rapid heartbeat.

Hypertrophic cardiomyopathy

Thickening of the heart walls interfering with normal heart function and causing reduced pumping capacity.

Hypocalcemia

An abnormally low blood level of calcium.

Hypoglycemia

A lack of glucose in the blood stream. The condition can cause sweating, mental confusion, atrial fibrillation and muscle weakness.

Hypokalemia

An abnormally low blood level of potassium.

Hypomagnesemia

An abnormally low blood level of magnesium.

Hyponatremia

An abnormally low blood level of sodium

Hypotension

An abnormally low blood pressure.

Hypothyroidism

An underactive thyroid gland. The condition is characterized by fatigue, hair loss, feeling cold, constipation and skin pallor.

ICD

Implantable cardioverter-defibrillator.

Idiopathic

Of no known cause.

Idiopathic atrial fibrillation

Atrial fibrillation of no known cause.

Incidence

The extent or frequency of occurrence.

Infarction

Localized cell death (necrosis) resulting from obstruction of the blood supply.

INR

International Normalized Ratio. A measure of the blood's tendency to coagulate (form clots) when on warfarin (Coumadin). A normal INR is 1.0. Warfarin dose is usually adjusted to give an INR between 2.0 and 3.0.

Interatrial septum

A thin, muscular wall separating the right and left sides of the atrium. This wall is breached during ablation procedures involving the left atrium.

Intermittent claudication

Muscle pain, usually in the calf muscles, that is brought on by exercise and relieved by rest. It is usually caused by atherosclerosis of the arteries feeding the affected limb.

Intracardiac Echocardiography [ICE]

An ultrasound technique for visualizing the inside of heart chambers.

Intracellular

Situated or occurring inside a cell.

Intracranial

Within the head.

lon

An electrically charged atom or molecule.

Ion channel

A pore in a cell's membrane that provides a channel for ions to cross the membrane.

Ischemia

Inadequate blood flow to the heart or other body parts [ischemic].

Ischemic stroke

See Stroke

Left atrial appendage

See Atrial appendages.

Left ventricular dysfunction

Inadequate pumping capacity of the left ventricle. Characterized by a left ventricular ejection fraction below 40 per cent.

Lone atrial fibrillation [LAF]

Atrial fibrillation not associated with structural heart disease.

M

Macrophages

Large scavenger cells found in connective tissue and in many major organs and tissues including the liver, lymph nodes, spleen, bone marrow and central nervous system.

Mast cells

Large cells in connective tissue that release heparin, histamine and serotonin in response to inflammation or allergens.

Maze procedure

A surgical procedure that involves the creation of a pattern of scar tissue to contain and channel the heart's electrical impulses and thereby prevent atrial fibrillation.

Medulla

The inner part of the adrenal gland. Epinephrine and norepinephrine are synthesized here.

Mini-maze procedure

A minimally invasive surgical procedure for electrically isolating the pulmonary veins from the left atrium thereby preventing atrial fibrillation. The mini-maze is distinguished from the original maze procedure by the fact that it does not involve open heart surgery or the use of a heart/lung machine. Catheters and a small camera are introduced into the breast cavity through mini-incisions between the ribs.

Mitral stenosis

A narrowing of the opening of the mitral valve. Usually caused by leaflet adhesion or scarring.

Mitral valve

A valve that allows blood to flow between the left atrium and the left ventricle while preventing back flow.

Mitral valve prolapse [MVP]

A usually benign abnormality of the mitral valve resulting in regurgitation (back flow) of blood from the left ventricle to the left atrium.

Monocyte

A variety of white blood cells whose purpose is to ingest foreign particles such as bacteria and tissue debris.

Mortality

Incidence of death in a given period.

Myocardial infarction [Heart attack]

Destruction of heart tissue resulting from obstruction of the blood supply to the heart muscle.

Myocarditis

An acute or chronic inflammation of the heart muscle.

Myocardium

The middle of the three layers that form the wall of the heart. It is composed of muscle fibres.

Myocyte

A muscle cell.

Myxoma

Benign gelatinous tumour of connective tissue. Atrial myxoma most commonly involves a tumour in the left atrium.

Ν

Necrosis

Death of cells through injury, disease or obstruction of blood supply.

Neutropenia

Decrease in the number of neutrophils (a type of white blood cell) resulting in an increased susceptibility to infection.

Nitric oxide [NO]

A colourless gas produced in cellular metabolism. It is involved in oxygen transport to tissues, the transmission of nerve impulses and the relaxation of blood vessel walls.

Non-valvular atrial fibrillation

Atrial fibrillation that is not caused by malfunctioning or damaged heart valves.

Norepinephrine

The neurotransmitter released at sympathetic (adrenergic) nerve endings. Also known as noradrenaline.

Normal sinus rhythm [NSR]

The normal rhythm of the heart when beats are initiated only at the sinoatrial node.

0

Ostial PVI

A pulmonary vein isolation procedure where the ablation lesions are placed in the left atrium around the openings of the pulmonary veins rather than inside the pulmonary veins. The ostial procedure eliminates or sharply reduces the risk of pulmonary vein stenosis.

On-Demand-Approach

A method of self-terminating atrial fibrillation episodes. It involves taking propafenone or flecainide immediately following the start of the episode. Also known as the pill-in-the-pocket approach.

Oxidative stress

A condition that occurs when the body's natural antioxidant defences are overwhelmed by reactive oxygen species and other free radicals.

P

Pacemaker

An implanted device meant to provide small electric shocks to the heart to initiate heartbeats (contractions) at a predetermined rate. Mostly used in the form of a dual-lead pacemaker which paces both the atria and the ventricles.

Palpitation

A sensation of a rapid, irregular heart beat.

Parasympathetic

Pertaining to the parasympathetic branch of the autonomic nervous system.

Parasympathetic tone

See vagal tone.

Paroxysmal

Occurring at intervals (intermittent).

P cells [Pole cells]

The pacemaker cells of the heart. Normally found only in the SA and AV nodes, but may also occur in the pulmonary veins.

Peripheral arterial disease [PAD]

Atherosclerosis in arteries other than the coronary arteries. Intermittent claudication may occur if the atherosclerotic deposits are blocking the arteries feeding the legs.

Permanent LAF

Continuous lone atrial fibrillation that does not respond to cardioversion.

Persistent LAF

Lone atrial fibrillation episodes lasting more than seven days, but amenable to cardioversion.

Pheochromocytoma

A tumour of the adrenal gland that produces epinephrine and norepinephrine.

Platelet

Blood cell involved in the initiation of blood clotting [thrombocyte].

Platelet inhibitor

A drug that prevents the aggregation of platelets.

Plaque

A build-up of cholesterol and fatty substances on the inner lining of arteries.

Postprandial

Occurring after a meal, especially dinner.

Premature atrial complex [PAC]

A premature heart beat originating in the atrium other than at the sinoatrial node.

Premature ventricular complex [PVC]

A premature heart beat originating below the atrioventricular node, often in the ventricular muscle itself.

Prevalence

The total number of cases of a disease in a given population at a specific time.

Proarrhythmic

Capable of inducing arrhythmia.

Prophylaxis

Action taken to prevent disease [prophylactic].

Prostaglandin

A hormonelike compound synthesized in the body from 20-carbon unsaturated fatty acids, notably arachidonic acid. Prostaglandins are involved in a wide range of physiological functions including control of blood pressure, contraction of smooth muscle and modulation of inflammation.

Prothrombin time

A measure of the blood's tendency to clot when medicated with warfarin. See INR.

PUFA

Polyunsaturated fatty acid.

Pulmonary embolism

A blood clot lodged in the pulmonary artery.

Pulmonary vein ablation [PVA]

Ablation of sources of ectopic heartbeats located at the junction of the left atrium and the pulmonary veins.

Pulmonary vein isolation [PVI]

Isolation of the pulmonary veins from the left atrium by ablating (generating lesions) a ring around each pulmonary vein.

Pulmonary veins

The veins draining oxygenated blood from the lungs to the left atrium.

Purkinje fibres

A group of specialized heart cells that conduct electrical impulses in the ventricles.

P wave

A small wave observed on an electrocardiogram indicating that atrial contraction has begun.

QRS complex

The principal deflection of an electrocardiogram produced by depolarization (contraction) of the ventricles.

QT Interval

The duration of the activation and recovery of the ventricular myocardium. A prolonged OT interval is associated with ventricular arrhythmias.

R

Refractory period

The rest period following a contraction of the heart muscle. The cell does not respond to stimulation during this period.

Reperfusion

The restoration of blood flow to an organ or tissue that has had its blood supply cut off due to a stroke or heart attack. Reperfusion is associated with increased free radical activity.

Repolarization

The recharging of the heart's muscle cells in preparation for the next depolarization (contraction).

Rheumatic heart disease

Heart damage caused by rheumatic fever.

R-R interval

The interval between the peak of one QRS complex and the next.

Run

An abnormal heart rhythm characterized by four or more ectopic beats in a row.

S

Segmental pulmonary vein isolation

An ablation procedure in which electrophysiological mapping (using a multipolar Lasso catheter) is used to locate the pathways taken by aberrant impulses from the pulmonary veins. The pathways are eliminated by radiofrequency ablation around the veins approximately 5 to 10 mm from the ostia of the veins. Also known as the Haissaguerre method.

Sick sinus syndrome

A disorder in which the sinus node (the heart's natural pacemaker) malfunctions and causes arrhythmias, usually bradycardia.

Sinoatrial (sinus) node

The specialized (pacemaker) tissue that initiates a heart beat. It is located near the top of the right atrium.

Sinus rhythm

See Normal sinus rhythm.

Stasis

Stagnation or cessation of flow; for example, of blood or lymph fluid.

Stenosis

A constriction or narrowing of a duct or passage; for example, pulmonary vein stenosis.

Stroke

An event that damages nerve cells in the brain. It is caused by an interruption of the oxygen supply to the brain due to a blood clot (ischemic stroke) or a burst blood vessel (hemorrhagic stroke).

Subcutaneous

Beneath the skin.

Supraventricular

Located above the ventricles, that is in the atria or atrioventricular node.

Supraventricular tachycardia (SVT)

A rapid, but regular heart rate caused by a fault in the conduction system around the atrioventricular node.

Suture

The closure of a wound or incision with material such as silk or catgut. The term is also used to describe the material used in closing the wound or incision.

Sympathetic

Pertaining to the sympathetic branch of the autonomic nervous system.

Syncope

A brief loss of consciousness (fainting or dizziness) caused by an insufficient supply of oxygenated blood to the brain.

Systemic

Relating to or affecting the body as a whole.

Systolic

Pertaining to the time at which the ventricles contract. The systolic pressure is the higher of the two readings reported when measuring blood pressure.

Т

T-cells

A specialized kind of white blood cells (lymphocytes) that help identify foreign cells and antigens so that killer cells can dispose of them.

Tachycardia

A rapid, but regular heart beat usually in excess of 100 bpm.

Tamponade

Compression of the heart caused by the build-up of fluid or blood in the space between the sac (pericardium) surrounding the heart and the heart muscle (myocardium) itself.

Thallium stress test

A test used to assess the blood flow through the coronary arteries before and after exercise.

Thromboembolism

A condition in which a blood clot or fragment of a clot breaks off in one part of the body and blocks a blood vessel in another part of the body.

Thrombosis

A condition in which blood changes from a liquid to a solid state, i.e. forms a clot [thrombotic].

Thrombus

A blood clot.

Thrombolysis

The dissolution of a blood clot by the infusion of an enzyme, such as streptokinase, into the blood [thrombolytic].

Thyrotoxicosis

A serious condition resulting from an excess of thyroid hormones.

Transesophageal

Through or across the esophagus. The term is often applied to a special form of echocardiography used to check for blood clots in the left atrial appendage.

Torsade de Pointes

A distinctive form of ventricular tachycardia associated with a prolonged QT interval.

Transient ischemic attacks (TIAs)

A sudden, temporary loss of neurological function caused by blockage of small arteries supplying blood to the brain (mini-stroke). Typical symptoms are dizziness, vision disturbances, numbness or unconsciousness. Symptoms subside within 24 hours.

Transthoracic

Through or across the chest. The term applies to the standard form of echocardiography.

Tricuspid valve

A valve that allows blood to pass between the right atrium and the right ventricle.

Trigeminy

An abnormal heart rhythm in which every third beat is ectopic (originating outside the SA node).

Triplet

An abnormal heart rhythm involving three ectopic beats in a row.

V-W

Vagal

Pertaining to the parasympathetic branch of the autonomic nervous system.

Vagal LAF

Lone atrial fibrillation triggered by excessive parasympathetic stimulation.

Vagal tone

The strength or vigour of the parasympathetic branch of the autonomic nervous system.

Vasodilatation

An increase in the diameter of blood vessels, especially arteries. It is brought about by a relaxation of vessel walls mediated, for example, by nitric oxide.

Vagus nerve

The tenth cranial nerve originating in the brain stem. It enervates the heart, gastrointestinal tract and larynx (voice box).

Valsalva manoeuvre

A manoeuvre that increases vagal tone. It is performed by attempting to forcibly exhale while keeping the mouth and nose closed for about 15-30 seconds. It may sometimes help to abort an episode of supraventricular tachycardia or adrenergic LAF.

Vein

A blood vessel that carries blood towards the heart.

Vena cava

The large vein(s) that returns blood from the body to the heart (right atrium).

Ventricles

The two lower chambers of the heart.

Ventricular fibrillation

An often-fatal cardiac arrhythmia characterized by rapid, irregular fibrillation of the ventricles. Ventricular fibrillation is the main cause of sudden cardiac death (cardiac arrest).

Wavelet

A small circular pattern of electrical activity observed in the atrium as a prelude to or during rhythm disturbances.

PHARMACEUTICAL DRUGS FOR LAF

Generic Name	Trade Names	Class
Beta-blockers		
Acebutolol	Sectral	Class II
Atenolol	Tenormin	Class II
Bisoprolol	Zebeta	Class II
Carvedilol	Coreg	Class II
Metoprolol	Lopressor, Toprol	Class II
Nadolol	Corgard	Class II
Propranolol	Inderal	Class II

Antiarrhythmics with beta-blocking effects

Amiodarone	Cordarone, Pacerone	Class III
Propafenone	Rythmol	Class IC
Sotalol	Betapace, Sotacor	Class III

Antiarrhythmics with no beta-blocking effects

Disopyramide	Norpace, Rythmodan	Class IA
Dofetilide	Tikosyn	Class III
Flecainide	Tambocor	Class IC
lbutilide*	Corvert	Class III
Procainamide	Procan	Class IA
Quinidine	Quinaglute, Biquin	Class 1A

Calcium channel blockers

Diltiazem Cardizem, Tiazac Class IV Verapamil Veramil, Veralan, Calan Class IV

DRUGS FOR STROKE PREVENTION

Generic Name Trade Names

Antiplatelet Agents

Acetylsalicylic acid Aspirin, ASA
Nitroxy-butyl-acetylsalicylate NO-ASA
Clopidogrel Plavix
Ticlopidine Ticlid
Dipyridamole Persantine

Indobufen Not available in the US Glycoprotein inhibitors Abciximab, Tirofiban

Anticoagulants

Warfarin Coumadin
Ximelagatran Exanta
Enexoparin (Heparin) Lovenox
Nadroparin (Heparin) Fraxiparine

Thrombolytic Agents

tPA tPA

Urokinase Abbokinase Streptokinase Streptase

^{*} Used only in intravenous form for conversion to normal sinus rhythm

Statin Drugs

Atorvastatin Lipitor
Lovastatin Mevacor
Pravastatin Pravachol
Simvastatin Zocor

ACE inhibitors

Captopril Capoten
Perindopril Aceon
Ramipril Altace

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