

11. Glossary

The terms and definitions here relate to the study of hypertension and ambulatory blood pressure monitoring. It may be helpful to become familiar with the terminology.

Absent Phase V is a special case condition sometimes occurring during auscultation where the Korotkoff sounds don't disappear and can be heard near 0 mm Hg pressure.

Ambulatory blood pressure Monitoring (ABP or ABPM) is the technique by which multiple indirect blood pressure readings may be taken automatically over a period of one or more days with minimal intrusion into the daily activities of the patient.

Antihypertensive drugs are certain groups of medications used to treat high blood pressure. The main categories are diuretics, blockers, calcium antagonists, ACE inhibitors, vasodilators.

Angina Pectoris is the medical term for chest pain which radiates from the center of the chest to the neck and arms. It is a symptom of myocardial ischemia, and may be correlated with elevated blood pressure in some patients.

Aorta is the large artery that receives blood from the heart's left ventricle and distributes it to the body.

Arrhythmia (or Dysrhythmia) is an abnormal rhythm of the heart.

Arterioles are the small, muscular branches of arteries. When they contract, they increase resistance to blood flow, and blood pressure in the arteries increases.

Arteriosclerosis is a disease in which artery walls thicken and lose elasticity. Hypertension is one of several conditions that cause this to occur.

Artery is one of the blood vessels that carries blood from the heart to the body. Arteries have thick, elastic walls that can expand as blood flows through them.

Artifacts are unwanted extra "noises" during monitoring that cause questionable blood pressure readings, or affect the reading so that the measurement is cancelled. Sources of artifact include muscle tremor, arm movement, or vigorous exercise. Other sources include external vibrations in the patient's environment, such as riding in an elevator or driving an automobile.

Artherosclerosis is a form of arteriosclerosis in which the inner layers of artery walls become thick and irregular due to deposits of plaque, which is made up of fatty deposits, cholesterol and cellular waste products. The arteries become narrowed. blood flow is reduced, and blood pressure is increased.

Auscultatory method is an indirect method of blood pressure measurement which employs the use of a microphone to detect Korotkoff sounds.

Auscultatory gap is a special case phenomenon occurring in some patients where during auscultation, the Korotkoff-sounds disappear during Phase I and reappear in Phase II.

Blood Pressure is the force or pressure exerted by the heart in pumping blood; it is the pressure of blood in the arteries.

Blood pressure load refers to

Capillaries are microscopically small blood vessels between arteries and veins that distribute oxygenated blood to the body's tissues.

Cardiovascular literally means "heart" and "blood vessels". The cardiovascular system is the circulatory system of the heart and blood vessels.

Circadian rhythm is the regular recurrence of certain phenomena in cycles of approximately 24 hours.

Circulatory System refers to the heart, blood vessels and the circulation of the blood.

Congenital refers to a condition present at birth.

Congestive Heart Failure is a condition where the heart is weakened and cannot pump all of the blood that returns to it. Blood backs up in the veins.

Coronary Arteries are the two arteries that stem from the aorta, arch down over the top of the heart, and then branch out to supply blood to the heart muscle.

Coronary Artery Disease, or called Coronary Heart Disease, causes narrowing of the coronary arteries so that the heart muscle receives less blood.

Diastolic Blood Pressure is the lowest blood pressure measured in the arteries, and occurs when the heart muscle relaxes between pulses.

Diuretic is a drug which promotes the elimination of water and salts from the body by increasing the rate at which urine forms.

Edema is swelling caused by an abnormally large amount of fluid in body tissues.

Electrocardiogram (ECG or EKG) is a graphic record of the electrical impulses produced by the heart.

Endothelium is the smooth inner lining of many body structures, such as the heart and blood vessels.

Enzyme is a complex organic substance capable of speeding up specific biochemical processes in the body.

Fibrin is a protein in the blood that facilitates blood clotting by meshing blood and other materials under certain conditions.

Heart Attack is death or damage to part of the heart muscle due to an insufficient blood supply.

Hypertension is high blood pressure. It is a chronic increase in blood pressure over the normal range.

Acute hypertension is a fluid pressure imbalance between intravascular and interstitial fluid to shift. Edema and inflammation result.

Benign hypertension is a gradual rise in blood pressure with minimal clinical signs. The disease progresses slowly over many years, rarely causing complications until it is far advanced.

Chronic hypertension is caused by a thickening of the artery's medial layer from cell proliferation. Lumen narrowing restricts blood flow and reduces elasticity.

Labile or episodic hypertension is intermittent high blood pressure. Because it is inconsistent, it is difficult to diagnose and it may go undetected.

Malignant hypertension (accelerated or necrotizing hypertension) is sudden, sustained rise in blood pressure with dramatic clinical signs, such as fibrinoid necrosis (tissue death) in the heart, kidneys, or brains. If untreated, this disease is fatal in about two years.

Office or "white coat" hypertension

Primary hypertension (essential, or idiopathic hypertension) is sustained high blood pressure of unknown cause.

Refractory hypertension is high blood pressure that is non-responsive to treatment.

Resistant hypertension

Preeclampsia is pregnancy-induced hypertension.

Secondary hypertension is sustained high blood pressure caused by an identifiable disease, condition, or drug; for example, pheochromocytoma, renal artery stenosis, or oral contraceptives. Many causes of secondary hypertension are curable.

Hypotension is the condition of low blood pressure. Sustained hypotension is generally no cause for concern.

Orthostatic hypotension is a fall in blood pressure associated with dizziness, syncope, and blurred vision occurring upon standing or when standing erect in a fixed position.

Hypertensive crisis is an acute, severe, life-threatening blood pressure rise causing rapid deterioration of brain, heart, and kidney function.

Intra-arterial (direct) blood pressure measurement is an invasive technique to measure beat-to-beat blood pressure by the use of indwelling arterial catheters.

Ischemia is decreased blood flow to an organ, usually due to constriction or obstruction of an artery.

Ischemic Heart Disease, or Coronary Artery Disease, is characterized by decreased blood supply to the heart. It is caused by narrowing of the coronary arteries.

Korotkoff sounds are the audible vibrations of blood as it pulses through a vessel.

Lumen is the opening within a tube, such as in a blood vessel.

Myocardium is the muscular wall of the heart. As it contracts, blood is pumped out of the heart to the body. As it relaxes, returning blood refills the heart.

Myocardial Ischemia is deficient blood flow to part of the heart muscle and can lead to infarction (damage or death to the tissue).

Myocardial infarction is death to portions of the heart muscle which might result in lower blood pressure because the strength of the heart is reduced (reduced cardiac output).

Nitroglycerin is a drug that causes dilation of blood vessels and is often used in treating angina pectoris.

Normotensive is blood pressure that remains within normal blood pressure range (systolic pressures under 140 mm Hg and diastolic pressures under 90 mm Hg).

Occluded artery is when blood flow through the artery has been impaired by a blockage.

Oscillometric method is an indirect method of BP measurement where a pressure cuff placed around the arm, measures the pressure oscillations as the cuff is deflated. Oscillometric measurement techniques detect systolic and mean blood pressure, and use an algorithm to calculate diastolic pressure.

Petechiae is a condition of damaged blood vessels (bruising) that is sometimes seen as a result of wearing a blood pressure cuff. Other side effects noted may be edema, dermatitis and ulnar nerve palsy.

Pheochromocytoma is a tumor of Chromaffin tissue, most commonly found in the adrenal medulla. Symptoms include sustained hypertension or intermittent rise and fall of blood pressure, pallor (paleness),

Piezoelectric microphones

Plaque is a deposit made up of fatty substances, cholesterol and cellular waste products which accumulate along the inner lining of the artery walls.

Prophylaxis is a preventive treatment.

Remler device was a semiautomatic BP unit (no longer available)

Sphygmomanometer is an instrument for measuring blood pressure.

Stenosis is the narrowing or constriction of an opening, such as a blood vessel or heart valve.

Stethoscope is an instrument for listening to sounds within the body.

Stress is bodily or mental tension within a person resulting from his or her response to physical, chemical or emotional factors. Stress can refer to physical exertion as well as mental anxiety.

Stroke also called Apoplexy, Cerebrovascular Accident or Cerebral Vascular Accident, is a sudden and often severe attack caused by an insufficient supply of blood to part of the brain.

Systolic blood pressure is the highest blood pressure measured in the arteries. It occurs when the heart contracts with each pulse.

Target organs are the organs most dependent on a generous blood supply and therefore are most affected by hypertension and vessel deterioration: heart, brain, kidneys, and the eyes.

Ultrasound is high-frequency sound vibrations, not audible to the human ear. Medical ultrasound equipment can produce images of internal organs or vessels to visualize disease or function. Doppler is an ultrasound technique used to determine blood pressure, especially in infants.

Vascular pertains to the blood vessels.