

B) Systemic Terminology

Lecture 6:

1- Roots for CVS

2- Roots of ANS

3- Roots of Hematopoietic System

I. Roots of CVS

1- Cardio: heart

e.g., **Cardiac**: pertaining to the heart

e.g., Intracardiac injection: injection into the heart

e.g. **Cardiotonic** agents: are drugs that increase the tone of heart muscle.

e.g., Brady**cardia** means slow heart rate,

e.g., Tachy**cardia** means rapid heart rate.

e.g., **Cardiomegaly**: enlargement of the heart.

e.g., Endo**carditis**: Inflammation of the heart from inside.

- **Cardiomyopathy**: disease of the heart muscles.
- **Pericarditis**: Inflammation in the membrane surrounding the heart.
- **Dextrocardia**: Presence of the heart in the right side.
- **Electrocardiogram (ECG)**: a record of electricity of the heart.
- **Cardiopulmonary resuscitation (CPR)**: Restoration of the heart and lung functions.
- **Retrocardia**: behind the heart
- **Microcardia**: small sized Heart

- **Cardiorrhexis**: Rupture of the **heart**.
- **Cardiologist**: **specialist** in heart science
- **Cardiovascular** system (CVS): System of the heart and blood vessels.
- **Cardiomyocytes**: Cells of the **heart muscles**.

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2- **Arterio**: means artery

e.g. **Arterial**: means pertaining to arteries,

e.g., **Arteriosclerosis** means hardening of arteries,

e.g., **Arteriomalacia**: means softening of the coats of an artery.

e.g., **Arteriostenosis**: means narrowing of the artery (**syn**:

Artericonstriction # **Arteriodilatation**.

e.g., **Intraarterial** injection: injection into the artery.

e.g., **Arteriole**: Small **artery**.

e.g., **Arteriospasm**: Contraction of **an artery** # **Arteriodilatation**

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3- Ven/o: Vein

- e.g., **Venule**: Small vein
- **Intravenous administration**: Injection of a drug into the vein.

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4- Phleb/o: means vein

- e.g., **Phlebectomy**: means surgical removal of a vein
- e.g., **Phlebitis**: means inflammation of a vein.
- e.g., **Thrombophlebitis**: inflammation of the vein with the formation of blood clot.

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5- **Angio**: means blood vessel/duct

- e.g., **angiogenesis**: means formation of new blood vessels
- e.g., **angiogram**: means X-ray picture of blood vessels.
- e.g., **angioectasias**: means expansion of blood vessels.
- e.g., **Cholangitis**: inflammation of **bile duct**
- e.g., **angiostenosis**: means narrowing of blood vessels.
- e.g., **angiosarcoma**: cancer of the inner lining of blood vessel.
- e.g., **angiography**: is the x- ray study of the blood vessels.
- e.g., **Angioma**: **tumors** in the cells of **blood vessels**

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6- **Vas/o**: vessel

- e.g. **Vasodilation**: means widening of a **blood vessel** through relaxation of smooth muscles (**Antonym**: **Vasoconstriction**).
- e.g., **Vasoconstriction**: means narrowing of a blood vessel through contraction of smooth muscles around the vessel.
- e.g., **Vasodilators**: Agents that dilate blood vessels
- **Vasospasm**: Sudden contraction of blood vessel.
- e.g., **Vasectomy**: means surgical removal of part of vas deferens.

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7- Thrombo: blood clot

- e.g., **Thrombus**: The clot itself
- e.g. **Thrombophlebitis**: means inflammation of a vein with the formation of a blood clot
- e.g., **Thrombectomy** means surgical removal of a blood clot from veins or arteries.
- e.g., **Thrombogenesis**: formation of blood clot.
- e.g., **Thrombolysis**: dissolution of thrombus.
- e.g., **Thrombosis**: conditions of forming blood clot inside a blood vessels.
- e.g., **Thromboembolism**: obstruction of blood vessels by blood clot.
- e.g., **Deep Venous Thrombosis (DVT)**: blood clot formed in one or more of deep veins; usually in the leg.
- ¹¹ e.g., **Coronary artery thrombosis**: blood clot in coronary arteries.



8- Cyte: means cell

- e.g. erythro**cyte**: means red cell,
- e.g., lympho**cyte**: means lymph cell.
- e.g., thrombo**cyte**: means platelet cell
- e.g., leuco**cyte**: means white blood cell.
- e.g., pan**cytopenia**: means decrease in all blood elements.

9- Baro: Pressure

- e.g., **Baro**receptors: Receptors that sense **blood pressure**.
- e.g., **Baro**meter: Instrument used to measure atmospheric **pressure**

II. Roots of Hematopoietic and Lymphatic Systems

Hemo or hemato: blood

- e.g., **hemostasis**: means stopping of blood flow.
- e.g., **hematology**: science of blood.
- e.g., **hemostatic**: agent that stop bleeding.
- e.g., **hemolytic anemia**: a condition in which red blood cells are destroyed and removed from the bloodstream.

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Roots of Hematopoietic and Lymphatic Systems

- **Neutr/o**: means neutrophil,
 - e.g. **neutropenia**: means decreased count of neutrophils.
- **Eosinophil**: means acidophils,
 - e.g. **eosinophilia**: means increased eosinophil count.
- **Phago**: means to eat,
 - e.g. **Phagocytes**: are white cells that eat or engulf micro-organisms and foreign particles.
 - e.g., **Phagocytosis**: the ingestion of bacteria or other material by phagocytes.

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- **Hema or hemato**: means blood,
 - e.g. **hematoma** means a tumor filled with blood,
 - e.g., **hematology**: means science of blood.
- **Lymph**: means lymph,
 - e.g. **lymphocyte**: means lymph cell.
- **Splen**: means spleen,
 - e.g. **splenectomy**: means surgical removal of spleen

III. Roots Of Autonomic Nervous System

Roots Of Autonomic Nervous System

- **Neuro:** means nerve
 - e.g. **Neurotransmitter:** means chemical which transmits impulses between two nerves or between a nerve and an effector organ.
- **Ganglion:** means ganglion,
 - e.g. **pre-ganglionic nerve:** is the nerve before ganglion,
 - e.g., **post-ganglionic nerve:** is the nerve after the ganglion.
- **-Ceptor:** means receptor
 - e.g. **Adrenoceptor:** means adrenergic receptor.
 - e.g. **Cholinoceptor:** means cholinergic receptor.

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- **Cholin:** means acetylcholine,
 - e.g. **cholinergic nerve:** is the nerve that releases acetylcholine,
 - e.g., **cholinergic receptor:** is the receptor whose agonist is acetylcholine.
- **Adren:** means adrenaline or noradrenaline
 - e.g. **adrenergic nerve:** nerves that release adrenaline or noradrenaline.
 - e.g., **adrenergic receptor:** receptors upon which adrenaline or noradrenaline act.
- **Sympatho:** means sympathetic
 - e.g. **sympathomimetic drug:** is the drug which produces actions similar to sympathetic nervous system stimulation.
- **Parasympatho:** means parasympathetic,
 - e.g. **parasympatholytic drug:** is the drug inhibits actions of parasympathetic stimulation.
- **Autonomic:** means involuntary, e.g. autonomic nervous system is the involuntary nervous system.

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