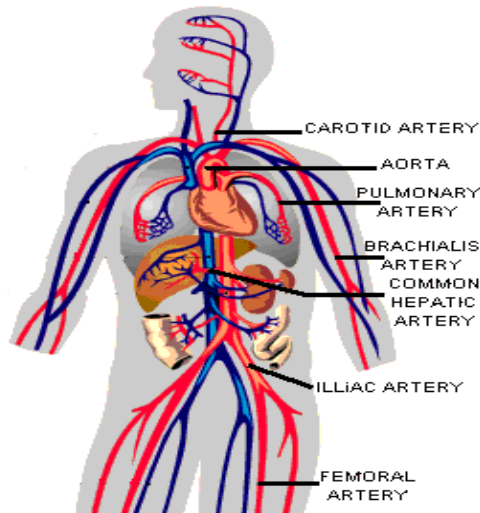


Lecture No . 5

The Circulatory System



The circulatory system composed of cardiovascular system and lymphatic vascular system , the cardiovascular system consist of heart , arteries , veins and capillaries.

Arteri/o = Arteries

Arteri/o/scler/osis: Hardening of the arteries

Arteri/o/fibr/osis: A fibrous condition of the arteries

Arteri/o/malacia: A softening of the arteries

Ather/o = Fatty, Porridgelike

Ather/o/scler/osis: Hardening of the blood vessels caused by a fatty substance (atheroma)

Can decrease vascular supply causing ischemia (temporary lack of blood flow) and necrosis (dead tissues), leading to myocardial infarction (heart attack) or cerebral infarction (stroke).

Ather/o/scler/o/tic coronary artery disease causes Angina Pectoris

Ather/ectomy or End/arter/ectomy: Excision of an ather/oma
Commonly performed on the carotid artery

Hem/o, Hemat/o = Blood

Hem/angi/oma: A benign tumor of a blood vessel

Hem/angi/o/blast: An embryonic blood vessel cell

Hem/arthr/osis: A condition of blood in a joint

Hemat/o/lysis or hem/o/lysis: Destruction of blood cell

Hemat/o/phobia: An abnormal fear of blood

Hemat/o/logy: The study of blood

Hemat/o/logist: One who specializes in the science of blood

Thromb/o = Blood Clot

Thromb/o/angi/itis: Inflammation of a vessel with formation of a blood clot

Thromb/ectomy: Excision of a thrombus (clot)

Thrombus (singular): clot

Thrombi (plural): clots

Thromb/o/lymph/ang/itis: Inflammation of a lymph vessel with formation of a thrombus

Thromb/o/phleb/itis: Inflammation of a vein with thrombus formation

Phleb/o = vein

Thromb/osis: A condition of forming a thrombus

Thromb/o/cyte: A cell that aids clotting

Thromb/oid: Resembling a thrombus

Thromb/o/gen/ic: Pertaining to the formation of a thrombus

Thromb/o/lysis: Destruction of a thrombus

Thromb/o/cyt/o/penia: Lack of cells that aid in clotting (platelets)

Thrombotic Events

A thrombus may occlude a vessel, causing ischemia, producing an infarct. In heart muscle, this condition is called myocardial infarction (MI).

Occlusion = Blockage in a vessel

Infarction = Necrosis of tissue due to ischemia

Myocardial = Pertaining to heart muscles

Myocardial infarction = A heart attack

If an cerebral artery is occluded, Cerebral Infarction can occur

Cerebral infarction = CVA, stroke

Phleb/o = Vein

Arteries carry oxygenated blood away from the heart.

Veins carry deoxygenated blood back to the heart.

Phleb/o/scler/osis: Hardening of veins

Phleb/ectomy: Excision of a vein

Phleb/o/pexy: Surgical fixation of a vein

Phleb/o/plasty: Surgical repair of a vein

Phleb/o/tomy: Incision into a vein, or venipuncture (for blood draw)

Ven/o, Ven/i = Vein

Ven/i/puncture: A procedure performed to obtain a venous blood samples

Ven/ous: Pertaining to veins

IV injection = Intravenous injection: injecting inside vein

Angi/o/plasty: Repair of a vessel

i.e. Balloon angioplasty = PTCA (percutaneous transluminal coronary angioplasty)

Angi/o/graphy: Process of obtaining an x-ray of a vessel
 i.e. coronary angiography

Angi/o/scopy: Process of using a looking device to examine a vessel

Phleb/o/plasty: Repair of a vein

Phleb/o/graphy, Ven/o/graphy: Process of obtaining an x-ray of a vein

-ectasia = Stretching, Dilation

Dilation or Dilatation = Stretching or increase in diameter

Phleb/ectasia: Venous dilatation (stretching)

Arteri/ectasia: Arterial dilatation

Angi/ectasia: Vessel dilatation

-rrhexis = Rupture

Rupture of the heart **Cardi/o/rrhexis**

Rupture of a vessel **Angi/o/rrhexis**

Rupture of an artery **Arteri/o/rrhexis**

Rupture of a vein **Phleb/o/rrhexis**

Echocardiography: an ultrasonic evaluation of the motion of the heart.

Cardiac catheterization : insertion of a catheter and contrast dye into the coronary arteries to detect blockage.

Abbreviation	
AOD	Arterial occlusive disease
AS	Arteriosclerosis, Left ear
ASCVD	Arteriosclerotic cardiovascular disease
ASHD	Arteriosclerotic heart disease
CABG	Coronary artery bypass graft
CAD	Coronary artery disease
MI	Myocardial infarction
MS	Multiple Sclerosis
ECG	Electrocardiogram
BP	Blood pressure
LDL	Low density lipoprotein
HDL	High density lipoprotein
Hb	Hemoglobin
HR	Heart rate
HTN	Hypertension