Manifestation of blood disorders

1.HISTORY

I-Medical history

A.The present illness, focus on the following:

1.Bleeding.

2.Infection or symptoms related to enlargement of L.N liver or the spleen

3.Non-specific symptoms related to anaemia:Malaise , weakness, headache & weight loss.

B. Any exposure to drugs or chemical.

C. Review of systems; including the nervous system, is necessary as blood dyscrasia effect many, if not all, organ systems .

II- Family history; information about the health of other family members as well as the ethnic background .

2- PHYSICAL EXAMINATION

A- Thorough physical exam. Should focus on; SKIN, MOUTH ,MUCOUS MEMBRANE,& EYES.

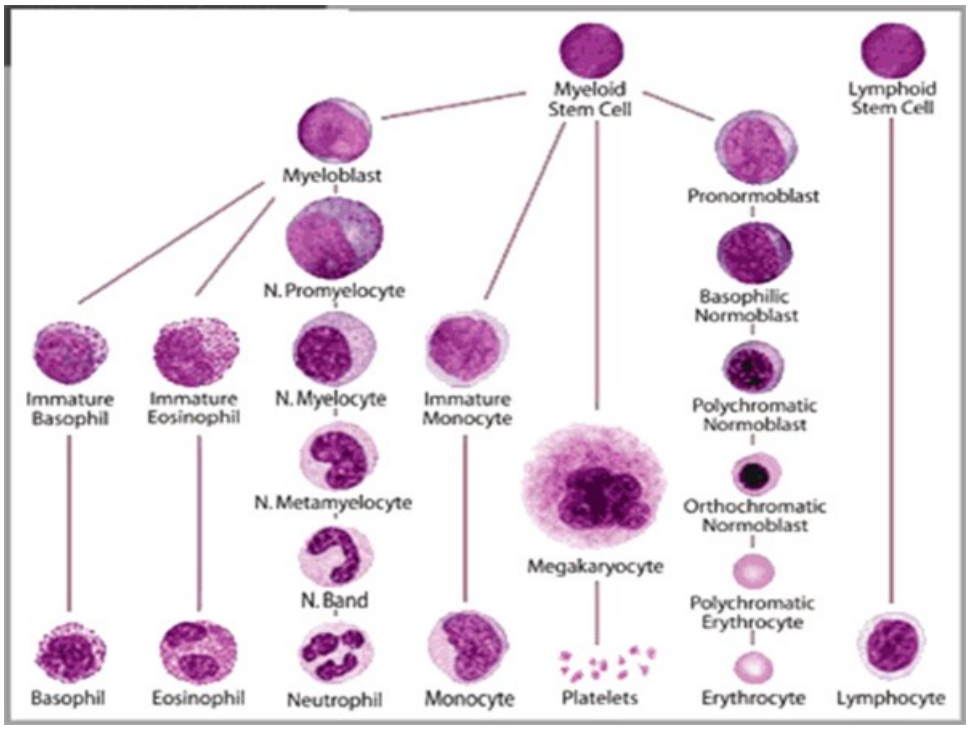
JAUNDICE

PALLOR

PETECHIAE & ECCYMOSIS.

ULCERS

B- Hepatomegaly, splenomegaly,enlarged or tender L.N ,soreness over the ribs or sternum & variety of neurological abnormalities.



Components of Blood

Plasma:

Transport mechanism 90-92% water, 6-7% proteins,2-3% :Fats,Carbohydrates (glucose),Electrolytes,Gases (O2, CO2) and Chemical messengers.

ANAEMIA

Anaemia defined as a reduction in one or more of the major red blood cell (RBC) measurements obtained as a part of the complete blood count (CBC): haemoglobin concentration, hematocrit (HCT), or RBC count.

In practice, however, a low haemoglobin concentration or a low haematocrit is most widely employed for this purpose.

A-Symptoms & signs pertaining to anaemia.

1-Non-specific symptoms include; fatigue, weakness, shortness of breath & symptoms of CHF

2-Signs ;

Pallor ,tachycardia , splenomegaly in minority of cases.

Venous hum in severe anaemia (Hb < 4 gm/dl).

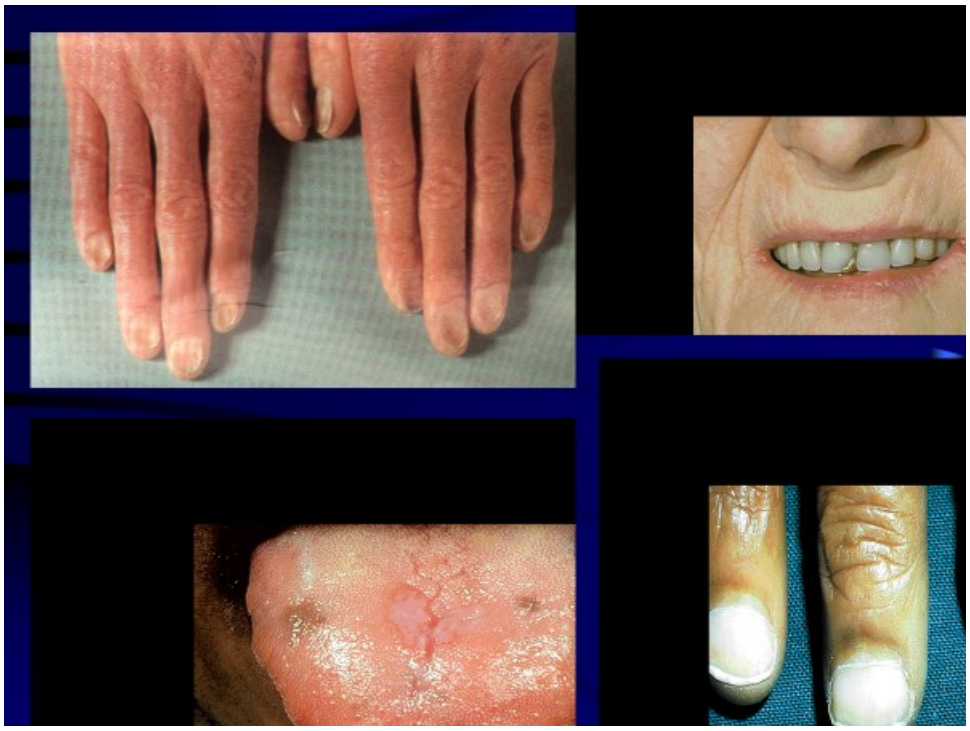
Functional systolic(flow) murmur.

History:

1-Is there a recent history of loss of appetite, weight loss, fever, and/or night sweats that might indicate the presence of infection or malignancy?

2-Is there a history of, or symptoms related to, a medical condition that is known to result in anemia (eg, tarry stools in a patient with ulcer-type pain, significant blood loss from other sites, rheumatoid arthritis, renal failure)?

3-Is the anemia of recent origin, subacute, or lifelong? Recent anemia is almost always an acquired disorder, while lifelong anemia, particularly if accompanied by a positive family history, is likely to be inherited (eg, the haemoglobinopathies, thalassaemia, hereditary spherocytosis).



Polycythemia:

Overproduction of erythrocytes.Occurs in patients > 50 years old .Most deaths due to thrombosis.Results in bleeding abnormalities:Epistaxis, spontaneous bruising, GI bleeding

PLATELETS:

NORMAL PLATELET COUNT 150-400 X10^9/L

PLATELET disorders;

Defect in count :THROMBOCYTOPENIA

Defect in function :THROMBOASTHENIA.

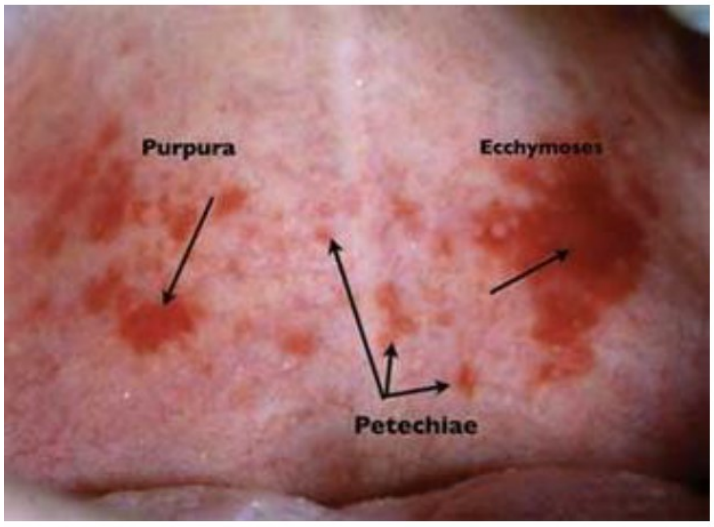
CLINICAL MANIFESTATIONS;

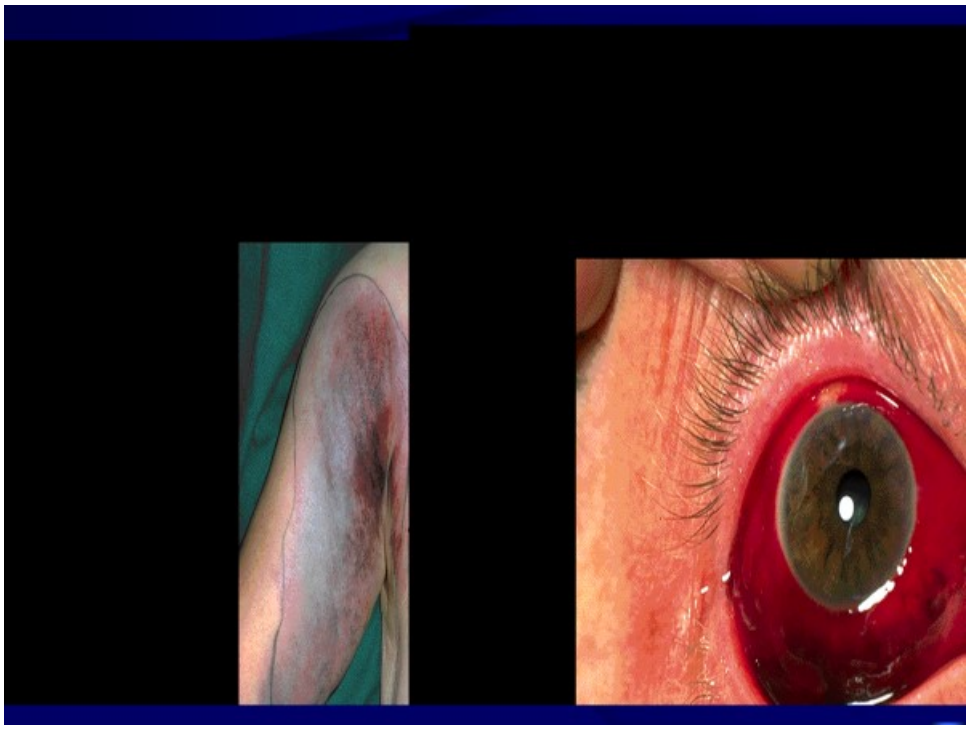
1-PETECHIAE: are pinpoint non-blanching spots that measure less than 2 mm in size, which affects the skin and mucous membranes

2-PURPURA: is a non-blanching spot that measures greater than 2 mm.

3-ECCHYMOSIS(BRUSIES): appear on the skin as a result of trauma to the body. They occur when the small veins, capillaries, and muscle and fiber tissues under the skin break.

4- HAEMATOMA: is a collection of blood outside of a blood vesse.





Clotting Disorders:

Haemophilia:

Deficiency or absence of a blood clotting factor

Deficiency of factor VIII causes haemophilia A.

Deficiency of factor IX causes haemophilia B.

Deficiency is a sex-linked, inherited disorder.

Defective gene is carried on the X chromosome.

Signs & Symptoms:

Numerous bruises, deep muscle bleeding, and joint bleeding.