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Assignment:- Hematology.

Q-NO :--
EXPLAIN THE FOLLOWING:-

ANS:--
1) LEUKOPENIA:--

Meanings:- It is derived from Greek words "Leukos" means white and "penia" means deficiency.

CONDITION:-- It is a condition in which decrease the number of
Leukocytes found in the blood.

* They are white blood cells.

* They are the primary defense of the body againts Infection.

* Thus Leukopenia places individuals at increased the risk of infection.

2) LYMPHOCYTOSIS:--
is a condition in which high Lymphocytes count increased in white blood cells.

* Lymphocytes help fight off diseases so its normal to see a Temporary increase after an infection.

A condition in which there is lower than normal number of lymphocytes (found in white blood cells).

3) LYMPHOPENIA:--

It is also known as LYMPHOCYTOPENIA. it is term used to Describe a state where you have reduced the level of a certain type of blood cells called
Lymphocytes.

Lymphocytes one of three types of white blood cells(known as Leukocytes) found in the blood.

Leukocytes function as a part of our body first line Immune defense system against pathogen such as viruses , bacteria and parasites.

Lymphopenia most often caused by infection including Flu, and will usually recover on its own once the infection has cleared.

4) BASOPHILLIA:-- is a cindition having greater than 200 Basophills/UL in the venous blood are the least numerous of the myelogenous cella and it is rare for thier to be abnormally high without changes to other
blood components.

it is define as the absolute increases the number of basophills.
Reference values vary from Laboratory to laboratory but absolute count of basophills is greater than 0.2×109/L is considerd a true basopillia.

basophillia are the types of white blood cell.
basophillia is not a condition on its own but can be important marker of other underlying madical problem.

basophillia is the abnormally condition of basopills.
it is a sign of chronic inflamation in your body.
Or
A condition when there is too much production of basophill or white blood cell in your bone marrow.

5) NEUTROPHILLIA:--

it is an increased in circulating neutrophills above that expected in healthy individual of the same sex, age, race and physiological status.
This represent the increases in Neutrophills count above 7.5×109/L and is one of the most frequently observed changes in the FBC causes of neutrophillia.

increasing the number of WBCs may represent either a primary disorder of WBCs production or most commonly a secondary respose to underlying disease.

neutrophillia is the best define as is increase in the absolute blood neutrophills count level to a 2 standard deviation above the mean value for normal adult individual from a practical standpoint this is a usually defined as a neutrophill count greater than 10,000/mm3.

initially laboratory error should
exculted as a cause of neutrophillia.but nowdays the workup of neutrophillia is simplified by

classifying it in primary or secondary neutrophillia.

6) THROMBOCYTOSIS:--

it is a condition when there is a excessive level of platelets in the blood. platelets are blood cells found in plasma which stop bleeding by sticking together to form a clot,stroke,heart attack or a clot in blood vessel.

platelets are blood particles produced in bone marrow that they a play an important role in formation of blood clot

Thrombocytosis is a disorder in which too much platelets produce in the body its called a reactive or secondary thrombocytosis when the cause is underlying condition such as infection.

less commonly when Thrombocytosis has no apparent underlying condition such as cause, this disorder is called primary or essential thrombocythemia.
This is a blood and bone marrow disease.

your doctor will detect Thrombocytosis by a routine blood test which indicates a high platelets level in blood.if your test show any thrombocytosis then you need to know whether its reactive thrombocytosis or essential thrombocytemia to know how manage the condition.

7) THROMBOCYTOPENIA:--

is a condition when you have a Low platelets count in blood cell.
platelets are colorless blood cells they help in blood clot.

platelets stop bleeding by clumping and forming plugs
in blood vessel injuries.
This condition can range from
mild to severse depending on its underlying cause.for some the symptoms can include severs bleeding and ara be fatal if they are not treated.
other people may not experience any symptoms.

blood is made of several types of cells. these type of cell floats in a liquid called plasma.

these are WBCs, RBCs and Platelets or Thrombocytes.

when your skin are injured platelets clump together and form cloth to stop bleeding.if you have not any platelets then your body cannot form a cloth.

so a low platelets level is called Thrombocytopenia.

8) POLYCYTHEMIA:--

It is refer to increased the number of red blood cell in the body.
The extra cell cause the blood to thicker and this is turn to risk cause the other healthy issues such as blood clot.

polycythemia has different causes and each of which have its own options of treatment.The treatment of polycytemia involves its underlying cinditiond if possibles and finding the way to bring the level of cell down.

There are Two types of polycytemia:-

1) primary polycytemia or polycytemia vera.(PV) This condition is due to myleoproliferative disease of PV.

2) secondary polycytemia:- This is not due to myleoproliferative disease of PV

9) ANEMIA:- is a conditiom if you have lack healthy red blood cell
to carry adequate oxygen to your body's tissues.

having anemia make you feel more tired and weakness.there are many form of anemia each with its own cause. Anemia ca be acute or chronic and it can ranges from miled to severe.

Anemia can hapen when there is very low number of red blood cell in your body.
if the number of RBCs are low then your body cannot recieved oxygen level as much required.

Anemia includes many symptoms with there form disease due to da shortage of delivery of oxygen to tissues and organs.
Anemia is a word wide disease which effect 1.6billion peoples around the world.women and children have many risk of this chronic disease like cancer.

10) LEUKEMIA:--

Is the cancer of blood cells. there are several broad categories of blood cells includind WBCs,RBCs and PLATELETS.

generally leukemia refer to the cancer of WBCs.
WBCs are the vital part of your immune system. in fights againts bacteria,viruses and fungi.
white blood cell produces in the bone marrow,but it is also produce in spleen,lymp nodes and Thymus glands.
once white blood cell produce then circulates throughout the body.
in Leukemia the white blood cells not work like normal WBCs but work too quickly and eventually crowed out all normal cells.

11) RETICULOCYTOSIS:-

Is a condition when there is increased in number of Reticulytes in the immune red blood cells.it is commonly in Anemia. They are seen in blood films when the bone marrow is highly active in an attempt to replace red blood cell loss such haemolytic anemia and haemorrhage.

An apparent Reticulocytosis exist during gestation increasing
from 90% from 12 week gestation to15% from 6 months gestation and ultimately 4% to 6% at birth.

Reticulocytosis perisists for about 3 days after birth then decline abruptly to 0.8% reticulocytosis on postnatal days 4 to 7.
at two months the the number of reticulocytosis increased slightly followed by slide declined from
3 months to 2 years. when adults level 0.5% to 2.5% Attained 1,2,10-12 The reticulocytes count of premture is typically higher than that of term infants however the count can vary.

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****--THE END--****

no