* ***NAME TOHEEDULLAH***
* ***ID 14939***
* ***SUBJECT WBC DISSORDERS***
* ***DEPARTMENT BS-MLT***

***QNO.01:-***

***ANSWER-NO.1:-***

***-LEUKOPOIESIS:-***

-It is form of hematopoises.

-In which leukopoiesis are form in bone marrow.

-Formation of WBC.

TYPES OF LEUKOPISES

-There are main two types of leukopuses…

***1-Graneulocytopoises;***

-Also called Granulocyte.

-It is a granulated cells with poly sigment nuclei.

-There are three types of cells.

1. ***NEUTROPHILE:-***

-High N:C ratio.

-Basophilic cytoplasm.

-Round neuclus .3-4

-Chromatin difuse.

-Neucleoli appeas.

-Contain lysosomal granules.

***DIFFERENTIAL:-***

-50% TO 70% in human body.

***FUNCTIONS:-***

-Realse chemical.

-Help in phagocytosis.

1. ***ESINOPHILS:-***

-Also called EOS.

-Have bi lobed -2 segments.

-Blue cytoplasm.

-Red orange granules.

- Life spleen.

- 7---12 days

***DIFFERENTIAL:-***

-3---4% normally present in human blood.

***FUNCTIONS:-***

-Help in allergic reaction.

-Inflamation.

-Defense against parastic infection.

1. ***BASOPHILS:-***

-Also called BASO.

-Blue cytoplasm.

-Lobulate Nucleus.

-Purpule staining granules.

***LIFE SPAN:-***

-12---15 days

***DIFFERENTIAL:-***

-1—2% in blood.

***FUNCTIONS:-***

-Immediated hypersensitivity reaction.

-Parasitic infection.

- Allergic infection.

***2- A-GRANEULOCYTOPIEOSIS:-***

-Also called Agraneulocytes.

-There are Two Types of cells.

* + ***MONOCYTES:-***

-It is a large cell.

-Gyrish cytoplasm.

-Lobulated nucleus.

-Oval Nucleus.

***LIFE SPAN:-***  -2----5 days.

***DIFFERENTIAL***: -2—8% in blood. ***FUNCTION:-*** -Function in tissue where they d/f into long-lived macrophag.

-Antigen presenting cell.

-Help in immune cells.

* + ***LYMPHOCYTE:-***

-They are small.

-High neuclur.

-Danse chromatin.

***LIFE SPAN:-***

1 DAY.

***DIFFERENTIAL:-***

-25-----35%.

***QNO.02:-***

***ANSWER NO.2:-***

***CRONIC - PHASE***:-

* -85% patients have chronic phase.
* -The diseased is Asymptomatic of mild symptoms.
* -Blast cells present less than in 10%.
* -Spleen is Normal.
* -Anemia Not seen.
* -Thrombocytosis .
* Excessive platlets.
* -They can transmitted to accelerated phase.

***ACCELERATED - PHASE :-***

* -Blast cells presents 10-19% in blood.
* - >20% basophilis.
* -Platlets < 100,000.
* -Unrelated to theraphy.
* -Chromosomal abnormalities presents.
* - WBC increased.
* -Marked Sperogomy.

***BLAST CRISES/PHASE:-***

* -It is a final phase.
* -Like accute leukemia.
* -Progressive is Ripid.
* -Survival is short.
* --Daignosis based on :-
* - > 20% lymphocyte in blood.
* - Large blasts on Bonemarrow.
* -Chloroma Develop.

***QNO.03:-***

***ANSWERN-NO.03:-***

***LEUKEMIA:-***

* -It is a type of blood cancer.
* -Blast cells are increased in this type of cancer.
* -It is broad term of disease they effected the blood.
* -They also affected lympoid system and bonemarrow.

***CAUSES:--***

* INFECTION :-

-Leukemia of blood.

* HEREDITARY:-

-Down syndrome.

-Also environmental factor cause leukemia.

For-example:-

* -Ionieation Radiation.
* -Chemical and cettain Drug.

***QNO.04:-***

***ANSWER-NO.04:-***

***ACUTE-LEUKEMIA:-***

* -They are develop blast cells.
* -It is a young cells.
* -They course symptoms quickly.
* -They do not dividing.
* -They target immature cells.

***CHRONIC LEUKEMIA:-***

* -It is also type of leukemia.
* -Many lymphocyte makes in this type of cancer.
* -They progression is very slow.
* -Commanly they effected the lmpods.
* -They can invade other body tissue.
* -Symptoms takes long time to apeare.
* ***QNO.05:-***

***ANSWER-NO.05:-***

* ***RAI-CLASSIFICATION-OF-CHRONICLYMPHOCYTIC-LEUKEMI:-***
* -That classification is described with staging system.
* -It is divided into five different stages.

***STAGE-N0.0:-***

* ***Lymphocytosis:-***
* -Mean high level of lymphocytes.
* -More than 5000 lymphocytes.
* -No physical sign.
* ***STAGE.NO.01:-***
* -In this stage lympnodes becomes enlarge.
* -Liver or spleen is normal.
* -Patient have NO Anemia.
* -Platlets is normal in this stage.

***STAGE.NO.02:-***

* -In this stage spleen become en large.
* -Patient have swallen of lympnode.

***STAGE.NO.03:-***

* -Liver or spleen become enlarged.
* -Anemia symptoms will be appear.

***STAGE .NO.04:-***

* -Platlets level become low.
* -Patient not have swrllon of lympnode.
* -Liver become normal.

***CHART OF RAI CLASSIFICATON:-***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| RAI STAGE | HIGH LEVELOF LYMPHOCYTES | ENLARGED LYMPHNODES | ENLARGED SPLEEN OR LIVER | ANEMIA |
| 0 | YES | NO | NO | NO |
| 1 | YES | YES | NO | NO |
| 2 | YES | YES OR NO | YES | NO |
| 3 | YES | YES OR NO | YES OR NO | YES |
| 4 | YES | YES OR NO | YES OR NO | YES ORNO |

***QNO.06:-***

***ANSWER-N0.06:-***

***CAUSES OF CHRONIC LYMPHOCYTIC LEUKEMIA:-***

* -It is caused by multiple genetic mutation.
* -Also caused with epi genetic change.
* -Agent orange increased the caused of CLL.
* -Hepatitis c increased the risk.
* -Blood transfusion play ruled as a risk factor.

***SYMPTOMS:-***

* -High while bood cells.
* -Specially increased lymphocytes.
* -Enlarged lympnode.
* -Bone marrow.

***PRODUCE LOW WBC PLATLETS AND NEUTROPHIL:-***

* -Fever.
* -Weight loss.
* -Infection.
* -Feeling tired.