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BS. MLT 4th. .

Q1. Differentiate between Acute and Chronic leukemia?

- **answer...**

CHRONIC LEUKEMIA,

chronic leukemia take a long period of time and slow growing of cell .

A type of leukemia that leukemia is a prolong response leukemia ,chronic leukemia depend on abnormal cells are immature cells like stem cells or mature cells like normal white blood cells wbcs .the cell of leukemia is longer than the normal cells these cells normally fairs but can't fight infection as well as normal wbcs do it. that leukemia cells made up in the bone marrow chronic leukemia to cause the problem can take a long a prolong times ,chronic leukemia is depended by normal cell ,more than person can be live and many months +years but chronic leukemia are usually more difficult then acute leukemia ,untreated chronic leukemia is taken a time about two to six year chronic leukemia can cause usually adults chronic leukemia is normal /Hugh platelets and mature predominant cells it.

For example *asthma and osteoporosis.

ACUTE LEUKEMIA,

Acute leukemia is take a short period of time and fast growth of the cells.

Acute leukemia is a type of leukemia not mature cell in the bone marrow cell,reproducetion of these celli mean reproduce continually this immature cells that cells continue reproduce and made up Acute leukemia is a suddenly action that show it. Acute leukemia are the infected people not treatment well done is live a few days +30 or months that people only live it. only live a few months any types of leukemia is more expensive cannot easily treated but Acute leukemia is usually less difficult than chronic leukemia , Acute leukemia the count of wbcs is variable , Acute leukemia is taken on six months or less than many be it.

THE END.

Q2. Explain chronic myeloid leukemia causes and symptoms?

- **answer...**

chronic myeloid leukemia

Chronic myeloid leukemia the type of cancer is also known as chronic myeloid leukemia.

that beginning in the blood forming cells of the bone marrow out of control of the body cell to start cancer and that infected cell spread over all body every part of the to infect is a write cell to damage the write cell chronic myeloid leukemia is also called as chronic myelogenous leukemia .immature myeloid cell are genetic change the cell that are made red blood cell , and most kind of white blood cell and platelets are without lymphocytes. it changes is that gene are called BCR-ABL. which turns the cell into chronic myeloid cell . spread up into the blood and made by the bone marrow the leukemia cell are divide and growth will be don .all leukemia are not will same .other kinds of varies from of leukemia cancer that start in organs . leukemia is a varies from of types of cancer that start in organs such as,breast,lungs,and spilling (spread) to the bone marrow . cancer that start other part of the body and spilling to the marrow are not leukemia . chronic myeloid leukemia is a slowly appear systems .all granulocyte is increase pre-

dominate, a phase in chronic myeloid leukemia is convert to acute leukemia ,the over production of WBC are different to control .

Symptoms,

- Night sweating.
- Wheight lossing.
- Fever .
- Bone and joint pain can leukemia cell spilling.

causes,

Chronic myeloid leukemia is the main cause are BCR-ABL1 gene. that gene are change remain translocation. transfer of location in the chromosomes and occure genetical changing on the mine and twenty two chromosomes .write as a 22 trans part of the ABL1 gene from the chromosomes nine as part of the BCR gene frome chromosomes 22 to developed the normal gene also called BCR-ABL1

- Radiation therapy high dose

-Translocation between 22 and a chromosomes WBCS and platelets disorders.

THE END.

Q3. What is leucopoiesis , and also explain its types ?

- **answer...**

LEUCOPEOISIS,

The formation of white blood cell in bone marrow in adult organ and hematopoietic and the fetus is also called leucopoiesis

TYPES,

leucopoiesis are the following two types,

1) Granulopoiesis and

2)Agranulopoiesis.

1) GRANULOPOIESIS,

granulocytes, the blood formation in the bone marrow also called graneulopeoisis, and that is a part of hematopeoisis. structure change and decrease cell size an accumulation of cytoplasmic granules, condensation of nuclear chromatin. granulocytes is contain in the following cells.

-1-eosinophile

-2-basophile.

-3-nutrophil.

CYTOKINES ,cytokines is family of protein seen in the wbcs in first time, such as,' interferon and interleukin, interleukin is a group of protein

FUNCTION, cell proliferation and migration is adhesion ,maturation.

1) BASOPHILE,

Purple granules, lobulated, circulate in the blood and migrate in the tissue where thy become "mast" cells. differential is about one to two 1to 2 percent, and the basophile life spine is to fifteen days it.

FUNCTION, help also in allergic reaction and hypersensitivity .

2) NUTROPHILE ,

Nutrophile are also called polymorph nucleus nutrophil. nutrophil. Is a multi-lobe in nucleus about three to four and connected by the filaments `is two to five days ,it is a contain granules also lysosomal

DIFFERENTIATED,

fifty to seventy percent in normal in body .

FUNCTION,

- Help to phagoeytosis ,and released the chemical against or opposite the microorganism .chemotatic done activity.

3) EOSINOPHILE,

Eosinophile are two segmented bi lobed shape are organ red like granules and blue cytoplasm the differentiated by may be three to four 3 to 4 percent ,the life about the eosinophile are 7 t0 12 days.

FUNCTION, parasite infection ,allergic reaction and defense against the infection and allergies.

2) AGRANULOPOIESIS,

agranulopoiesis is a without granules and contain the fallowing granulocytes

1) MONOCYTES,

Bone marrow is a building fetor of the blood monocytes is made in the bone marrow in run via the blood in the body and convert or made the macrophages and kill microorganism. monocytes is a type of white blood cell. monocytes is a type a immune cell. divided from cfu-5,cfu ga9,cfu-ly myeloid stem cell

-myeloid stem cell - myelomonoblast - promonocyte - monocyte- macrophages,

monocytes is largest cell and grey cytoplasm.

FUNCTION, they function in tissue where they differentiate into macrophage.

2) LYMPHOPEOSIS OR LYMPOCYTES,

that will be make in the bone marrow ,part of immune cell, found in the blood and tissue, high n/c ratio, dense chromatin ,the differentiation is twenty five to thirty five, the life spine of the lymphocytes are about one days.

lymphoid stem cells-lymphoblast- lymphocytes are contain T-lymphocytes and B- lymphocytes. T-lymphocytes are divide are cytotoxic cells and T-helper cell.

THE END.

Q4. Explain leukemia and its causes?.

- **answer...**

LEUKEMIA,

Leukemia is type of blood /bone marrow cancer and abnormal production of white blood cells leukemia are neoplastic proliferation or abnormal growth of cells of hematopoietic cells and full or whole body spreading the term of leukemia is define the unite of blood cancer in the bone marrow also called abnormal blood cells that cancer strat in the blood forming tissue, for example, in the bone marrow, enter the bloodstream a produce a large amount of abnormal of blood cells, leukemia a death human about in the year of 2015 about 352600'approximately, method diagnose of the leukemia is make of too blood tests, and bone marrow biopsy.

CAUSES,

-Infection, human T-cell leukemia,

-genetically changing or abnormality ,

-hereditary down syndrome,

-environmental factor,

-drugs,

-chemical carcinogen,

-radiation like X-rays.

THE END.

Q5. Compare all phases (Chronic ,Accelerated, Blast)of CML?

1) BLAST PHASE,

Blast phase also known as blast crisis. twenty percent more blast to bone marrow in the blood is the number of white blood cells are difficult to control in the blast phase, genetically change occur in the chronic myeloid leukemia, to other type of leukemia patient to see that approximately some these blast cells with problem of the patient in the blast have enlarge the spleen weight loss and generally fever and unwell felling like it. abnormal blood cells these blood are connect completely created are called blast.

2) CHRONIC PHASE,

chronic phase with the CML promote are move into the accelerated phase and then into the blast phase running about three to four years after diagnose. chronic phase in the bone marrow in the blood is contain blast in less the ten

percent and this phase can continue for several years ,disease can progress fast or explosive phase when diagnosed are approximately ninety percent of people have chronic phase of CML.

3) ACCELERATED PHASE,

This phase of CML most infected people patient have ten to nineteen percent in blast to together or both bone marrow and blood are more than basophilic in the peripheral blood cells also called basophilic, occur in these cells is cytogenetic changing sometime have new cytogenetic changes occur it, and changing chromosome will done.

THE END.

Q6. Discuss Rai Classification of chronic lymphocytic leukemia?

Chronic lymphocytes leukemia are dose not made tumor because thy are present in the blood and bone marrow in many cases, when it is discover it spread has to other organ in the body for example, liver, lymph nodes and spleen, for cancer staging the process of determine how much the cancer has spread, stage identification can Afton be useful as it can help guide treatment and determine a person diagnoses point of view, most type of cancer are based on the size of the tumor and how far the cancer are spread.

Chronic lymphocytes leukemia it divided into five stages.

*** STAGES O,**

Stages o also called low-risk stage. lymphocytes are high count of blood of lymphocytoisis, and not enlarged the spleen lymph nodes and liver, and near normal thrombocytosis and red blood cells.

*** STAGES I,**

Stage I also called intermediate risk stage lymphocytoisis, enlargement plus lymph node the red blood cells of count it platelets in normal, or only low the liver or spleen are not a bigger or enlarged

***STAGE II,**

Stage II also called intermediate risk stage ,the lymphocytoisis plus an enlarge the spleen and can be possible liver will be enlarge and no will enlarge the lymph nodes, the only slightly low the count off platelets and red blood cell are normal.

***STAGE III,**

Also called high risk stage, many few red blood cells, lymphocytoisis plus anemia. and or not enlarged of spleen, lymph nodes or near normal are counts of the platelets

***STAGE IV,**

Also called this stage are a high risk thrombocytosis and lymphocytoisis plus are many few platelets or not contain anemia liver or spleen and lymph nodes are enlarged.

THE END