



Libyan International Medical University
Faculty of Basic Medical Science



Libyan International Medical University
Second year Faculty of basic medical science

Leukemia

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This Report Related To CVS

Abstract :

The following report will be undergoing a type of cancer which is leukemia and the common symptoms , report well undergo different kind of study that were done in the (London ,Germany ,and Egypt).

Introduction :

Leukemia is a cancer which starts in blood-forming tissue, usually the bone marrow. It leads to the over-production of abnormal white blood cells, the part of the immune system which defends the body against infection. Leukemia is a cancer of blood cells (and therefore sometimes referred to as blood cancer

Blood cells are formed in the bone marrow, the spongy tissue found inside the bones. Blood-forming stem cells divide to produce either more stem cells or immature cells that become mature blood cells over time. A blood stem cell may become a myeloid stem cell or a lymphoid stem cell.(1)

A myeloid stem cell becomes one of three types of mature blood cells: Red blood cells that carry oxygen to all tissues of the body.

Platelets that form blood clots to stop bleeding.

Granulocytes (white blood cells) that fight infection and disease.

A lymphoid stem cell becomes a lymphoblast cell and then one of three types of lymphocytes (white blood cells):

B lymphocytes that make antibodies to help fight infection

T lymphocytes that help B lymphocytes make the antibodies that help fight infection.

Natural killer cells that attack cancer cells and viruses.

Leukaemia affects white blood cells and can be classified by the type of white cell affected (myeloid or lymphatic) and by the way the disease progresses (acute or chronic). Acute and chronic do not refer to how serious the disease is but to how rapidly it progresses.

Common symptoms of chronic or acute leukemia may include(2) pain in the bones or joints, swollen lymph nodes that usually don't hurt, fevers or sweats, feeling weak or tired, bleeding and bruising easily, frequent infections, discomfort or swelling in the abdomen, weight or loss of appetite.(3)

Discussion:

1-Study done in London 2012 to 2014 on group of patient age group 18 to 30 years , male and female study was done in the local hospital on patient with leukemia after taking good history and investigation almost 23% had night sweat and fever , 40% frequent infection,20% had abdominal pain . (2)

2-Study done in Germany Berlin university 2013 to 2014 on group of patient age group 15 to 30 years , male and female study was done in the local hospital on patient with leukemia after

taking good history and investigation almost 27% had night sweat and fever , 35% frequent infection,40% had abdominal pain (1)

3-Study done in air shams university in egypt 2011 to 2012 on group of patient age group 14 to 33 years , male and female study was done in the local hospital on patient with leukemia after taking good history and investigation almost 29% had night sweat and fever , 37% frequent infection,50% had abdominal pain .(3)

Conclusion:

Leukemia is a cancer that starts in blood stem cells. Stem cells are basic cells that develop into different types of cells that have different jobs. Blood stem cells develop into either lymphoid stem cells or myeloid stem cells. Lymphoid stem cells develop into lymphocytes, a type of white blood cell. Lymphocytes help fight infection and destroy abnormal cells. The 3 types of lymphocytes are B cells, T cells and natural killer (NK) cells. Myeloid stem cells develop into red blood cells, granulocytes, monocytes or platelets. Red blood cells carry oxygen to all tissues of the body. Granulocytes and monocytes are types of white blood cells that destroy bacteria and help fight infection. Platelets form clots in damaged blood vessels to stop bleeding.

Reference :

[http://www.cancer.ca/en/cancer-information/cancer\(2\)](http://www.cancer.ca/en/cancer-information/cancer(2))

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[http://www.medicinenet.com/leukemia/article.htm\(1\)](http://www.medicinenet.com/leukemia/article.htm(1))

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