

About Acute Myeloid Leukaemia (AML) - A Quick Guide



Contents

This is a brief summary of the information on 'About Acute Myeloid Leukaemia (AML)' from CancerHelp UK. You will find more detailed information on the website.

In this information there are sections on

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The blood and acute myeloid leukaemia

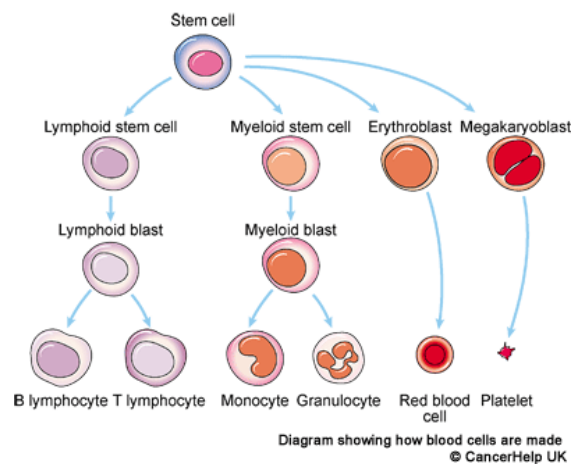
Leukaemia is a cancer of the white blood cells and bone marrow. There are several types and subtypes. In acute myeloid leukaemia (AML) it is white blood cells called granulocytes or monocytes that become cancerous.

Blood cells and leukaemia

Your body makes blood cells in the bone marrow. This is the soft inner part of your bones. You make blood cells in a controlled way, as your body needs them. All blood cells start as the same type of cell,

called a stem cell. Stem cells then develop into one of four different types, which in turn become red blood cells, platelets, or different types of white blood cells.

The diagram below helps to explain this



In acute myeloid leukaemia, the bone marrow makes too many white cells called monocytes or granulocytes. The cells made are not fully developed and are not able to work normally.

How leukaemia affects you

White blood cells help fight infection. If your body makes abnormal white blood cells, you are more likely to get infections. And find it difficult to get rid of them.



Abnormal white blood cells can also build up in parts of the lymphatic system (the spleen and lymph nodes) and in the liver.

If there are too many white blood cells, the bone marrow gets overcrowded and there is not enough space for other types of blood cells. So you may have a lower than normal count of red blood cells and platelets.

Acute myeloid leukaemia risks and causes

Acute myeloid leukaemia is rare. It is most common in people over 65 years old. We don't know what causes most cases of leukaemia. But there are some factors that may increase your risk of AML.

The most major risk factor that we know of is being exposed to high levels of radiation. The atomic bomb survivors in Japan had higher than normal levels of leukaemia. Other possible risk factors include exposure to benzene, past chemotherapy, some genetic (inherited) conditions, some blood disorders, some autoimmune conditions, smoking and being overweight.

Screening for acute myeloid leukaemia

Screening means testing people for early stages of a disease before they have any symptoms.

Before doctors can screen for any type of cancer, there must be an accurate test to use. The test must be reliable in picking up cancers that are there. And it must not give a positive result in people who do not have cancer. It must also be simple, safe and not too expensive.

At the moment, we don't have a screening test that is reliable enough to use for acute myeloid leukaemia (AML). So there is no UK screening programme.

Symptoms of acute myeloid leukaemia

Many symptoms are vague and non-specific. You may feel as if you have flu. Possible symptoms can include

- General weakness
- Feeling tired (fatigue)
- High temperature (fever)
- Weight loss
- Frequent infections
- Bruising or bleeding easily
- Blood in your urine or stools
- Pain in the bones or joints
- Breathlessness
- Swollen lymph glands – this is rare
- A feeling of fullness or discomfort in the tummy (abdomen) from a swollen liver or spleen

These symptoms are caused by too many abnormal white blood cells and not enough normal white cells, red cells and platelets.

What to do if you have these symptoms

If you have any of these AML symptoms, you must get checked by your GP. But remember, the symptoms of AML are often vague and can all be caused by other medical conditions. Most people with these symptoms don't have leukaemia.

Types of acute myeloid leukaemia

Doctors divide acute leukaemias into myeloid and lymphoblastic leukaemias. But they also divide them into even smaller groups or subtypes. This is called classification. There are two classification



systems that doctors use. On the full length version of this page, there is information about the classification systems for AML. Doctors plan your treatment according to the particular subtype of leukaemia you have.

Your doctors look at your leukaemia cells under a microscope to find which group your leukaemia is in.

Granulocytic sarcoma

In acute myeloid leukaemia, a lump of cells can collect outside the bone marrow. This is called a granulocytic sarcoma. You can get these anywhere in the body.

A mixture of types

Some leukaemias seem to be a mixture of AML and acute lymphoblastic leukaemia (ALL). Doctors call these 'acute biphenotypic leukaemias'. Biphenotypic just means 'both types'.

Should I see a leukaemia specialist?

It can be very difficult for GPs to decide who may have a leukaemia and who may have something much more minor. But it is very important for AML to be diagnosed and treated quickly. Your GP may do a blood test. If the results show signs of acute myeloid leukaemia your GP should refer you to a blood specialist straight away.

NICE guidelines for urgent referral

The National Institute for Health and Clinical Excellence (NICE) has produced guidelines to help GPs decide who needs to see a specialist and how soon. An urgent referral means you should get an appointment with a specialist within 2 weeks. If you have a combination of some

of the symptoms below, your GP should take blood tests and make an urgent referral to a doctor specialising in blood diseases. The symptoms are

- An enlarged spleen for no obvious reason
- Unexplained extreme tiredness
- Weight loss
- Night sweats that drench you
- Itching all over
- Breathlessness
- Bruising easily or bleeding
- Infections that keep coming back
- Pain in the tummy (abdomen) or bone pain
- Swollen lymph glands

Questions for your doctor about acute myeloid leukaemia

- What type of leukaemia do I have?
- What does this mean for me?
- How can you tell if I have acute myeloid leukaemia?
- Am I more likely to get acute myeloid leukaemia than anyone else?
- Someone in my family has had leukaemia. Does this mean I am more likely to get it?
- How common is acute myeloid leukaemia?
- What else might be causing the symptoms I have?
- Do I need to have any tests done?
- Should I see a specialist?



Notes

More information

For more information about acute myeloid leukaemia, visit our website
<http://cancerhelp.cancerresearchuk.org>

You will find a wide range of detailed, up to date information for people affected by cancer, including a clinical trials database that you can search for cancer trials in the UK. You can view or print the information in a larger size if you need to.

For answers to your questions about cancer call our Cancer Information Nurses on
0808 800 4040 9am till 5pm Monday to Friday

Adapted from Cancer Research UK's Patient Information Website CancerHelp UK in September 2010. CancerHelp UK is not designed to provide medical advice or professional services and is intended to be for educational use only. The information provided through CancerHelp UK and our nurse team is not a substitute for professional care and should not be used for diagnosing or treating a health problem or disease. If you have, or suspect you may have, a health problem you should consult your doctor.
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