

About Myeloma

A Quick Guide

Contents

This is a brief summary of 'About myeloma' from our website. You will find more detailed information on there. In this information there are sections on

- What is myeloma?
- Myeloma risks and causes
- Screening for myeloma
- Myeloma symptoms
- Types of myeloma
- Should I see a myeloma specialist?
- Questions for your doctor about myeloma

You can view this information in a larger print on our website.

What is myeloma?

Myeloma is a type of cancer that develops from cells in the bone marrow called plasma cells. Bone marrow is the spongy tissue found inside the inner part of some of our large bones. Bone marrow produces our different types of blood cells. Myeloma can develop wherever there are plasma cells. As it can be in several places in the body, it is often called multiple myeloma.

Plasma cells are part of the immune system. They make proteins called antibodies, which are also known as immunoglobulins. Antibodies attack and help to kill bacteria and viruses. Different antibodies are made to respond to different infections. There are 5 main types of antibody. Myeloma cells produce an abnormal form of one of these types of antibody. It is found in your blood and urine. The abnormal antibody does not work properly and is not able to fight infections.

In myeloma, too many plasma cells are made. These take up much more room in the bone marrow than they would normally. This means that there is not enough space for making normal white cells, red cells and platelets.

Myeloma risks and causes

Myeloma is an uncommon cancer in the UK. It is very rare in people under 40. It is more common in black populations than white and Asian populations. It is more common in men than women. We don't know what causes most cases, but there are some known risk factors. Risk factors are things that increase your risk of developing a particular illness or disease.

Risk factors for myeloma

- MGUS – Some people who have a condition called monoclonal gammopathy of unknown significance (MGUS) go on to develop myeloma. Almost everyone who has myeloma has MGUS first
- Family history – People who have a close relative diagnosed with myeloma or MGUS are more likely to develop myeloma or MGUS
- Lowered immunity - People who take medicines to lower immunity after an organ transplant, or have HIV are at increased of myeloma
- Some medical conditions - Autoimmune conditions such as pernicious anaemia, and a rare genetic condition called Gaucher disease increase the risk of myeloma
- Obesity – People who are overweight or obese may have an increased risk of myeloma
- Radiation exposure - People exposed to high levels of radiation may have an increased risk of myeloma

Screening for myeloma

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

Before screening for any type of cancer can be carried out, doctors must have 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. The test also needs to be cost effective.

There is no UK screening programme for myeloma as myeloma is not a common condition and so too many people would have unnecessary tests. Screening everyone would also be very expensive for each cancer found.

But, we know that a small number of people with a condition called monoclonal gammopathy of undetermined significance (MGUS) will go on to develop myeloma. If you are diagnosed with this condition, you will have regular check ups.

Myeloma symptoms

Multiple myeloma does not always cause symptoms in its early stages. But possible symptoms can include

- Pain in the bones especially in the back or ribs
- A broken bone (fracture)
- Thirst
- Feeling or being sick
- Passing a lot of urine
- Tiredness, shortness of breath or weakness
- Repeated infections or infection that is difficult to clear
- Unusual bleeding or bruising more easily than normal
- Swollen ankles

About 7 out of every 10 people with myeloma (70%) have pain when they are first diagnosed. The pain is most often in the lower back or ribs. Pain in the bones is caused by a lot of plasma cells collecting there. The large numbers of plasma cells damage the bones. Occasionally it is a fracture of a bone that leads to a hospital admission, and a diagnosis of myeloma is made.

All of the symptoms listed above are more likely to be caused by other illnesses. However, if you have any symptoms like these, you should see your doctor.

Types of myeloma

There is really only one main type of myeloma, but in different people, the cancerous plasma cells make different antibodies. Doctors call these antibodies immunoglobulins. In each case of myeloma, only one type of immunoglobulin (Ig) is overproduced, but this varies from patient to patient. The different types are called IgG, IgA, IgD, IgM and IgE. IgG is the most common type of myeloma. IgD, IgM and IgE myeloma are very rare.

Light chain myeloma

Some people with myeloma do not produce complete immunoglobulins, they only produce a part. Doctors call this light chain myeloma or Bence Jones myeloma. The light chains are smaller than the complete immunoglobulins and can show up in the urine. The serum free light chain test can detect small amounts of light chains in the blood. So doctors may use urine and blood tests to help diagnose and monitor this type of myeloma.

Non secretory myeloma

Rarely, the myeloma cells produce little or no immunoglobulin (also called paraprotein). The serum free light chain test can help in diagnosing and monitoring some people with non secretory myeloma. But in most cases, doctors use bone marrow tests.

There are other conditions of plasma cells that are related to myeloma. These include MGUS, plasmacytoma and amyloidosis.

Should I see a myeloma specialist?

Myeloma is rare and the symptoms can be similar to other medical conditions. So it can be very difficult for GPs to decide who may have myeloma and who has something less serious. But there are particular symptoms that mean your GP should refer you to a specialist straight away. The National Institute for Health and Care Excellence (NICE) guidelines say if you are

- Over 60 with persistent bone pain, particularly back pain, or have an unexplained broken bone (fracture) you should be offered a full blood count and other blood tests
- Over 60 with a high calcium level or low white blood cells and other symptoms that seem like you could have myeloma, you should be offered special blood and urine tests within 2 days
- If you have abnormal blood test results at any age that suggest you could have myeloma, your GP should arrange a special urine test within 2 days
- If the results of your urine or blood tests suggest you might have myeloma, your GP should make an urgent referral to a haematologist within 2 weeks

If you are concerned that your GP is not taking your symptoms as seriously as you think they should, you could take this information with you to an appointment.

What to ask your doctor about myeloma

- How can you tell if I have multiple myeloma?
- Am I more likely to get multiple myeloma than anyone else?
- How common is multiple myeloma?
- What else might be causing the symptoms I have?
- Someone in my family has myeloma, so does that mean I am more likely to get it?
- Do I need to have any tests done?
- What are the different types of myeloma?
- What type of myeloma do I have?

Notes

For more information, visit our website <http://www.cruk.org/about-cancer>

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 trials in the UK. Our information is based on the best current scientific evidence and reviewed regularly by leading clinicians and experts in health and social care.

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

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