



About us

The Leukaemia Foundation is Australia's peak body for blood cancer, funding research and providing free services to support people with leukaemia, lymphoma, myeloma and related blood disorders.

We invest millions of dollars in the work of Australia's leading researchers to develop better treatments and cures and provide free services to support patients and their families.

We receive no ongoing government funding and rely on the generosity of the community and corporate sector to further our Vision to Cure and Mission to Care.

We can help you

Our range of free services supports thousands of Australians, from diagnosis, through treatment and beyond. To learn more, please call 1800 620 420 to speak with one of our Support Services team.

You can help us

There are many ways that you can help us to improve the quality of life for people with blood cancer. From making a donation, to signing up for an event; from volunteering, or joining us as a corporate sponsor - please call 1800 500 088 or go to www.leukaemia.org.au to learn more.

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Asymptomatic (smouldering) myeloma?

Asymptomatic myeloma, also called smouldering multiple myeloma (SMM) is a plasma cell disorder that may progress to myeloma.

Plasma cells, a type of white blood cell, develop from mature B-lymphocytes in the bone marrow. They play an important role in protecting the body against infections by producing proteins called immunoglobulins (Ig) – also known as antibodies. Normally, 1-5% of cells in the bone marrow are plasma cells.

Asymptomatic myeloma is defined by the presence of abnormal plasma cells in the bone marrow and an abnormal antibody in the blood (referred to variously as a paraprotein, monoclonal antibody, or M-protein).

However, there are no symptoms and no evidence of 'end-organ damage'; that is, there are no signs of injury to any organs in the body that characterise active myeloma. These signs include a high **Calcium** level, **Renal** (kidney) impairment, **Anaemia** (low red blood cell count), and **Bone** lesions – often referred to by the acronym **CRAB**, for short. Furthermore, partial antibodies, known as free light chains (FLC), can be measured in the blood and, if produced to excess, as in active myeloma, can pass into the urine where they are known as Bence-Jones proteins (BJP), but they are not a feature of asymptomatic myeloma.

How is asymptomatic myeloma diagnosed?

A diagnosis of asymptomatic myeloma is often an incidental finding after an elevated protein level is found in a routine blood test, or during investigation of an unrelated health problem. It is important to distinguish between asymptomatic and active myeloma because people with asymptomatic myeloma generally do not require immediate treatment.

To establish a correct diagnosis, several investigations are carried out including blood and urine tests, X-rays and a bone marrow biopsy. For asymptomatic myeloma to be diagnosed, the following must be present:

- a blood paraprotein (M-protein) level of 30 g/L or higher, OR levels of 10% or more for abnormal plasma cells in the bone marrow, OR both

plus

- a normal calcium level, a normal renal function, no anaemia, no bone lesions, and no significant levels of light chains in the blood or in the urine.

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How is asymptomatic myeloma treated?

Most people with asymptomatic myeloma do not need treatment unless they develop active myeloma. However, if you have osteoporosis associated with your asymptomatic myeloma, your doctor may recommend medication known as bisphosphonates to help strengthen your bones.

Monitoring asymptomatic myeloma

The cornerstone of asymptomatic myeloma management is close monitoring, to detect progression to active myeloma.

While people diagnosed with asymptomatic myeloma generally do not require immediate treatment, some people develop myeloma and then will require treatment. Most people with asymptomatic myeloma develop active myeloma within several years of diagnosis.

A number of risk factors have been identified that may help to predict the likelihood of developing myeloma. These include a high proportion of abnormal plasma cells in the bone marrow; reduced levels of normal immunoglobulins (antibodies); an abnormal serum free light chain (FLC) and/or BJP; and/or a high or rapidly increasing paraprotein level.

Clinical studies have shown that, on average, the risk of progression from asymptomatic myeloma to myeloma is 10% per year for the first five years, 3% per year for the next five years, and 1-2% per year thereafter. For this reason, close monitoring of people with asymptomatic myeloma, particularly in the first few years following diagnosis, is vitally important. Monitoring tests generally include blood count, biochemistry (kidney function and calcium levels), immunological tests (including immunoglobulin and paraprotein levels), serum free light chains, and symptom-directed X-rays or MRI scans.

Monitoring tests are generally done every 3-4 months during the first year after diagnosis. If these results are stable then the frequency of testing occurs less often for the next five years (every 4-6 months) and if those tests do not show any signs of progression to myeloma, monitoring tests are then carried out every 6-12 months. Even where people do not develop myeloma, follow-up is continued indefinitely.

Is there any research into asymptomatic myeloma?

As is the case with myeloma generally, an enormous amount of research into asymptomatic myeloma is being conducted.

International studies are underway to determine if it is possible to identify people with asymptomatic myeloma who may be at greater risk of developing myeloma, and determining whether this group would benefit from closer monitoring and/or early treatment.

The Leukaemia Foundation publishes the information booklets: 'Myeloma. A guide for patients & families'; 'Leukaemia, Lymphoma, Myeloma, MDS, MPN and related blood disorders'; and 'Living with Leukaemias, Lymphomas, Myeloma, MDS, MPN and related blood disorders'.

* These plasma cells are different to the fluid in which red and white blood cells and platelets are suspended, which also is known as plasma.

For more information, freecall 1800 620 420
email info@leukaemia.org.au or visit www.leukaemia.org.au