

IS MYELOMA ON YOUR RADAR?



Leukaemia
Foundation

VISION TO CURE
MISSION TO CARE

ABOUT THIS TOOL

The Leukaemia Foundation has developed this tool to assist GPs in the diagnosis of myeloma. Myeloma (also called multiple myeloma) is the most rapidly increasing blood cancer in Australia. The diagnosis of myeloma can be challenging as it is reasonably rare with approximately 1500 people diagnosed each year in Australia. A GP may only encounter a few patients in their career and this may lead to limited awareness of the condition.

WHAT IS MYELOMA?

- Myeloma is a B-cell malignancy characterised by an abnormal expansion of plasma cells in the bone marrow and less commonly in extramedullary sites. It is defined by an overproduction of monoclonal proteins. It is often preceded by MGUS - Monoclonal Gammopathy of Undetermined Significance.
- Myeloma is a cancer of the elderly. 80% of people diagnosed are over the age of 60. Myeloma is relatively uncommon under the age of 40.
- Treatment for myeloma may consist of chemotherapy, radiotherapy, targeted therapy and stem cell transplantation depending on presenting symptoms and age of the person. Five years after a myeloma diagnosis around 70% of people will not have survived³.

SIGNS AND SYMPTOMS OF MYELOMA

- ❖ Bone pain +/- fractures (common)
- ❖ Anaemia (common in 80%)
- ❖ Renal dysfunction (about 20%)
- ❖ Hypercalcaemia
- ❖ Recurrent infections (about 25%)
- ❖ Blood hyperviscosity (occasionally)

A common delay that can occur in myeloma diagnosis is related to the musculoskeletal symptoms. For example back pain can be initially diagnosed as arthritis or sciatica.

MYELOMA DIAGNOSTIC CRITERIA²

Each of the below should be referred to a haematologist

MGUS	Asymptomatic Myeloma	Symptomatic Myeloma
Serum M protein <30 g/L	Serum M protein >30 g/L	M protein in the serum or urine
< 10% clonal plasma cells	> 10% clonal plasma cells	> 10% clonal plasma cells
No related organ and tissue impairment	No related organ and tissue impairment	Related organ and tissue impairment*
No other B cell lymphoproliferative disorder		
No treatment - monitor	No treatment - monitor	Treatment required

* The four criteria commonly used to define active disease (and therefore the requirement for treatment) can be grouped by the mnemonic "CRAB", which stands for:

1. HyperCalcaemia: elevated serum calcium
2. Renal dysfunction: abnormal serum creatinine
3. Anaemia: haemoglobin 20 g/L below lower limit of normal
4. Lytic Bone lesions

Other complications indicative of active disease include:

5. Symptomatic hyperviscosity
6. Amyloidosis
7. Recurrent bacterial infections (more than two episodes in 1 year)

CAUSES OF MYELOMA

The cause of myeloma remains unknown but there are certain factors that may place some people at a higher risk of developing this disease. These include exposure to high doses of radiation and ongoing exposure to certain industrial or environmental chemicals.

REFERENCES

- 1 Adapted with permission from Myeloma UK
- 2 Adapted from the report of the International Myeloma Working Group. Br J Haematol 2003;121:749-757
- 3 Cancer Survival 2001 - AIHW & AACR (2004)

SERVICES AND SUPPORT FOR PATIENTS

The Leukaemia Foundation provides free services to support people with myeloma. These include information, education, emotional support, transport and accommodation for people required to relocate to better access treatment.

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MYELOMA DIAGNOSIS PATHWAY¹

Myeloma is most common in patients over 50, but is increasingly more common in younger patients.

