



Could it be multiple myeloma?

Do you know what to look for?

About Myeloma

Multiple myeloma, also known as myeloma, is the 2nd most common form of blood cancer. Myeloma affects a type of immune cell called the plasma cell, found in the bone marrow. Every day, eleven Canadians are diagnosed, yet in spite of its growing prevalence, the disease remains relatively unknown. While there is no cure, people with myeloma are living longer and better lives, thanks to recent breakthroughs in treatment. To find the cure, more funding and research are required. **Learn more at www.myeloma.ca.**

Family physicians can help diagnose myeloma early

Family physicians are often the first healthcare professional a patient will meet on their path to a diagnosis, yet most family practitioners will only see a few myeloma patients (if any) throughout their careers.

Myeloma is difficult to diagnose without an evaluation and work up by a hematologist/oncologist. Its signs and symptoms are often vague (e.g., fatigue, pain) and thus are attributed to aging or other more common causes or conditions. Many undiagnosed myeloma patients who present with fatigue or pain are advised to control their symptoms with rest or analgesics. This not only leads to delayed diagnosis, but also increases the chances of complications that can affect a person's long-term quality of life and survival.

In order to support early diagnosis and rapid referral to hematologists/oncologists, Myeloma Canada has developed a quick reference guide (see reverse page) to help family physicians recognize and identify the early symptoms and complications of myeloma.

About Myeloma Canada

Myeloma Canada is the only national charitable organization created by and for Canadians impacted by multiple myeloma. The organization is driven to improve the lives of those affected by myeloma by empowering the community through awareness, education and advocacy programs, and supporting clinical research to find a cure. Since it was founded in 2005, Myeloma Canada has been making myeloma matter.

Visit our website to learn more: www.myeloma.ca

(See reverse page for additional information)

For more information contact:

Myeloma Canada

1255 TransCanada, Suite 160
Dorval, QC H9P 2V4

- Toll-free: 1-888-798-5771
- E-mail: contact@myeloma.ca
- Website: www.myeloma.ca



Could it be multiple myeloma?

Recognizing & identifying the early symptoms & complications of myeloma

Presenting symptoms

Common

- Persistent bone pain or fractures (usually in the spine, ribs, hips or skull)
- Frequent, recurring or persistent infections
- Weakness, fatigue and shortness of breath

Less common

- Abnormal bruising or bleeding (i.e., nose, gums, gastrointestinal)
- Blurred vision, headaches, nausea, thirst, constipation, sleepiness, tiredness
- Neurological problems (i.e., confusion, peripheral neuropathy, symptoms of spinal cord compression)

End-organ complications: Think **CRAB**



Calcium elevated



Renal (kidney) insufficiency/impairment



Anemia (low hemoglobin)



Bone lesions

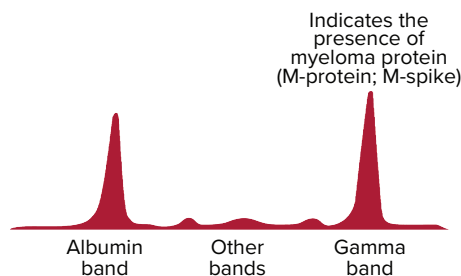
Note: Other symptoms are possible. Related conditions include monoclonal gammopathy of undetermined significance, monoclonal gammopathy of renal significance, smouldering myeloma and other monoclonal gammopathies such as Waldenström macroglobulinemia and amyloid light-chain (AL) amyloidosis.

Workup for suspected myeloma

Complete blood count & blood chemistry

- Hemoglobin (low)
- Serum calcium (elevated) and albumin
- Renal/kidney function (impaired): evaluate creatinine clearance (or serum creatinine), and electrolytes (ie, Na, K, Cl, and bicarbonate)

Example serum protein electrophoresis results



Serum & urine monoclonal protein

- Total serum protein & electrophoresis (with immunofixation)
- Serum-free light chain (sFLC) assay (with ratio)
- 24-hour total urine & electrophoresis (with immunofixation)

If there is bone pain, imaging (e.g., PET, X-ray) could be considered. Refer to a hematologist/oncologist for further workup (more sensitive bone imaging and bone marrow biopsy) and diagnosis.

**There is no cure for myeloma yet. It requires treatment.
Learn more at www.myeloma.ca.**