







Myeloma is a less common cancer, often presenting with non-specific symptoms. This pathway is designed to assist GPs and other healthcare professionals to diagnose myeloma.





## Suspect myeloma

### Myeloma red flags

Unexplained symptoms and/or more than one symptom:

-  **Back pain/other pain** – usually presents as unexplained pain, generalised or localised
-  **Generally unwell** – fatigue, weight loss, suspicion of underlying cancer
-  **Recurrent infections**
-  **Unexplained anaemia**
-  **Pathological or fragility fractures** – e.g. of the vertebra
-  **Unexplained breathlessness**

### CRAB denotes four features of myeloma

-  **Ca** Calcium raised
-  **R** Renal impairment/failure
-  **A** Anaemia
-  **B** Bone disease

## Think myeloma

If you suspect myeloma, request the following:

### 1. Full blood count and blood chemistry

- **FBC:** look for unexplained anaemia
- **ESR:** usually elevated
- **U&Es:** check for renal impairment

### 2. Serum protein measurement

- **Serum protein electrophoresis** to check for the presence of paraprotein
- **Serum free light chain (sFLC) assay**, or urine Bence Jones protein (BJP) test if sFLC is unavailable
- **Serum immunoglobulins (IgG, IgA, and IgM)**

## Refer to haematology clinic

Contact/refer to the haematology clinic if the investigations show abnormal results, or in cases of unresolving presenting symptoms.

Check the NICE suspected cancer referral guidelines ([www.nice.org.uk/guidance/ng12](http://www.nice.org.uk/guidance/ng12))

Further tests, including imaging and biopsy.

## Diagnose myeloma

### Myeloma – Requires treatment.

Treatment consists of a combination of drugs; typically, this will be chemotherapy, steroids and treatments such as proteasome inhibitors and/or immunomodulatory drugs.

Younger, fitter patients are usually offered an autologous stem cell transplant after initial chemotherapy.

## Other conditions associated with monoclonal proteins

- Monoclonal gammopathy of undetermined significance (MGUS)
- MGUS with renal impairment (MGRS)
- MGUS with clinical consequences (MGCS) – such as AL amyloidosis
- Low grade lymphoma

All require follow-up or review.