

## PARAPROTEINS – GP REFERRAL GUIDELINES

### Introduction

Disorders characterised by the production of a paraprotein include monoclonal gammopathy of undetermined significance (MGUS), multiple myeloma and Waldenström's macroglobulinaemia. Paraproteins may also be a feature of CLL, NHL or amyloidosis. MGUS is a diagnosis of exclusion: 3% of over the age of 70 and 5% of over the age of 80 have a paraprotein which is frequently found incidentally and not associated with symptoms or physical findings. The overall risk of MGUS progression to myeloma is around 1% per year – this remains constant over time.

*Referrals to Haematology should not be made for patients with raised immunoglobulin levels in the absence of a paraprotein band on serum electrophoresis. Polyclonal gammopathy implies a non-specific immune reaction and is not associated with underlying haematological disorders.*

### The following should be referred urgently for outpatient assessment:

- Any new paraprotein with accompanying features suggestive of multiple myeloma or other haematological malignancy:
- hypercalcaemia
- unexplained renal impairment
- urinary Bence Jones proteins
- bone pain or pathological fracture
- radiological lesions reported as suggestive of myeloma
- anaemia or other cytopenia
- hyperviscosity symptoms (headache, visual loss, acute thrombosis)

Patients with suspected spinal cord compression should be discussed with on call Haematologist to arrange appropriate direct assessment

### Referral for specialist opinion should be considered for:

- Other newly-identified paraproteins not meeting the above criteria for urgent referral

### Discharge policy for patients with MGUS<sup>1</sup>

- **Very low risk patients:** IgG paraprotein, less than 15 g/L and normal Free Light Chains ratio.
- Patients with IgM paraproteins will generally remain under haematology follow-up
- **Monitor FBC, U&E, Creatinine and Ca<sup>++</sup> and Serum Electrophoresis annually**
- **Dipstick urine for protein annually**

**Reasons to re-refer:**

- Monoclonal Band rising unexpectedly (>50% increase compared to baseline)
- Developing a significant cytopenia (for instance):
- Hb dropping below 10 g/dl
- Neutrophils below  $1.5 \times 10^9/l$
- Platelets  $< 80 \times 10^9/l$
- Developing renal impairment
- Severe proteinuria with 24 hrs proteins  $>1,5g/24$  hours or ++ or +++ on Dip stick examination.
- Unexplained hypercalcaemia
- Pathological fracture
- Unexplained bone pain
- L nodes enlargement with  $>3$  lymph nodes  $>3$  cm diameter
- Unexplained weight loss  $> 3$  kg within  $<3$  months of time.

**General Advice:**

- No specific dietary advice required.
- Administer all usual vaccines (Flu Pneumovax etc.)