

Evaluation of plasma cell dyscrasias

Serum EPP, immunoglobulins, immunofixation, and free light chains: Monoclonal paraprotein detected.

Possible causes

Monoclonal Gammopathy of Unknown Significance

Found in 3% of people > 50 years; 5% in > 65 years
Paraprotein present but less than myeloma levels
Marrow plasmacytosis < 10%
Little or no free light chain production
No myeloma-related symptoms
No lytic bone lesions
May progress to myeloma over time

Multiple Myeloma

Higher paraprotein levels typically > 10g/L
Marrow plasmacytosis > 10%
Abnormal free light chain ratio
Lytic bone lesions
Myeloma-related symptoms: anaemia, hypercalcaemia, renal impairment

Waldenstroms Macroglobulinaemia/ Lymphoplasmacytic Lymphoma (LPL)

Found in <20% of patients with IgM paraprotein
Higher paraprotein levels
Lymphadenopathy/hepatosplenomegaly
Related symptoms: cryoglobulinaemia/cold agglutinins, hyperviscosity, neuropathies, coagulopathy

Heavy Chain Disease

A group of rare diseases
Heavy chain immunoglobulin only detected in serum and occasionally in urine
Associated with lymphoproliferative disorders

Primary Amyloidosis

An abnormal free light chain ratio may be seen

Other definitive tests

Bone marrow examination
Beta-2-microglobulin
Skeletal X-ray