

Light chain multiple myeloma: an evaluation of its biochemical investigations

ABSTRACT

Multiple myeloma is a type of plasma cell dyscrasia, characterised by presence of paraprotein or monoclonal (M)-protein in serum or urine. The M-protein may consist of an intact immunoglobulin, the heavy chain only or the light chain only. The latter, designated as light chain multiple myeloma (LCMM) makes up almost 20% of myelomas. Clinical manifestation is often heralded by hypercalcaemia, renal impairment, normocytic normochromic anaemia and bone lesions, reflecting end-organ damage, collectively known as the acronym CRAB. In particular, free light chain nephrotoxicity accounts for the high prevalence of renal impairment seen in LCMM. This case illustrates a typical presentation of LCMM with focal discussion on its initial and diagnostic, as well as prognostic biochemical investigations.

Keyword: Light chain multiple myeloma; Diagnosis; Prognosis; Biochemical investigations