

Light chain myeloma

Abstract

Introduction

The patients with multiple myeloma have characteristically monoclonal gammopathy in serum protein electrophoresis. However, there are cases without monoclonal gammopathy by above test, which could be due to light chain myeloma or non-secretory myeloma. Here, I present a case of light chain myeloma.

Case presentation

A 64-year-old man presented with back pain for 3 months duration. He had nocturnal and daytime pain aggravated by mobility. He had not had any other local or systemic symptoms and physical examination was not remarkable except mild pallor and tenderness over the back of the chest. Imaging with X-ray thoracolumbar spine pointed to a lesion of wedge fracture of 11th thoracic vertebra. The skeletal survey found punched out lytic lesions in the angle of mandible and pelvis. The serum protein electrophoresis did not find monoclonal bands. However, elevated Kappa chains in serum free light chain assay and plasma cell infiltration of bone marrow gave us the diagnosis of light chain myeloma. The patient was managed with standard chemotherapy and supportive care.

Conclusion

The patients with multiple myeloma commonly present with back pain due to vertebral fractures. The characteristic monoclonal band is absent in light chain and non-secretory myeloma. Therefore, further investigations with serum free light chain assays and bone marrow biopsies are warranted even in the absence of monoclonal band.

Keywords: light chain myeloma, serum protein electrophoresis, light chain assays, osteoporotic fracture