To the Editors:

Non-secretory multiple myeloma

A 62-year old woman was admitted to hospital with a history of backache and weight loss of 4 months' duration. Two weeks before the admission, she had a fall and developed weakness of both lower limbs. She also had polyuria and constipation. On examination she was emaciated, dehydrated and pale. She was disoriented and had an upper motor neuron type incomplete paraplegia with both bladder and bowel involvement. Cardiovascular, respiratory and abdominal examinations were unremarkable. Vaginal and rectal examinations were normal.

Laboratory investigations showed: ESR 2 mm in the first hour, Hb 5.5 g/dl, blood film normochromic normocytic anaemia without rouleaux formation, serum calcium 12.7 mg/dl, alkaline phosphatase 100 u/l, blood urea 26 mg/dl, Na⁺ 136 mmol/l, K⁺ 3.4 mmol/l and serum creatinine 0.9 mg/dl. Urine culture showed a urinary tract infection due to *Klebsiella* species. Xrays showed multiple punched out lytic lesions in the skull and evidence of generalised osteoporosis with fracture dislocation of the T12 vertebra. Our initial clinical diagnosis was multiple myeloma. However, her urine was negative for Bence Jones protein (BJ protein) on several occasions, and serum protein electrophoresis (SPEP) showed hypogammaglobulinaemia without an M band. Chest xray and ultrasound scan of the abdomen and pelvis were normal. Bone marrow aspiration biopsy showed plasma blasts and more than 30% abnormal plasma cells. We made a diagnosis of non-secretory multiple myeloma with spinal cord compression and

hypercalcaemia. Initially she was managed conservatively, and then transferred to the Cancer Institute Maharagama for specialised management.

Non-secretory multiple myeloma accounts for 1 to 4% of all myelomas (1,2). In these cases, plasma cells secrete neither heavy nor light chains due to a defect in the assembly or secretion of immunoglobulins, or due to their rapid catabolism (2, 3). The presence of immunoglobulins within the plasma cells can be detected by immunoperoxidase staining or immunofluorescence. In a small percentage of these patients monoclonal proteins cannot be identified even within the plasma cells (2). This case emphasises the need for a high index of suspicion of variant multiple myeloma such as the non-secretory type in patients who present with multiple lytic lesions in bones but have normal SPEP and absent BJ protein in the urine.

References

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