AN UNUSUAL CAUSE OF INCREASED BACK PAIN IN ANKYLOSING SPONDYLITIS

Dear Sir,

A 57-year-old man who has been a known case of ankylosing spondylitis (AS) for 25 years, presented with increased back pain and difficulty in walking starting a month ago. Examination revealed generalised hyperreflexia and upgoing plantars. Suspecting atlantoaxial dislocation, an urgent radiograph of the cervical spine was done (Fig. 1a). Apart from a bridging syndesmophyte C5–C6, the radiograph also revealed lytic lesions in the skull and possible erosion of C4. This prompted a skeletal survey, which revealed multiple punched-out lesions in the skull (Fig. 1b), and a large lytic lesion on the left side of the pelvis along with bridging syndesmophytes in the lumbar spine (Fig. 1c). Blood tests revealed haemoglobin 8.5g/dl, erythrocyte sedimentation rate (ESR) 110 mm (1st hour Westergren), serum creatinine 1.7 mg/dl, serum albumin 3.0 g/dl and globulins 6.1 g/dl. Serum and urine electrophoresis showed a thick M band typed to be IgG-ϰ by immunofixation. Atypia was observed in 70%–80% of the plasma cells in the bone marrow, confirming a diagnosis of multiple myeloma (Fig. 1d). Magnetic resonance imaging of the spine and pelvis was suggestive of extraosseus plasmacytomas in areas of the lysis in the spine and pelvis (not shown). The patient was started on chemotherapy and is doing well one year later.

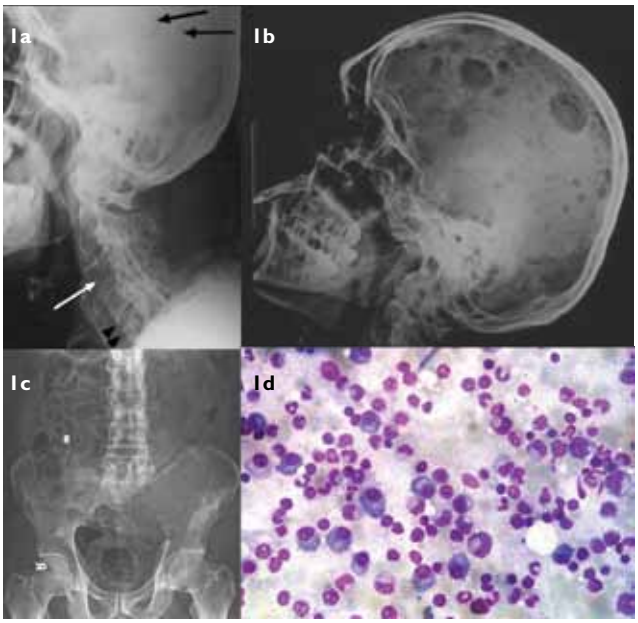

Fig. 1 (a) Radiograph of the cervical spine shows a bridging syndesmophyte of C5–C6 (arrowheads), lytic lesions in the skull (black arrow) and possible erosion of C4 (white arrow). Radiographs show (b) multiple punched-out lesions in the skull; and (c) a largelytic lesion on the left side of the pelvis along with bridging syndesmophytes in the lumbar spine. (d) Photomicrograph shows atypia in 70%–80% of the plasma cells in the bone marrow, confirming a diagnosis of multiple myeloma (Leishman stain, x 400).

Multiple myeloma is an unusual cause of increased lower back pain in AS, which can mimic a flare that similarly leads to an increase in ESR. Although rare, there are case reports which have predominantly reported on IgA myeloma with AS.[1,2] A large study confirmed that patients with AS have a higher incidence of multiple myeloma and a relative risk of 1.82 (95% confidence interval1.12–2.98).[3] The pathogenic basis is thought to be that of persistent stimulation of the immune cells, including B cells. A possibility of myeloma should be suspected in AS patients with an unexplained increase in back pain, especially with neurological or other "red flag" signs.

Yours sincerely,

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REFERENCES

1. Lam SM, Ho HH, Dunn P, Luo SF. Association of ankylosing spondylitis with IgA-multiple myeloma: report of a case and pathogenetic considerations. Taiwan Yi Xue Hui Za Zhi 1989; 88:726-8.
2. O'Neill TW, Harrison BJ, Yin AL, Holt PJ. Ankylosing spondylitis associated with IgA lambda chain myeloma. Br J Rheumatol 1997; 36:401-2.
3. Brown LM, Gridley G, Check D, Landgren O. Risk of multiple myeloma and monoclonal gammopathy of undetermined significance among white and black male United States veterans with prior autoimmune, infectious, inflammatory, and allergic disorders. Blood 2008; 111:3388-94.

ERRATUM

EVALUATION OF ROBOTIC-ASSISTED LOCOMOTOR TRAINING OUTCOMES AT A REHABILITATION CENTRE IN SINGAPORE

Singapore Med J 2010; 51(9):709-715

Page 712, right column, lines 7–9 should read "… were observed in FIM transfer, FIM ambulation, RMA, MI of knee extension and hip flexion, and MAS of quadriceps." The authors apologise for the error.

Editor's note:
The corrected version is available online at: http://smj.sma.org.sg/5109/5109a3.pdf.