Corrected serum calcium and full blood count remained normal. A drug induced central nervous system toxicity syndrome has been reported in patients treated with pamidronate, possibly resulting from an increase in plasma parathyroid hormone levels. 

Studies of patients with Paget's disease treated with pamidronate have consistently shown a transient fall in serum calcium and phosphate, which are seldom of clinical significance and are associated with a decline in urinary calcium excretion and an increase in plasma parathyroid hormone levels. 

Transient haematological changes and fevers have also been reported after oral and IV pamidronate, possibly mediated through direct or indirect effects on mononuclear phagocytes, resulting in the activation of cytokines. The mechanism underlying hallucinations in this patient is unknown but is considered unlikely to be due to alterations in serum calcium concentrations.

Adverse psychiatric reactions to bisphosphonates appear to be rare, although etidronate has previously been reported to cause confusion (Committee on Safety of Medicines, personal communication). It is recommended that the mental state of patients given high dose infusions of pamidronate for Paget's disease should be monitored closely after their treatment.

Correction

Sir: We are writing to correct an inadvertent error in our manuscript 'Detection of antineutrophil cytoplasmic antibody in a patient with l-tryptophan induced eosinophilia-myalgia syndrome', which appeared in volume 50 of the Annals last year. The caperion of fig 1, on page 817, stated that the antineutrophil cytoplasmic antibody stain shown was demonstrated on ethanol fixed neutrophils. This microphotograph was actually of the antineutrophil cytoplasmic antibody indirect immunofluorescence on formalin-acetone fixed human neutrophils. This is of importance because the antineutrophil cytoplasmic antibody (ANCA) specificity documented by enzyme immunoassay was for myeloperoxidase, which typically produces a perinuclear/nuclear staining pattern on ethanol fixed neutrophils rather than the granular cytoplasmic staining which is depicted. This pattern on ethanol fixed neutrophils is associated with antiproteinase 3 specificity in about 85–90% of cases. An assay for antiproteinase 3 was negative in our patient, who also had a high titre of antinuclear antibody present at the time the ANCA was detected. Myeloperoxidase ANCA are difficult to detect on ethanol fixed neutrophils in the presence of antinuclear antibodies; therefore, we used the formalin-acetone fixation technique, which prevents the translocation of myeloperoxidase from the primary granules in the neutrophil cytoplasm to the nucleus when the nuclear membrane is lysed. When this technique is used, both types of ANCA demonstrate the staining pattern shown. In the absence of antinuclear antibodies ethanol fixed neutrophils are then used to rescreen the patient's serum and if the pattern converts to a perinuclear/nuclear one, myeloperoxidase specificity is present in 90% of cases. When antinuclear antibodies obscure the ANCA pattern a secondary assay such as the enzyme linked immunosorbent assay (ELISA) we used must be employed to identify the specificity of the ANCA present.