Plasma levels of IL-1β, IL-1ra and TNF-α did not differ statistically with regard to the presence or absence of the main symptoms. Conversely, as shown in Fig. 1, there was a significant 2-fold increase in plasma levels of TGF-β1 in patients with back pain compared to those without back pain, and IL-6 plasma levels were 5-fold higher in patients with peripheral arthritis than in those without arthritis (see Fig. 1).

This study shows a relationship between the blood TGF-β1 or IL-6 profile and concomitant symptoms in SpA. As previously reported in AS and RA [1, 2, 10], IL-6 was well correlated with CRP, but its increased level seemed to be linked more to the presence of peripheral synovitis rather than to other forms of disease activity. Despite overall low TGF-β1 plasma levels, whose mechanism remains obscure, patients with current inflammatory back pain had higher levels than the others. The mechanism of the characteristically new bone formation is still unknown, but since it was recently shown that TGF-β2 mRNA, but not TGF-β1, is expressed in sacroiliac joint biopsy specimens of AS patients near the sites of new bone formation [3], one may postulate that erosive inflammation in the enthesis provokes local secretion of TGF-β which, in turn, initiates mechanisms of healing and ossification. Supporting this hypothesis, our data suggest that periods with axial symptoms are accompanied by an increase of TGF-β1 production, possibly by inflamed spinal enthesis.

These results, involving a potential relationship between TGF-β and back pain, require confirmation and should be completed by a longitudinal study.

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Ankylosing Spondylitis Associated with IgA Lambda Chain Myeloma

Sir—Recent studies suggest that serum IgA is elevated in patients with ankylosing spondylitis (AS) and that raised levels are associated with active disease [1, 2]. We report a woman with advanced AS who developed IgA lambda chain myeloma and discuss the possible pathogenetic relationship between these diseases.

An 81-yr-old woman presented in 1991 with a 3 month history of pain, swelling and redness of her left hand. In 1983, she had been noted to have a raised IgA level with a monoclonal band. In 1984, a diagnosis of advanced AS was made following investigations for back pain.

On examination, the left wrist was tender and swollen. There was marked restriction of lumbar and cervical spine movements. Investigations revealed a normal full blood count, urea, electrolytes and calcium. ESR was 98 mm/h. IgA was elevated at 22 g/l (0.6–4); however, IgG and IgM were at the lower limits of normal at 5.6 g/l (5.9–15.6) and 0.6 g/l (0.5–2.4). A monoclonal IgA lambda band (9 g/l) was present on protein electrophoresis. β2-Microglobulin was elevated at 4.5 mg/l (0.8–2.5). Bone marrow examination revealed 6% plasma cells, Bence–Jones proteins were negative. Radiographs of the left hand showed patchy osteopenia, and bone scan, diffusely increased uptake in the region of the left hand and wrist. Radiology of the spine showed features of advanced AS. Diagnoses of Sudeck’s atrophy and indolent myeloma were made.

She was given intensive physiotherapy for her hand with improvement in symptoms. Over the next 3 yr, the IgA paraprotein level gradually increased. In 1993, the IgA level was 33 g/l and the monoclonal band 17 g/l. A repeat bone marrow examination was performed and revealed 14% atypical plasma cells. A limited skeletal survey found no evidence of lytic lesions.

She was treated with melphalan; however, this resulted in pancytopenia. She is currently being managed symptomatically with blood transfusions. In November 1995, IgA was 39 g/l with evidence of...
suppression of the other immunoglobulins (IgG = 4.8, IgM = 0.3).

The causes of multiple myeloma are largely unknown; risk factors include various occupational and environmental exposures, including radiation [3]. Long-term follow-up of AS subjects who received spinal or total body irradiation indicates an increased risk of myeloma [4]; however, our patient had no history of therapeutic irradiation. An excess of multiple myeloma has been observed in some medical conditions associated with chronic antigenic stimulation (CAS), although the epidemiological data are not always consistent [3]. In a retrospective study of patients with IgA myeloma, however, the majority (17/20) had either underlying chronic biliary, gastrointestinal or respiratory tract inflammatory diseases [5].

It has been suggested that the elevated levels of IgA associated with AS may occur as a result of microbial antigenic stimulation on mucosal surfaces such as the gastrointestinal tract [1, 2]. It is possible that prolonged plasma cell stimulation and proliferation in our patient, as a result of a similar process, may have been a factor in the development of her myeloma. There are, to our knowledge, five previous reports of IgA myeloma associated with AS [6–9]. In contrast to our patient, however, all of these cases were male and the myeloma was a kappa chain type. Because both diseases are rare (in a series of 557 AS patients, only one case of myeloma was identified [10]), very large numbers would be required to permit more formal study of the relationship between them. In a review of published reports, however [10], the proportion of cases with IgA, as compared to IgG, myeloma was greater than would be expected in the general population.

In summary, we report an elderly woman with advanced AS and IgA lambda chain myeloma. Prolonged plasma cell stimulation and proliferation in mucosal surfaces as a result of antigenic stimulation may have been a factor in the pathogenesis of the myeloma.

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Systemic Effects of Open and Arthroscopic Articulosynovectomy Compared to Radiosynoviorthesis in Patients with Rheumatoid Arthritis

Sir—Up to now, there has been no prospective study on the influence of local treatment of articulosynovitis on the general course of disease in patients with rheumatoid arthritis. Therefore, this study was performed to evaluate suspected systemic effects of articulosynovectomy via an open (group 1) or arthroscopic (group 2) approach and of radiosynoviorthesis with yttrium-90 (group 3). Twenty-two patients (seven male, 15 female, 28–71 yr old), all of whom had rheumatoid arthritis (ARA criteria 1988) and all treated by the same disease-modifying drug (methotrexate), underwent therapy for articulosynovitis of the knee joint in one of the above-named groups.

During the follow-up period (appointments: prior to treatment, and 3 weeks, 6 weeks, 3 months and 6 months post-treatment), patients were examined for pain, synovial swelling, limitation of motion and blood tests for erythrocyte sedimentation rate (ESR) according to Westergren, C-reactive protein (CRP) and rheumatoid factor (RF).

The blood parameters showed that radiosynoviorthesis has no systemic effect on the underlying inflammatory disease, while articulosynovectomy performed via the arthroscopic or open approach reduced the total inflammatory activity, demonstrated by reduction of ESR, CRP and RF levels (Fig. 1).

To evaluate the systemic effects of the treatment regimes used on inflammatory activity, the best parameters seem to be the decrease of ESR, CRP and RF in percentage points. The absolute values are of little use because of different pre-therapeutic levels. One may criticize the ‘short’ follow-up period of 6 months, but we believe that this is an adequate time to recognize any systemic effect—we should remember that the decision on the success or failure of a disease-modifying drug is also made after 6 months; in