LETTERS TO THE EDITOR

Increased type I collagen degradation is associated with a need for total joint replacement surgery in rheumatoid arthritis

Much work has been done to find biochemical tests that could reflect disease processes in rheumatoid arthritis (RA) more precisely than the traditional laboratory tests. Such tests include markers of bone and cartilage metabolism.

Type I collagen accounts for about 90% of the organic matrix of bone, and is also the major matrix protein in tendons, ligaments, and soft connective tissues. Thus assessment of its breakdown by a radioimmunoassay of a cross-linked carboxyterminal telopeptide of type I collagen (ICTP) might be useful in diseases involving connective tissue degradation, such as RA. We recently tested ICTP, used as a serum test, in a community based RA series of 90 patients with a mean (SD) disease duration of 15·3 (8·7) years.

Thirty nine (43%) of the patients had increased serum concentrations of ICTP and the test discriminated between patients with signs of aggressive disease and milder cases.

We have followed the subjects of the series for three years, looking for important morbidity events, such as destruction of large joints (hip and knee) indicated by a need for total joint replacement surgery (TJRS). Patients who died early during the follow up were excluded.

During the follow up of three years, nine (26%) of the 35 patients with initial serum ICTP values above the upper limit of the reference range (4·6-6·0 μg/l) required TJRS of at least one joint (six of them underwent two, and one underwent three operations) compared with one (2%) of the 50 patients who had normal serum concentrations of ICTP (p=0·001) (Table). Thus increased serum ICTP among patients with advanced RA seems to discriminate between cases with destructive joint disease, and a further need for TJRS, and milder cases.

Interestingly, in the present series, increased C reactive protein (CRP) had an equivalent prognostic power as to a further need of TJRS. We did not make sequential analyses of the above laboratory tests for this study, but it has been shown that even when current drug treatment reduced the acute phase response, radiographic progression continued. The few data on increased serum ICTP reported previously were similar.

Polyaralgic presentation of enterovirus infection: a cause of diagnostic confusion

The cause of polyalgia rheumatica (PMR) remains unknown. In the absence of arteritic symptoms, the diagnostic yield from temporal artery biopsy is low and, in the majority of patients, PMR remains a 'clinical' diagnosis. While the possibility of underlying temporal arteritis and expectation of rapid clinical response may prompt early recourse to steroid treatment in suspected PMR, failure to adhere closely to established diagnostic criteria may lead to misdiagnosis. We report a case of enteroviral infection mimicking PMR.

In this series of patients with advanced RA, an increase in serum ICTP was associated with progressive disease course as judged by need for TJRS. Ideally, measurement of outcome in RA should estimate the outcome of disease during the early reversible stages and the later stages. In our previous series of early RA, an increased serum ICTP was also a risk factor for a more erosive disease course. Thus a combination of measurement of serum ICTP, and more traditional measures used in clinics, such as the number of swollen joints and CRP, could serve as prognostic indicators for cases requiring the most aggressive treatments.

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Polymyalgic presentation of enterovirus infection: a cause of diagnostic confusion

The cause of polymyalgia rheumatica (PMR) remains unknown. In the absence of arteritic symptoms, the diagnostic yield from temporal artery biopsy is low and, in the majority of patients, PMR remains a 'clinical' diagnosis. While the possibility of underlying temporal arteritis and expectation of rapid clinical response may prompt early recourse to steroid treatment in suspected PMR, failure to adhere closely to established diagnostic criteria may lead to misdiagnosis. We report a case of enteroviral infection mimicking PMR.

A previously well 70 year old housewife was seen by her general practitioner (GP) with a 10 day history of malaise and 'burning' periorbital pain, on arising in the morning, with stiffness and weakness in the shoulder girdle, upper arms, thighs, and lower back. She volunteered difficulty in lifting her arms to brush her teeth in the morning. Her symptoms were of sudden onset and had also been present for two to three days.

The patient was referred to the Rheumatology outpatient department and, when seen six weeks later was symptom free on prednisolone 10 mg daily. Clinical examination was normal. A full blood count, rheumatoid factor, antinuclear antibody, c reactive protein, erythrocyte sedimentation rate (ESR) and serum complements were normal. The ESR was 10 mm/1st h. Her haemoglobin was 12·6 g/dl, leucocyte count 10·3 x10⁹/l, platelets 645 x10⁹/l and erythrocyte sedimentation rate (ESR) 70 mm/1st h. On the basis of her presenting range of enteroviral infection, but did not present any other symptoms.

Her house was removed with enterovirus infection.

We report a case of enteroviral infection mimicking PMR. A 70 year old woman presented with a 10 day history of malaise and 'burning' pain in her legs, on arising in the morning, with stiffness and weakness in the shoulder girdle, upper arms, thighs, and lower back. She volunteered difficulty in lifting her arms to brush her teeth in the morning. Her symptoms were of sudden onset and had also been present for two to three days.

The patient was referred to the Rheumatology outpatient department and, when seen six weeks later was symptom free on prednisolone 10 mg daily. Clinical examination was normal. A full blood count, rheumatoid factor, antinuclear antibody, c reactive protein, erythrocyte sedimentation rate (ESR) and serum complements were normal. The ESR was 10 mm/1st h. Her haemoglobin was 12·6 g/dl, leucocyte count 10·3 x10⁹/l, platelets 645 x10⁹/l and erythrocyte sedimentation rate (ESR) 70 mm/1st h. On the basis of her presenting range of enteroviral infection, but did not present any other symptoms.

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We report a case of enteroviral infection mimicking PMR.
Epstein-Barr virus, and rotavirus are not increased compared with controls. A recently reported increased prevalence of antibodies to RSV and adenovirus in patients with PMR was not seen in an earlier study. A suggested association with hepatitis B infection has not been confirmed.

Our patient's case suggests that response to enteroviral infection in the elderly may mimic the symptoms of PMR and cause diagnostic confusion. In this patient the relatively short duration of symptoms at diagnosis meant that formal diagnostic criteria of PMR were not fulfilled. Although clinical presentation and response to treatment were strongly suggestive of PMR, uneventful early withdrawal of steroids without subsequent relapse suggests a more self limiting pathology. Careful attention to a history of infectious contact and to features suggestive of viral prodrome may allow the identification of a small subset of patients with suspected PMR in whom unnecessary steroid treatment can be avoided by the detection of enteroviral infection, preferably by culture of stool or throat swab (taken into viral transport medium) in the acute stage or, retrospectively, by serology.

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