Royal National Hospital for Rheumatic Diseases we found differences between the seropositive and seronegative patients that to some extent paralleled our original Stanford experience and now the Italian data.[1]

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Reference

1 Lowthian P, Woolf A, Downes J, Gofton J P, Calin A. 'Seronegative rheumatoid arthritis' a distinct radiological entity: a controlled study versus seropositive disease. *Ann Rheum Dis* 1984; **43:** 117–8.

Vertebral rim lesions in dorsolumbar spine

SIR, I have read with interest the paper by Hilton and Ball[1] describing vertebral rim lesions in the dorsolumbar spine. It implies, inter alia, that transverse tears ('avulsions') of the annulus have not been mentioned before in the literature. However, such tears in the attachment region of the annulus were described and illustrated many years ago by Schmorl and Junghanns[2] and more recently by Vernon-Roberts and Pirie.[3]

Hilton and Ball[1] state, moreover, that 'The avulsed annulus may be recognised radiographically as a small translucency (clinically sometimes referred to as the vacuum phenomenon).[1] While I agree that the larger annular tears may sometimes be visualised on post-mortem radiographs of thin slabs of spine (the majority are detected by microscopic examination of stained sections), they are not responsible for the well-known vacuum phenomenon which may be seen on clinical radiographs[4] and which is associated with cleft formation[2] initially affecting the nucleus pulposus alone and extending to involve the annulus at a later stage.[3] Current evidence suggests that nuclear clefts, present in almost every spine after middle age,[3] are initiated by a primary degenerative process commencing in the nucleus. Clearly they should be distinguished from the less frequent annular clefts (avulsions) formed as a result of traumatic episodes or fatigue failure due to repetitive loading of the annular fibres. The excellent paper by Hilton and Ball[1] supports these important distinctions and is in accord with a personal view that detailed pathological studies of the spine can provide important clues to the pathogenesis of back pain.

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2 Schmorl G, Junghanns H. *The human spine in health and disease*. 2nd American edition translated and edited by E F Besemann. New York and London: Grune and Stratton, 1971.
3 Vernon-Roberts B, Pirie C J. Degenerative changes in the intervertebral discs of the lumbar spine and their sequelae. *Rheumatol Rehabil* 1977; **16:** 13–21.
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'Seronegative spondarthritis'

SIR, Dr Malaviya and his colleagues[1] suggest the need for a name to include their ' "unclassifiable" seronegative spondyloarthropathies'. This semantic confusion would not have arisen had the editor of *Medicine (Baltimore)* been willing to accept the original title of our paper[2] on the subject, that is 'Seronegative spondarthritis', and instead of the somewhat cumbersome title under which it was published. One of the cornerstones of this concept was the degree of clinical overlap among the constituent diseases, and we have all seen over the years patients with an apparently unequivocal diagnosis of one of these conditions in whom the diagnosis then shifts as other features supervene, and also numerous examples of *forme frustes* of these diseases. There have also been semantic arguments about the diagnosis of Reiter's disease, especially if incomplete, and its relation to the reactive arthritides, and also additions to the group, including some cases of juvenile chronic arthritis. Fortunately the original concept of seronegative spondarthritis is sufficiently robust to accommodate all these variations, and I would suggest that Dr Malaviya and his colleagues adhere to the name 'seronegative spondarthritis' to describe his patients in the future.

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References

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2 Moll J M H, Haslock I, Macrae I F, Wright V. Association between ankylosing spondylitis, psoriatic arthritis, Reiter's disease, the intestinal arthropathies and Behçet's syndrome. *Medicine (Baltimore)* 1974; **53:** 343–64.

Unusual case of dermatomyositis

SIR, We would like to report an unusual case of dermatomyositis, the dermatological aspects of which have been reported elsewhere.

A 23-year-old female civil servant first presented to this hospital in 1948 with an erythematous eruption in the light-exposed areas, pain and weakness of the muscles of the limbs and Raynaud's phenomenon. A diagnosis of

dermatomyositis was made. Apart from persistent telangiectasia she completely recovered over the course of a year.

Ten years later, having been completely fit in the interim, she again developed similar symptoms affecting the skin and proximal muscle groups. Muscle biopsy showed non-specific changes only in the sections examined. Again without any drug therapy her symptoms resolved completely within a year.

She remained completely well until June 1981 when she presented to the Rheumatology Department with a further recrudescence of dermatomyositis, confirmed on skin biopsy and with an associated elevation of muscle enzymes (CPK 1677 U/l, AST 78 U/l, HBD 495 U/l) and typical EMG findings supporting the diagnosis.

In view of the severity of this attack and despite the self-limiting nature of previous attacks she was treated with steroids and azathioprine, and two years later remains well on prednisolone 5 mg daily and azathioprine 50 mg b.d.

The prognosis of dermatomyositis is variable—about one third achieving complete remission or cure. Relapses, when they do occur, generally occur within a year of the initial attack. Recurrences separated by such long periods of remission are rare. Over the course of 34 years our patient has had three attacks of dermatomyositis, enjoying good health between attacks.

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Age distribution of amyloid in the intervertebral discs

SIR, We have studied with interest the series of reports concerning amyloid deposits in joint tissues.[1-3] In the excellent publication of Ladefoged[4] the explanation of a negative correlation between amyloid and inflammation on the basis of Teilum's[5] theory raises doubts, as inflammation is not necessarily found in osteoarthrosis. Moreover, the inflamed synovial membrane in rheumatoid arthritis only rarely exhibits amyloid deposits even in the burnt-out stage. On the other hand amyloid is known to occur in several tissues in senile individuals without an inflammatory process. Thus articular amyloid may also be regarded as an age-related phenomenon.

Some tissue components of the intervertebral discs are comparable to structures of diarthrodial joints. Inflammatory processes are usually regarded as unimportant for disc degeneration. We studied surgically removed disc specimens for the appearance of amyloid after Congo-red staining in two different age groups. The possibility that amyloid may even appear in 'ruptured fibrocartilage of vertebrae' has been reported by Bywaters and Dorling[6] in a case of plasmocytoma and by Ballou *et al.*[7] in primary amyloidosis.

As shown in Table 1, foci of an amyloid-like material with Congo-red green birefringence (Fig. 1a and b) were present only in the fibrous and hyaline cartilage of the older individuals. The morphological pattern of amyloid distribution was very similar to the picture presented by Ladefoged[4] in the joint capsule with chondroid metaplasia. Therefore we favour the idea that amyloid in the diarthrodial joints resembles amyloid in the intervertebral discs, being merely an expression of senile amyloidosis as was also recently demonstrated by Shimizu *et al.*[8] in the senescence-accelerated mouse.

Table 1 *Incidence of congophilic deposits in surgically removed intervertebral discs*

Age class	*No. of classes*	*% Positive for amyloid*
>65 years	80	36
<25 years	30	0

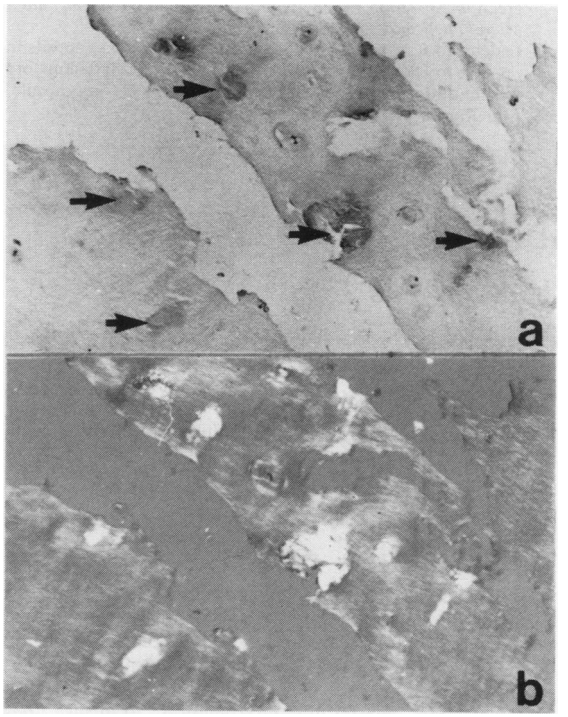

Fig. 1 *Amyloid deposits* (arrows) *in surgically removed intervertebral discs.* (a) *Plain light,* (b) *polarised light. (Congo-red, × 88).*

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