Figure 1 Cumulative probability of mycobacterial infections in 176 patients with polymyositis after the diagnosis of myositis. The incidence of tuberculosis was 110 out of 100 000 people in Finland in 1969. It was 47 out of 100 000 in 1980, and 11 out of 100 000 in 1995.⁸ The incidence of mycobacterial infections (*M. tuberculosis* and other mycobacteria) in PM patients was remarkably high when compared with that in the general population, especially considering the downward trend in infection over the period of this study. The risk of infection even seems to increase during the follow up after the diagnosis of PM. *M. tuberculosis* had been coded as either the main cause (N=3) or immediate cause (N=1) of death for four patients with PM.

between mycobacterial infections and PM is interesting, especially if there was a latent infection present in most of the cases, although this cannot be confirmed from their

records. A weak causal relationship with 'reactive myositis' caused by a former or latent mycobacterial infection cannot be ruled out.

We conclude that the possibility of mycobacterial infection has to be kept in mind when diagnosing and treating patients with myositis.

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Fat-suppression magnetic resonance imaging in the diagnosis of late-onset axial spondyloarthritis

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Although late-onset spondyloarthritis (SpA) is not rare, it is usually associated with peripheral joint involvement, which is relatively easier to recognise.^{1–3} We report a case of an elderly woman with late-onset SpA who presented with axial disease, where the diagnosis was established by magnetic resonance imaging (MRI). This shows the potential of MRI for defining the full spectrum of SpA-related diseases.

The patient was a 75-year-old female who presented with a one-year history of vague pain in the thoracic spine left posterior chest radiating to the left mid-axillary line and associated early morning stiffness for 2–3 hours. Her respiratory and cardiac systems were unremarkable, and the pain did not alter when breathing or sneezing. She had no pain in bed at night and had mild relief by taking anti-inflammatories. There was no history of peripheral enthesopathy, iritis or psoriasis or of precipitating infections. The family history was relevant in

that her daughter has ankylosing spondylitis and associated ulcerative colitis.

Upon examination, the only positive findings were discomfort on rotation of the thoracic spine. On some occasions, the patient did have some restriction of thoracic rotation with occasional discomfort adjacent to the paraspinal regions, especially on the left side, which were variable, but no spinous process tenderness. She had no clinical enthesopathy or peripheral synovitis. Routine investigations showed an erythrocyte sedimentation rate of 7 mm/hour and a C-reactive protein of 3 mg/l (<10 mg/l), negative rheumatoid factor and negative antinuclear antibodies, negative HLA-B27 and a negative myeloma screen. X-rays of her thoracic spine and a bone scan were normal.

During a rheumatology review, a diagnosis of inflammatory back pain was suspected and an MRI scan with fat suppression

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Figure 1 Magnetic resonance imaging with fat suppression showing Romanus lesions, which appear as a high signal, at T9 and T10 levels of the thoracic spine in (A), and also at T4 on an adjacent slice in (B) (arrows). The disc spaces are preserved and no evidence for degenerative changes is noted.

was requested. MRI showed Romanus lesions with bone oedema in the thoracic spine (fig 1), which are typically reported in SpA at that site.⁴ The patient was treated with intramuscular injection of 120 mg methylprednisolone, and she noted some improvement after 3 months. On the basis of these features, a diagnosis of late-onset axial SpA was made.

The SpAs are most typically seen in younger patients. However, late-onset SpA manifesting as peripheral synovitis or enthesopathy is well recognised.¹⁻³ Axial SpA in older subjects may be more difficult to recognise. Unlike sacroiliitis, where inflammatory pain can be recognised on the basis of the clinical history including radiation to the buttocks, the recognition of inflammatory pain in the thoracic spine is more problematic. Indeed the European Spondyloarthropathy Study Group classification criteria, which are not designed to be

diagnostic criteria, were predominantly based on sacroiliac joint symptomatology.⁵ Recently, a role for MRI in the diagnosis and monitoring of disease in SpA has emerged.⁶⁻⁸ To the best of our knowledge, this is the first report confirming late-onset axial SpA using MRI. It must be acknowledged that the specificity of MRI changes has yet to be determined, and the frequency of MRI-determined Romanus-like lesions in degenerative arthritis has not been reported. This is important given the recent findings that degenerative and psoriatic-related arthropathy may have the same MRI appearance in early disease.⁹ MRI is transforming the diagnosis of axial SpA.⁶⁻⁸ It is important to be aware of the diagnosis in elderly patients.

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