Fig. 1 Trend of hospital admissions in Italy for RA (primary diagnosis) in 2001–08. Number of discharges and age-adjusted discharge rates are given per year.

References


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Thoracic facet joint synovitis causing thoracic spinal cord compression and myelopathy in a patient with rheumatoid arthritis

Sir, A 67-year-old gentleman, with long-standing, well-controlled RA, presented to our hospital with myelopathy affecting mainly his lower limbs. He complained of a 5-week history of progressive weakness and paraesthesia in both legs and as a result his mobility had been impeded and his independence threatened. On admission, he was unable to mobilize independently and was reliant on a wheelchair most of the time. He denied any bladder or bowel symptoms or episodes of incontinence. He did not complain of any pain and upper limb function was unaffected. This was the first time this particular patient had experienced such symptoms. There was no history of trauma, no recent changes in his anti-rheumatoid medication and he had been systemically well.

On physical examination, there was weakness in hip flexion and extension and knee flexion and extension in both legs with Grade 4/5 power. Strength in the ankle joints was preserved (5/5). Sensation was normal throughout both lower limbs. He had clonus in both ankles, but normal peri-anal sensation and a normal per rectum examination. All reflexes were present and slightly brisk, but the most marked finding was severe ataxia of the lower limbs preventing him from mobilizing. He was Nurick Grade 4 on presentation [6]. Initial radiological examination of the thoracolumbar spine showed multi-level degenerative disease with anterior osteophytes, but did not show any evidence of osteoporotic or malignant vertebral collapse. Further investigation with a gadolinium contrast-enhanced MRI examination was carried out. This showed soft tissue and cysts arising from the costovertebral joints extending into the paraspinal tissues and central canal on the T2-weighted sagittal images (Fig. 1). The spinal cord was compressed from T9 to upper T10 level and the solid tissue enhanced with contrast. There was no evidence of bony destruction and the soft tissue abnormality was thought to be inflammatory in nature.
rather than malignant infiltration. There was no evidence of spinal cord compression attributable to disc degeneration or prolapse.

The patient underwent a posterior spinal decompression from T8 to T10. Histological examination of intra-operative tissue samples showed a large number of macrophages and varying amounts of cystic change associated with fibrin deposition. There was lymphoplasmacytic infiltrate that is present around the periphery of the nodules, which were entirely consistent with the history of RA and synovitis. Six months following his surgery, the patient’s ataxia had improved dramatically. He was mobilizing with two crutches and could manage a short distance without. A year from surgery and he had improved further. He was ambulating independently with one stick.

Patients with chronic RA are widely known to commonly develop spinal problems, in particular of the cervical spine. These can range from upper cervical spinal instability and stenosis to soft tissue spinal cord compression. As a result, a number of these patients will present with myelopathic signs and symptoms requiring investigation and intervention. The majority will undergo imaging of their cervical spine with an MRI scan as first-line investigation. In a large number of cases, this line of investigation will identify the primary pathology and lead to appropriate intervention.

We present an unusual case of thoracic spinal cord compression as a result of facet joint synovitis in the thoracic spine. From the literature search, we have performed this is one of only a few such reported cases. With this case report, we hope to highlight a rarer cause for patients presenting with profound myelopathy. Failure to appreciate such a diagnosis could lead to continuity of symptoms, further deterioration in mobility and potentially inappropriate surgery as some patients may have incidental findings on MRI. We believe that in cases such as the one we present that consideration of imaging the whole spinal cord and not just the cervical cord should be made. This is relevant to both the rheumatologist, to whom a lot of these patients may present initially and also the spinal surgeons who may be referred the patient for surgical management. In this specific case, prompt diagnosis was made and the patient is very grateful for the improvement in his symptoms that he has had following surgery.

**Rheumatology key message**

- Thoracic spinal cord compression should always be considered in rheumatoid patients presenting with myelopathy.

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James E. Stoddard1 and Neil Chiverton1
1Northern General Hospital, Sheffield, UK.
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Correspondence to: James E. Stoddard, Northern General Hospital, Herries Road, Sheffield S5 7AU, UK.
E-mail: S10ddy@hotmail.com

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