P. Korovessis

Author's reply

Sir:

We would like to thank M. Turgut for taking the time to write to the Editor concerning our article "Three-level thoracic disc herniation: case report and review of the literature" published in *Eur Spine J* (1997) 6:74–76. Our answers to the letter are as follows:

1. MRI is indeed a non-invasive method of axial and sagittal imaging, which locates the pathology within the spinal cord without use of radiation. However, MRI is still an expensive examination in most Mediterranean countries.

2. Additionally, MRI is not a method for measuring cord function, and thus in a patient with multiple thoracic disc herniation, it can not reveal which lesion is producing the symptoms. CT-myelography alone is also unable to make such a differentiation between multiple herniated discs. Thus, in the present patient, after careful evaluation of the clinical signs,

symptoms, somatosensory evoked potentials and MR images, we concluded that all three discs were responsible for the symptoms and we performed disc resection and interbody fusion simultaneously at three levels.

3. Fusion was necessary to restore the height of both the anterior and medial spinal column [1]. This was of particular importance at the T8–9 and T9–10 levels, because it is well known that these levels are biomechanically hypermobile (transitional area from an immobile thoracic to mobile lumbar spine).

4. Diminished sensation at the T6 level downwards is a sign of neurologic impairment above T8–9. Three-level decompression does not induce ischaemia in the spinal cord (or there is no evidence of it in the previous literature); additionally, some surgeons have performed scoliosis surgery with disc excision in more than five segments in the thoracic spine, and they have not reported such a complication. Spinal angiography would be theoretically helpful, but it was not available at our hospital nor is it available, as far as I know, in many

other hospitals in Europe. However, we believe that use of all the above-mentioned investigations is sufficient to make the diagnosis and to operate thoracic disc herniation safely with use of a surgical microscope. Injury of the Adamkiewicz artery is more of theoretical than practical significance for the reason explained above. Choice of an anterior or posterior-posterolateral approach depends on the experience of the surgeon. The best method is the one we know best to perform. As Hippocrates said "Help, do not harm".

5. Some literature was not available to us, although we tried to include all previous literature.

Thanks a lot for your contribution concerning this interesting area of spinal surgery.

References

1. Denis F (1983) The three column spine and its significance in the classification of acute thoracolumbar spinal injuries. *Spine* 8:817–831
2. Korovessis P, Stamatakis M, Baikousis A, Vassiliou D (1997) Thoracic disc herniation. *Acta Orthop Scand [Suppl 275]* 68:12–16

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