

Matters arising

MRI in Behcet's disease

Sir: The paper by Besana *et al*¹ underlines the contribution that MRI is making to a wide range of neurological illnesses, in particular multiple sclerosis.

We have recently reported a case of Behcet's in which a large midbrain mass on MRI with pressure effects disappeared after four months of steroid therapy.² This finding has prompted us to add further to the discussion by Besani *et al* on the origin of high signal lesions on MRI in their two cases.

High signal on T₂ weighted images may commonly result from increased rho (proton density), or increased T₂. Both of these occur in experimental oedema³ and gliosis.⁴ The resolving lesion we observed was most likely due to oedema, which would be consistent with the predominantly venular inflammation that occurs in Behcet's.⁵ Demyelination *per se* does not alter MRI signal, as intact myelin makes no contribution to MRI signal.⁶ It is the replacement of myelin with extracellular fluid or gliosis which shows demyelinating lesions on MRI.

In our case the massive midbrain lesion produced surprisingly few symptoms. As in multiple sclerosis, lesions may occur with or without clinical manifestations.⁷ Lesions may also show apparent shrinkage and even disappearance on MRI,^{7,8} and dynamic serial GdDTPA enhanced MRI studies have now given an insight into the mechanisms of this process in MS.⁸ Further MRI studies are required to determine the significance of these MRI findings in Behcet's.

ALLAN G KERMODE,

Multiple Sclerosis NMR Research Group,
Institute of Neurology,
Queen Square, London WC1N 3BG

References

- Besana C, Comi G, del Maschio A, *et al*. Electrophysiological and MRI evaluation of neurological involvement in Behcet's disease. *J Neurol Neurosurg Psychiatry* 1989;52:749-54.
- Kermode AG, Plant GT, MacManus DG, *et al*. Behcet's disease with slowly enlarging mid-brain mass on MRI: resolution following steroid therapy. *Neurology* 1989;39:1251-2.
- Barnes D, McDonald WI, Johnson G, *et al*. Quantitative nuclear magnetic resonance imaging: characterisation of experimental cerebral oedema. *J Neurol Neurosurg Psychiatry* 1987;50:125-33.
- Barnes D, McDonald WI, Landon DN, Johnson G. Characterisation of experimental gliosis by quantitative nuclear magnetic resonance imaging. *Brain* 1988;111:83-94.

- Lehner T, Barnes CG (eds). *Recent advances in Behcet's disease*. London, Royal Soc Med Services Limited, 1986.
- Ormerod IEC, Miller DH, McDonald WI, *et al*. The role of NMR imaging in the assessment of multiple sclerosis and isolated neurological lesions: a quantitative study. *Brain* 1987;110:1579-616.
- Isaac C, Li DKB, Genton M, *et al*. Multiple sclerosis: a serial study using MRI in relapsing patients. *Neurology* 1988;38:1511-15.
- Kermode AG, Tofts PS, MacManus DG, *et al*. Heterogeneity of blood-brain barrier changes in multiple sclerosis: an MRI study. *Neurology* (in press).

Treatments for torticollis

Sir: Until recently, pharmacotherapy constituted the major therapeutic approach to the management of torticollis, with surgery reserved as an intervention in a small number of cases. A variety of other therapies have also been used in the management of torticollis. However, no or little information about the effects of the majority of these alternative techniques has been available. We recently obtained information about the types and the effects of treatments undertaken by 72 patients with adult-onset idiopathic torticollis (Table).

The treatments can be grouped into the two main categories of physical and relaxation-oriented therapies. Many patients had undertaken a large number of alternative treatments for their torticollis, an average of 4.4 treatments. At the two extremes, one male patient had had no treatment, and at

the other, another male patient had undergone 11 different therapies.

No treatment was consistently effective. Thirty per cent of those who had received medication reported improvement. Eight of the 14 patients (57%) who had received surgery derived some benefit from it. The effects of relaxation-oriented therapies compared favourably with the physical therapies: the latter were considered helpful only by a minority of the patients. Using the data in the table as a base rate for comparison with efficacy data reported for botulinum toxin injection,¹⁻⁴ it is evident that this most recent therapy for torticollis is also the most effective, and has resulted in improvement in 63-88% of treated cases.

M JAHANSHAH, CD MARSDEN

Department of Clinical Neurology,
Institute of Neurology,
Queen Square, London WC1N 3BG

References

- Brin MF, Fahn S, Moskowitz C, *et al*. Localized injections of botulinum toxin for the treatment of focal dystonia and hemifacial spasm. *Advances in Neurology* 1988;50:599-608.
- Stell R, Thompson P, Marsden CD. Botulinum toxin in spasmodic torticollis. *J Neurol Neurosurg Psychiatry* 1988;51:920-3.
- Tsui JK, Eisen A, Mak E, Carruthers J, Scott A, Calne DB. A pilot study on the use of botulinum toxin in spasmodic torticollis. *Clin Neurophysiol* 1985;12:314-6.
- Tsui JK, Eisen A, Stoessl AJ, Calne S, Calne DB. Double blind study of botulinum toxin in spasmodic torticollis. *Lancet* 1988;ii:245-6.

Table The number of patients who had received different treatments and their reports of the effect of the treatment.

Treatment	Number of patients who had undergone treatment	Effects of treatment			Percentage improved
		Better	Unchanged	Worse	
Medication	69	21	48		30
Surgery	14	8	5	1	57
Physical therapies:					
Wearing collar	51	4	33	12	8
Physiotherapy	39	6	24	7	16
Acupuncture	29	5	22		19
Osteopathy	29	3	22	2	11
Chiropractic	13	3	7	2	25
Relaxation therapies:					
Hypnosis	19	3	13	1	18
Behaviour therapy (relaxation training, massed practice)	17	9	7		56
Biofeedback	7	1	6		14
Meditation	11	5	5	1	46
Other:					
Homeopathy	15	1	12		8

Due to missing data, the figures in the "effects of treatment" columns do not always add up to the total number of patients who have had a particular treatment. The percentage improvement figures are therefore based on the number of patients who reported the effects of a particular treatment.