

community, will allow clear definition of any bias towards the 50% rate they demonstrated in UK multiple sclerosis patients. Conversely, a low level in the patients will reinforce the environmental argument for the observed New Forest cluster.

D P MARKBY

*Curtle House Surgery,  
Beaulieu, Brockenhurst SO4 27YB,  
UK.*

#### Reference

- 1 Swingler RJ, Compston DAS. The distribution of multiple sclerosis in the United Kingdom. *J Neurol Neurosurg Psychiatry* 1986;49:1115-24.

#### Compston and Swingler reply:

Dr Markby's preliminary observations from the New Forest underline the need for case control studies of risk factors in multiple sclerosis from areas where the disease is inappropriately frequent or rare. Although we believe that genetic factors exert an important influence on the distribution of the disease, at least in the United Kingdom we are aware that there are too few areas where simultaneous prevalence and immunogenetic studies have been carried out, and there are exceptions to the rule that multiple sclerosis is common where DR2 is frequent in the at-risk population (for example, Hungarian Gypsies and some African tribes). Owing to misprinting of the horizontal axis in our recent paper, each point in figure 10 was inadvertently moved 10% to the left.

Subsequently<sup>1</sup> we have argued that under the multifactorial and polygenic model of susceptibility, the prevalence and specificity of genetic and environmental associations with multiple sclerosis will vary with changes in the absolute risk conferred by

individual susceptibility factors and their normal frequency. We agree that environmental exposure should be compared carefully in cases and controls in the New Forest where multiple sclerosis may be very common despite a relatively low frequency of DR2 in the normal population.

#### Reference

- 1 Swingler RJ, Compston DAS. HLA and multiple sclerosis in south east Wales. *J Neurol Neurosurg Psychiatry* (in press).

#### C7 Radiculopathy: importance of scapular winging in clinical diagnosis

Sir: We were interested to read the article by Makin, Brown and Ebers.<sup>1</sup> They reported six cases of C7 radiculopathy in which weakness of the serratus anterior, manifested by winging of the scapula, was a feature. Recently, we have treated a further case.

A 35 year old electrical worker presented with two months history of neck pain, right brachialgia and deep infraclavicular and subscapular pain. The pain was worse on movements and straining. His right arm felt weak and numb. He gave a previous history of neck pain, which had no brachialgic or other element, and which responded to chiropractic attention.

On examination, there was a good range of cervical spine movements, weakness of the right triceps and an obviously winged scapula. The right triceps and supinator jerks were reduced. No sensory deficits or long tract signs were elicited. Plain radiographs showed a reversed cervical lordosis and narrowing of the C6/7 disc space. There was no instability on the flexion and extension views. Cervical myelography demonstrated a C6/7 disc prolapse compressing the right C7 roots. CSF protein content was 0.47 g/l.

The patient underwent anterior cervical discectomy and fusion. At operation a large sequestered disc fragment compressing the right C7 root was removed. Post-operatively, there was immediate symptomatic relief and return of power to triceps. Serratus anterior recovery was, however, slow.

The motor weakness in this case was confined to the triceps and serratus anterior contrasting with the cases reported where the pectoralis major, latissimus dorsi and extensor carpi ulnaris were frequently involved. Four of the cases reported had anterior cervical discectomy and fusion and all derived symptomatic relief and made a good neurological recovery.

It is perhaps surprising that weakness of serratus anterior does not occur more frequently in C7 radiculopathies. We suggest however, that if the serratus anterior function were to be tested in a more diligent manner according to the recommendations of Makin *et al*, then what is apparently a rare clinical phenomenon may possibly be more commonplace. We would further comment that the thoracic distribution of pain seen in our case is not uncommon with C7 root compression but is frequently misinterpreted.

We are grateful to Dr Brian Phillips for referring this case for neurosurgical treatment.

IAN P CASH

A H JAMJOOSI

*Department of Surgical Neurology,  
Morrison Hospital,  
Swansea SA6 6NL, UK.*

#### Reference

- 1 Makin GJV, Brown WF, Ebers GC. C7 radiculopathy: importance of scapular winging in clinical diagnosis. *J Neurol Neurosurg Psychiatry* 1986;49:640-4.

## Book reviews

**Subarachnoid Haemorrhage.** By RP Sengupta and VL McAllister. (Pp 378; £114.00.) Berlin: Springer-Verlag, 1986.

Although it is 30 years since (Sir) John Walton published his famous monograph on subarachnoid haemorrhage, this is the first work in English that has appeared on the subject since then. During this time our

understanding of this complex neurosurgical catastrophe has expanded beyond recognition as has our ability to treat the lesions responsible. This is probably as opportune a time as ever for an up-to-date review of current knowledge on the subject, for following the explosion of both information and technology there are signs that the pace of advance may be beginning to slacken. Much of this present text is likely to be of permanent value.

Mr Sengupta and his radiological colleague, Dr VL McAllister, have produced what must surely become the definitive

guide to this field. The book is clearly written and beautifully produced. It contains a wealth of outstanding illustrations. Every aspect of subarachnoid haemorrhage and its management is covered in thorough, even recondite, detail, and the current literature is exhaustively reviewed. As is appropriate, the book commences with an historical review and ends with a chapter devoted to possible future developments.

Mr Sengupta is widely regarded as the premier aneurysm surgeon in Great Britain and the text draws generously on his own clinical experience and surgical results. The

specialist in the field will find this volume invaluable both for reference and as a source of new information. It is probably fair to say that the depth of detail make this a book which is more suitable for the expert than for the novice or the beginner training in neurosurgery, and it probably goes into greater depth than is required by the neurologist or the general physician who may have only a limited interest in subarachnoid haemorrhage. This reviewer can only make one adverse criticism of this outstanding work: Its price. This must put it beyond the reach of all but a handful of neurosurgeons in Britain and all but the best endowed medical libraries.

RS MAURICE-WILLIAMS

**Disorders of Posture and Gait.** Edited by W Bles, Th. Brandt. (Pp 358; \$92.50.) Amsterdam: Elsevier Science Publishers, 1986.

It is a remarkable feat that walking, standing and the maintenance of an upright posture are performed almost automatically. To do this, it is necessary to coordinate the movement of two limbs involving several muscles, at least six joints (in the lower limbs alone) balancing the trunk above, and organise appropriate associated movement of the upper limbs, head and neck. This is to say nothing of the skills demonstrated by the downhill skier or the tight rope walker. The mechanisms which enable us to walk and maintain posture are poorly understood. This volume presents the multi-disciplinary approach of the European School of Posturography to investigating and attempting to understand these problems. It is primarily concerned with the quantitative electromyographic and mechanical analysis of posture and gait.

The first section is devoted to untangling the various contributions of the proprioceptive, vestibular and visual systems to the maintenance of normal posture and gait. The normal patterns of EMG activity in leg muscles during walking and postural perturbations are also described. The second section is concerned with diseases that may produce disorders of posture and gait and the patterns of abnormality that one may see within the investigative framework of posturography. Vestibular, cerebellar, proprioceptive and visual disorders are discussed in separate chapters in relation to the effects they have on posture, gait and associated reflex mechanisms. There are also discussions about the normal patterns of stance

and locomotion in the upper motor neurone syndrome. Another chapter is devoted to an historical discussion on the role of cervical muscle afferents and their connections in producing disturbances of equilibrium. The final section deals with the learning processes involved in the acquisition of walking and postural skills in childhood and their decline in old age. The compensatory mechanisms that operate in vestibular and cerebellar lesions are discussed.

This multi-authored volume provides a variety of contemporary approaches to the subject. Most of the material has been published previously. The book would have benefited from an editorial overview and synthesis of the views expressed. It should be available to all those with an interest in this difficult and expanding field.

PD THOMPSON

**Suicide.** Edited by Alec Roy. (Pp 205; £27.00.) London: Williams & Wilkins, 1986.

This is a convenient, moderately priced book on the most tragic of all human behaviours. There are 13 chapters by experts on all aspects of the matter. Most of the contributors examine the chief factors which are known to determine suicide, calling on their particular area of expertise.

The facts about suicide have been known for many years. Men rather than women, the elderly more than the young, the physically and psychiatrically ill as opposed to "normal" people, commit suicide. The book examines each of these major determinants in detail.

What else can one say about suicide? The most interesting fact about suicide, is that in recent years there has been a dramatic drop in the suicide rate in Britain: from about 7,000 a year in the 1950s to about 5,000 a year now. This has not occurred to the same extent in any other European country, according to the figures given in the book. I could find no figures on this issue in the book for the United States, which is a pity, because the book is essentially American. It is generally believed that there are three possible reasons for this fall in Britain: the decline in barbiturate prescriptions, the change from coal gas to natural gas and the introduction of the Samaritan counselling services. None of these factors is supported by evidence presented in the book. In Holland, for example, suicide rates have increased despite a fall in barbiturate prescriptions and a decline in domestic coal gas.

In the United States the introduction of suicide counselling services has not led to a reduction in suicides. I feel that the questions raised by these matters should have been tackled more resolutely in the book.

I have two more quibbles about the book. The first concerns the discussion in several chapters about the relationship between depression and suicide. Obviously someone who commits suicide is "depressed". What is not clear, still, is whether they have a "depressive illness", "understandable misery" due to some devastating life event or whether they are just "miserable people". One study claimed that 94% of people who committed suicide had a depressive illness. This, in my view, is unlikely, and other studies, not quoted so extensively in this book, have shown that many suicides are relatively normal people who are faced with insuperable odds. I think that this debate should have been opened up. The second point concerns one chapter only, written by a psychoanalyst. It epitomises all that is wrong about this viewpoint. The author claims, for instance, that to say that someone is "suicidal simply indicates that there is an elevation in that individual's perturbation and lethality levels, respectively". Quite apart from the incorrect use of the word "respectively" such statements undermining the scientific approach of the rest of the book.

In conclusion, this book presents the traditional facts and views about suicide. Would I buy it for myself or for my library? The answer is probably not. It does not present the issue in a contemporary enough light, nor does it address the controversial issues. It might have been better if the editor had taken a more active role, and summarised or challenged each of the contributions.

JOHN CUTTING

**Basic Neurology.** By George David Perkin. (pp. 327; \$35.00.) Weinheim: VCH Verlagsgesellschaft. Copublication with Ellis Horwood, 1986.

The theme running through this book is an analysis of the author's experience in 4,000 successive outpatient cases. These data are presented throughout the book to assist the author's stated intention to present a more balanced view of the practice of neurology than can be found in many of the available standard textbooks. This aim is admirably realised.