separate but adjacent chapters in the middle section. Skin ageing is also in the geriatric section but includes ageing as well as pathological changes. Other overlaps are also to be found, for example, between the chapter on pathology of the ageing heart and on the one on valvular heart disease in old age. This is probably a consequence of the desire to increase the number of authors and especially the number of transatlantic contributions. The expansion of the list of contributors from 44 in the first edition to 99 in this fourth edition has been a mixed blessing. A further outcome from this division of labour has been the reduction of some chapters to very slim pieces—sometimes just three or five pages for large and important topics. In several chapters the actual text is only slightly longer than the list of references: for example, ageing blood has 7½ pages of text with 6½ pages of references.

It is, however, the lists of references that are the main strength of the book—often over 300 to a single chapter and over 400 in one instance! But again there is a defect—most of the references relate to the last decade and only a few to 1990. The most recent date quoted is the withdrawal of Terodalone in 1991, presumably added during a final proof reading session. One imagines that because of the complexity of the volume and the enormous task of coordinating the 99 authors, the gestational period of this book has just grown and grown.

This book is a dinosaur. It is large, unwieldy and uncoordinated and tells us a lot about the past but offers little in the way of practical details for dealing with the present problems and dilemmas that confront us all, and even less about combating the future.

How does it compare with its rivals? Pathy's tome, Principles and practice of geriatric medicine, and Grimley Evans', Oxford textbook of geriatric medicine are both aesthetically more pleasing. Pathy has a better index and Grimley Evans slightly more up-to-date references—but Brocklehurst's certainly wins on the quantity of references.

I would wish to have access to this book through a convenient library but I would not buy a personal copy.

S G P WEBSTER
Consultant Physician, Department of Geriatric Medicine
Addenbrooke's Hospital, Cambridge

Repetitive strain injury. By Edward C Huskisson. Chaterhouse Conference and Communications Ltd, London, 1992. 98pp. £10.00.

In the early 1980s a remarkable occupation associated disorder appeared in Australia. Patients who were predominantly female secretaries operating modern computer keyboards developed diffuse aching and stiffness of the forearm and hand leading in many cases to persistent incapacitating pain and severe disability. Clinical examination would reveal nothing more than diffuse tenderness and loss of function with no specific rheumatological or neurological signs. The condition was diagnosed as 'repetitive strain injury' or 'RSI' by Australian physiatrists and rheumatologists. The medi-co-legal implications were obvious and there was a phenomenal increase in the prevalence of the problem and in compensation claims. Any job involving repeated hand movements appeared at risk. There were clusters of cases in some cities, while in others, where workers were doing the same jobs, the problem did not occur. For example RSI developed in 25% of telephone operators in Sydney but only 4% in Melbourne and not at all in other countries. It reached a crescendo in 1986 when over 7,000 new cases were reported. Compensation was obtained without too much difficulty.

With the lack of objective evidence of any specific disorder, there was increasing scepticism about RSI and whether it had any organic basis. An investigation supported by the Royal Australasian College of Physicians found no scientific evidence that RSI was attributable to work, disagreed that there was any injury and suggested that the phenomenon had appeared as a result of media publicity, union pressure, the effects of support groups and the medicolegal process. They regarded it as a psycho-sociological phenomenon rather than a specific condition. Following this report the incidence of RSI plummeted and has now virtually disappeared in Australia.

The phenomenon initially occurred in keyboard operators and was variously ascribed to poor keyboard design, poor ergonomic work positions, working in a constant posture for long periods of time, working to very tight deadlines and being under constant pressure from demanding employers. Analogous problems such as writers cramp, chicken pluckers wrist have occurred in a whole variety of industries, in assembly work and machine operating tasks. In many of these, the same doubts arise regarding the organic bases of the problems.

In Britain interest in occupationally induced upper limb disorders has greatly increased. Several well defined syndromes of forearm and hand pain are related to occupation; they have a clear cut history and physical signs that enable us to make definitive diagnoses. These include tenosynovitis, carpal tunnel syndrome, radial tunnel syndrome, cubital tunnel syndrome, ulnar neuritis, tennis elbow, golfer's elbow and other problems. Specific ergonomic factors can be identified, there are definitive signs on examination and the conditions usually respond to appropriate modification of work and medical treatment.

We also are seeing many more patients with diffuse aching and stiffness which defy specific diagnosis. Many of these patients are labelled as having RSI. We seem about to repeat the Australian experience. Our social security system recognises the condition of forearm cramp due to repetitive movements of the hand, finger or arm and which may occur in typists, clerks
and routine assemblers. The lawyers are following this and claims are being made for forearm ache in association with almost any manual occupation.

Is RSI a real disorder? Many believe that ‘the pain and strain is mainly in the brain’. Is the label RSI correct? Many patients with the phenomenon are using their hands but are not doing repetitive tasks. There may not be any specific evidence of strain and there is no clearly defined injury. Surely the phrase repetitive strain injury is wrong.

Edward Huskisson has written an interesting book reviewing the problem. He describes the medical, environmental, sociological and psychological background to the whole problem. Confusion then arises with specific advice on the design of the workplace and in particular secretarial work stations, avoiding constrained and inefficient postures and uncomfortable work positions. On the one hand he suggests an ideal postural environment avoiding awkward stretching movements; on the other, it is important to take adequate rest periods, breaks from work to move around to do other tasks and not work under pressure. Perhaps the most important thing in preventing this disorder is that people should enjoy their work.

Huskisson does however play his part in this scenario. He provides advice on how to claim from social security and industrial tribunals and when to appeal. There is advice on how to make a claim against an employer, and in particular how to succeed with a claim and the likely levels of compensation. There is a warning about legal costs, and advice about union support and legal aid. All this will serve to perpetuate the RSI story.

Are you confused about RSI? So am I.

MALCOLM I V JAYSON
Professor of Rheumatology, Manchester

Brain dead, brain absent, brain donors. By Peter McCullagh. John Wiley & Sons Ltd, Chichester, 1993. 268pp. £34.95.

The subject of brain death has been prominent in public and medical debate during the past decade. The main reason for this is the emergence of organ transplantation surgery as an extremely valuable form of treatment with overall good results; in fact, results much better than those for treatment of many common cancers. Now that patients with kidney transplants have lived for 30 years, it is clear that this type of surgery is not just a gimmick and, as control of rejection improves, the value of a functioning vital organ graft to a patient in need becomes increasingly precious.

A major source of organs for donation is from patients who have died as a result of cerebral trauma or haemorrhage, and in whom permanent destruction of the brain stem has been determined by a moderately complicated set of neurological criteria indicating that there can be no chance of recovery and that continuing artificial ventilation is no longer appropriate to the patient. An organ to be transplanted has to function and will, therefore, need to be composed of parenchymal cells that are alive; to transplant a dead organ into a patient would hasten his demise. Therefore, to remove organs from a patient with permanent brain stem destruction after the decision has been made to stop ventilation would seem to be a logical and ethical procedure, and it is obvious that the organs would be in optimal condition if perfused with oxygenated blood until just before they are removed and cooled before being transplanted into the recipient.

Dr Peter McCullagh discusses brain death from many aspects and his book is not very easy to read. It is scholarly and certainly a major contribution to this subject, outlining the issue in a logical and reasonable way. A surgeon removing a normal organ from an individual whose heart is still beating will always have some unease since the procedure is so different from all other surgical operations. The worries have caused some medical men to react in a crusading manner against the acceptance of brain death.

In the past, if a patient suffered fatal brain damage from trauma or haemorrhage, supportive and compassionate care was provided until death. With modern methods of resuscitation many of these patients are intubated and ventilated when they would otherwise have died from failure of the breathing reflexes. In the context of the uncertainty of an acute ictus of trauma or cerebral haemorrhage, the physician is often unable to assess the prognosis acutely and, therefore, the resuscitative process can buy time whilst the cerebral damage declares itself as recoverable, partially recoverable or complete and irreversible. If the damage is complete and irreversible, to continue ventilating a corpse is unethical and repugnant to medical and nursing staff and even more so to the relatives of the patient who see the body divorced from the person they loved. Therefore, after full assessment and discussion with the relatives, mechanical ventilation is stopped; sometimes the relatives initiate the wish to stop the ventilation. This consideration has nothing to do with transplantation but since such cases potentially provide the most appropriate organs for transplantation, the relationship between stopping the mechanical ventilation and organ transplantation is understandable.

To explain brain death, the analogy of a victim decapitated has often been used. Under such circumstances, the circulation in the corpse without a head could in theory be maintained, at least for a short period. McCullagh rightly points to the defects in this analogy. When the head is still attached to the body, the assumption of completely irreversible brain damage rests on a careful neurological clinical assessment sometimes supplemented by special tests such as scanning. These criteria have been agreed by virtually all