Edited by C. J. Mathias and Sir Roger Bannister.

The last decade has seen an increasing interest in the study of disorders of the autonomic nervous system. For too
long, the autonomic nervous system has been regarded by neurologists as a field which might well be worth more interest, but which at the same time was so complicated that no one dared go into it. This situation is now changing; as the editors state in the preface, autonomic units are now to be found in many major hospitals. The knowledge gained in such centres is slowly diffusing into the neurological community. To facilitate this process we need good textbooks that provide clarity and order, the lack of which made the field so inaccessible in the past.

The first chapter, on neurobiology of the autonomic nervous system, provides a good example of the differences between what used to be taught about the autonomic nervous system and what is said now: we read that 'most target issues react predominantly to only one of the autonomic systems; opposite reactions to activity in sympathetic and parasympathetic neurones are more the exception than the rule; most responses are excitatory; i.e. inhibition is rare'. A few lines further on it is said that 'fast changes of heart rate during changes of body position . . . are generated via changes in the activity of parasympathetic neurones . . . ; the sustained increase of heart rate during exercise is mainly generated by . . . sympathetic neurones'. The contrast between such principles and what used to be taught in medical schools such as the concept of mutually antagonistic systems is striking. Perhaps now medical students need no longer wonder how autonomic reactions such as uterine contractions contribute to the fight/fright response.

The book, counting 592 pages, consists of six parts. The first one deals with the scientific aspects of structure and function, and the second part with physiology and pathophysiology relevant to autonomic failure. Clinical autonomic testing makes up the third part. The remaining three parts deal with disorders, and take up about 250 pages. The first of these deals with primary autonomic failure, the second with peripheral autonomic neuropathies and the final part of the book deals with other disorders associated with autonomic dysfunction.

A particular problem in reading the literature on the autonomic nervous system is that there is little consistency in terminology. The various varieties of syncope are notorious for the ease with which researchers use different names for the same phenomenon and vice versa. This book does not quite escape this particular evil: in one chapter, syncope is defined as a transient loss of consciousness resulting from cerebral dysfunction due to cerebral hypoperfusion, whereas in another chapter it is defined as a sudden and transient loss of consciousness, usually accompanied by inability to maintain postural tone. The latter definition would include several disorders that have nothing to do with perfusion of the brain; in fact a concussion would fulfill this definition. In the index, under vasovagal syncope, the reader is referred to 'neurocardiogenic (vasovagal) syncope'. The same holds for neurally mediated syncope. Readers familiar with this confusion of tongues will have little difficulty in distinguishing which disorder a particular author is talking about, but others might be confused. Note that this problem is not restricted to this particular book. In this book all these terms seem to mean roughly the same thing. We can only hope that a common terminology for the various forms of fainting will be agreed upon in the future.

The book's emphasis lies on physiology and pathophysiology rather than on clinical processes of diagnosis and patient care. This is not to say that these aspects are not dealt with at sufficient depth, because they are. It is just that for a neurologist with little experience in this particular field, it remains difficult to know where to start searching. Several chapters are noteworthy and useful in this respect. These include the difficult subject of the differential diagnosis of the primary chronic autonomic failure syndromes. This chapter contains small lists on how to distinguish between multiple system atrophy and Parkinson's disease, and on the distinction between pure autonomic failure and early multiple system atrophy. Another very practical chapter is that which deals with the management of postural hypotension.

For neurologists unfamiliar with autonomic disorders it is difficult to develop a feeling for what is important and common, and what is so uncommon that acquiring knowledge about it may be postponed for a while. A chapter on the general approach of autonomic disorders, with some numbers on the frequency of occurrence of the various causes, would have been appreciated for such users.

This consideration brings us to a general opinion of the book. Readers already familiar with several of the diseases as mentioned in the book will find a wealth of material regarding physiology and pathophysiology. References are up to date, and the quality of the contributions is high, as is that of the illustrations. Readers looking for an easy entry into this particular field will find that the learning curve is still rather steep. This criticism, however, also largely applies to the book's competitors. Compared with the situation of a decade ago, books like these enable neurologists to tackle the field, and that is a significant improvement.

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