The seventh edition of this well-known text on muscle disease comes 7 years after the sixth and 37 years after the first edition by Walton. The need for 56 contributors is a testament to scientific and clinical advances in our understanding of muscle and its disorders in man. That many of these contributors are often the forefront authorities in their respective fields on a worldwide basis, emphasizes the esteem in which this text is held as well as, no doubt, the hard work of the editors.

There are four sections. In the first (Scientific basis of muscle disease), structure and function of motor units, developmental and molecular/cellular biology are summarized succinctly. There is an admirable introduction to the molecular basis of muscle disease (the only limitation being the speed at which this field is developing) and this sits well with subsequent chapters detailing mitochondria, the sarcotubular system and the extracellular matrix now recognized to be of such importance in some muscle syndromes. The chapter on skeletal muscle biochemistry in health and disease is terse but clear and rewarding if persevered with. Whilst in other texts the neuromuscular junction seems remote from the sarcolemma, the chapter on this structure and neuromuscular transmission emphasizes the close structural links, and this is further emphasized in the subsequent chapter on sarcolemmal excitation processes. Perhaps only the chapter on animal models looks restless in its positioning.

Section 2 starts with an admirably brief summary of clinical neurophysiological tests and their application; this is followed by pathology with, in turn, histochemistry and immunocytochemistry, semithin resin sections and electron microscopy. The absolute necessity of comprehensive processing to maximize diagnostic information is emphasized and it is, perhaps, the scarcity of top quality competence in handling small specimens of muscle that has been foremost in the failure of needle biopsy to become more widespread, although, with modern day case outpatient surgery facilities, open biopsy is probably not the major procedure that it was, nor is it as painful. A chapter on muscle imaging and spectroscopy refers to the wide range of methods now available: muscle images can be fascinating to look at and confer extraordinary degrees of selectivity, but the clinical utility is not clearly made out.

Section 3 (Description of muscle disease) opens with the necessary, but difficult, section on clinical evaluation and differential diagnosis: there are several useful lists here (e.g. ‘myopathies that can be diagnosed or strongly suspected after examination’ and ‘muscle disorders associated with contrac-tures’) but some of the clinical photographs are perhaps not immediately eloquent—more a limitation of stationary black and white plates. A chapter on classification leads into the meat of the book, which is a series of chapters many of which have rather reassuringly old-fashioned titles such as ‘Limb girdle muscular dystrophies’, ‘Distal myopathies’ and ‘Congenital muscular dystrophy’ indicating that such terms have not been superseded wholly by a molecular nomenclature and can be useful clinical labels. Apart from the standard list of conditions, there are chapters on toxic and iatrogenic myopathy and painful muscle syndromes: the latter chapter overlaps significantly with that on examination and investigation at the beginning of the section, and could probably have been better integrated.

The book, in Section 4, concludes with a chapter on genetic counselling, some of which deals with principles, but much of which is specific to conditions mentioned earlier and might have been more appropriately integrated within disorder specific chapters. Similarly, there certainly are generic issues in relation to aspects of treatment and rehabilitation in many neuromuscular disorders, but the specific cardiac issues, for instance, in dystrophinopathy, Emery Dreifuss dystrophy and myotonic dystrophy are not necessarily best dealt with by coalescing them into a single section out of context of the main disorder. Similar considerations apply in other domains.

The book is physically well presented, not too large (775 pages), and is relatively easy on the eye: the references are, by and large, well chosen and comprehensive up to 1999. The index is perhaps not the book’s strong point, which, given that such tomes are primarily used as reference books, is a pity: look up ‘critical illness myopathy’ and you don’t find it—but it is in fact there as a relatively major heading (p. 681). Some conditions, e.g. carnitine palmityl transferase deficiency, have several index entries but there is no quick way (e.g. use of bold type) to tell where there is an account of the condition. The illustrations are mostly clear but more colour would be a further asset, especially for the muscle histology and histochemistry (perhaps an attached CD ROM could be considered in future editions?).

Overall content and writing are excellent and the book is a pleasure to interrogate. It remains an essential library item.

C. M. Wiles
Department of Medicine (Neurology),
University of Wales College of Medicine,
Cardiff, UK