Book reviews


This book comprises a collection of 21 papers given at a symposium on osteoarthritis held in Chicago in 1974. It embodies the views and practical experience of leading orthopaedic surgeons of the USA. With the exception of one eminent pathologist, all the authors are orthopaedic surgeons, among whom is one from Britain who summarized the work of this country.

The introductory papers survey the biochemistry and pathology of the joint and point out forcefully that joints do not 'wear out' in the way that machine bearings do, but that osteoarthritis involves an active metabolic response. The aetiology of osteoarthritis and its relationship to aging is discussed, and the importance of cancellous bone in absorbing energy on impact loading pointed out.

In this respect denser osteoarthritic bone is less efficient, whereas osteoporotic bone is more efficient than is normal bone. Hereeditary factors may be more important than is realized and minor anatomical abnormalities may be a common predisposing factor.

The innervation of the hip is examined both anatomically and by active stimulation and passive movements in anaesthetized cats. Four types of receptors are present, one being a pain receptor. The lack of appropriate drugs for the treatment of osteoarthritis and the untoward effects that may arise from anti-inflammatory drugs in common use are discussed.

The practical orthopaedic papers are prefaced by an account of the physical properties of orthopaedic cement and its effects on tissues. This reviewer is not qualified, however, to comment extensively on the clinical papers. These would appear to proffer valuable experience in a variety of surgical procedures currently in use or being developed for the treatment of osteoarthritis in many of the joints commonly affected. Each paper has a useful bibliography. The merits and drawbacks of total or partial arthroplasties of different design for the hip, knee, shoulder, elbow, and ankle joints are gone into thoroughly and salvage procedures recommended for failures from various causes.

Studies in experimental animals suggest that transplanting joints might eventually become feasible and joint tissues may be chemically modified to make them more resistant to degradative enzymes. Whether such novel ideas will lead to useful clinical applications remains to be seen.

The book is very well printed and has numerous illustrations and radiographs which are reproduced to a high standard. It is recommended to nonclinical as well as clinical workers concerned with osteoarthritis and joint function. The main criticism is the length of time that has elapsed between the symposium and publication of this book, although some up-dating has taken place.

HELEN MUIR


In spite of its title, this book (written by a professor of medicine and a clinical co-ordinator of nursing) has something to say about almost every aspect of osteoporosis. Approximately a quarter of the text is taken up with such matters as bone structure, calcium kinetics, methods of measuring bone mass, and aetiological factors. Diagnostic procedures are considered at length without trying to provide a technical vade mecum. Surprisingly, methods of correcting serum calcium values for serum protein levels are not discussed. There are chapters on the clinical aspects and the differential diagnosis of involutional osteoporosis and brief notes on the rarer types of osteoporosis. Recent studies of the clinical effects of oestrogens and other forms of treatment are reviewed and the authors' personal experience of oestrogen therapy in elderly patients with severe osteoporosis is presented and discussed in some detail. The reader is left in no doubt that in the authors' view the benefits of oestrogen therapy outweigh the risks; but the difficulties involved in determining therapeutic effectiveness get less consideration than they deserve and the intriguing question of what makes a patient 'porotic' is not really tackled. The last 10 pages describe the social, psychological, and nutritional problems encountered in elderly osteoporotic patients and the nursing care and rehabilitation of patients with back pain attributed to osteoporotic spinal fractures.

All this is contained in 147 pages of text in a hardback only slightly larger than a pocket book. It is illustrated by a number of radiographs, some, unfortunately, of indifferent quality. There are approximately 800 references. The authors are to be congratulated on marshalling an immense amount of information and providing a very useful source book for clinicians and others entering this challenging field.

HELEN MUIR


The contemporary student of biology and especially immunology is besieged by an ever-increasing mountain of papers, books, monographs, and the proceedings of meetings, etc. Unless original work, or at least a new critical appraisal of existing work leading to a fertile hypothesis, is offered, 'silence would have been preferable'.

Unfortunately this book cannot be ranked in either of the above categories. The reader is presented with an unending avalanche of brief reports—entirely uncritical—of the work of others taken from a list of references no less than 20 pages long out of a total of 136 pages. Where the author states his own opinion it is based on a somewhat subjective approach. For instance: '3-monohydroxycholamic acid in very small oral doses induced a portal cirrhosis in rabbits (Holsti 1956, 1969) which I feel resembles chronic aggressive hepatitis with rather few plasma cells'; or 'from a morphologist's point of view, I do not think it would be possible to quote the saying of Goethe: 'paper work is a very patient stuff'.

J. BAIER

G. LOEB

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