book reviews

paper with a pleasing typography, which facilitates reading. Each chapter is concluded with a most extensive bibliography.

Chapter I deals with osteolytic conditions and is easily written off in some thirty pages. Neurological, cutaneous, vascular and traumatic diseases as reasons for osteolytic syndromes are dealt with. It is unsatisfactory that in this otherwise so meticulously written chapter no special mention is made of osteolytic processes in connection with tumoral and reticulo-endothelial disease. Osteonecrosis has of late become a widely debated concept, chiefly because of its puzzling nature. Only scant information is given.

Chapter II contains an extensive description of osteomyelitis. Of special interest is the approach to both clinical and radiological appearances before and after penicillin treatment, which discloses some features probably not so well known either in orthopaedic or in radiological circles. The section on specific osteomyelitis, like tuberculosis, deserves special mention because of the clarity with which it is presented. It also serves as a reminder that tuberculosis is still a disease to have in mind despite its decreasing frequency.

Chapter III contains the description of Paget's disease, but nothing additional to common knowledge has been presented. Finally, chapter IV forms the bulk of this volume, taking up no less than 223 pages. Most joint systems are included and the distinctive advantage of this chapter is that not only is an anatomical but also a normal arthrographic description given. This facilitates the reading of the numerous arthograms with varying abnormalities in the one and same joint. Great help is offered by drawings accompanying the arthograms. It can only be said that this is one of the better arthrographic atlases ever published and it is highly recommended to anybody in difficulties when interpreting an arthogram.—ian goldie.


This is an inexpensive handbook type of publication containing the papers and some of the extempore discussion from the 4th International Symposium on Scoliosis under the editorship of George Chapchal. This is an important record, particularly of European, Scandinavian, American and Russian work in this field. Even although it has taken two years to produce, it still contains some fresh and original ideas. Although the major theme is operation, the consideration of indications, the form, etiology and prognosis of the various curves holds most interest, as indeed they should. Prognosis as defined by Drdkova of Prague, using function tests, clearly supports the work of the Brompton Hospital School in London. Pulmonary function in scoliosis was carefully studied by Kummer of Vienna who has explained how the biochemical respiratory changes are caused by the various structural changes—but unfortunately are not usually corrected even after a successful operation.

There is a short but efficient description and discussion of the very real complications of paraplegia by Nicod of Lausanne, and certain aspects of spinal cord vascularity. Several papers are reported comparing the results of Harrington instrumentation, vis-a-vis Hibbs grafting by Ziekle of Tubingen, with Harrington's own results as well as those from other units throughout Europe.

The various anatomical routes of correction via transthoracic, costovertebral and various types of procedure, e.g., spinal osteotomy and epiphyseodesis, are all described quite candidly by various authorities.

It is not very often that an international meeting appears to have been so successful with the presentation of up-to-date material and ideas. I feel sure there is something of interest and originality to be found for all workers in the field of scoliosis within this publication, and strongly recommend it for its content and its clear presentation.—R. B. duthie.


In the sixteen years since the first edition this book has become a classic. There can be few orthopaedic surgeons who have not thankfully sought its aid when faced with an unusual disorder
of growth or development. This new edition is justified by the rapid increase in understanding of the structure, chemistry and metabolism of the various components of connective tissue.

Each disease is described with an authority based on the author's wide personal experience and on an exhaustive survey of the literature. There are no less than 632 references to Marfan's syndrome alone, and these include papers published in the same year as the publication of this edition.

Such a concentration of information does not make easy or light reading but as a work of reference this new edition continues the high standard of its predecessors and should be available to all orthopaedic surgeons and trainees.—John CHALMERS.


When the first edition of this work appeared in three volumes in 1960, it provided for the first time a comprehensive treatise on various aspects of muscle structure and function. Since that time there have been a number of monographs which have concentrated on one or other aspect of the subject, and there have also been published the proceedings of a number of international congresses on neuromuscular disorders, which have contained a fair amount of basic research. However, if this new edition, which has now grown to four volumes, can bring together all the advances in the intervening years, it will be a welcome addition to the literature in this field.

Volume I is the first of two volumes devoted to the structure of muscle.

A number of sections, such as the interesting and well-illustrated chapter on the anatomy of muscles and their relation to movement and posture (Lockhart), and the contribution on the histochemistry of developing skeletal and cardiac muscle (Beckett and Bourne) have come through practically unchanged from the earlier editions. Margaret Murray, who included much of her pioneering work on skeletal muscle in culture in the first edition, has brought this section right up to date, and H. E. Huxley has done the same for his chapter on the molecular basis of contraction. Both these chapters provide excellent reviews of the topics and are magnificently illustrated.

A new chapter on the development of striated muscle is contributed by Fischman and contains a series of excellent electron micrographs. A separate new chapter by Goldspink covers in detail the post-embryonic growth and differentiation of striated muscle and includes a discussion on factors influencing muscle growth. A further three chapters are devoted to the structure of muscle in some of the more lowly members of the animal kingdom, such as nematodes with their peculiarly obliquely striated muscle, crustaceans and arthropods.

For the practising orthopaedic surgeon the remaining chapter on how muscles are used in the body (Monod) may well have the most practical application and should provide a useful source of reference for all those engaged in any aspect of neuromuscular investigations.

Future volumes will deal further with structure (Volume II), physiology and biochemistry (Volume III) and pharmacology and disease (Volume IV).—Victor DUBOWITZ.


Dr Zipkin has collected together several expert authors from many countries to write about biological mineralisation. After a rather fanciful introduction by the Neumans on the role of apatite in the origin of life, the book settles down to more routine sections on composition of mineralised tissues, analytical methods, role of Sr, Mn, Cu, Zn, Ca, P, Mg and F in bone biochemistry, calcification in mammalian and non-mammalian systems, and finally physiological and clinical aspects.

A key chapter on mechanisms of calcification by Urist presents views which are very interesting but have been debated by others. It is particularly sad that the long gestation necessary to produce a volume of this size has prevented a detailed account of interesting recent developments in calcification, e.g., the discovery by Anderson, Bonucci, etc., of extracellular membrane bound vesicles that calcify in cartilage and bone, or even on collagen especially from newer work on cross linkages and chemical typing that are all “in the news”. Lipids being present in large amounts in vesicles may have a significant role in calcification but as described it has only a suggested role.

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