selected references. It is interesting to consider how much these complex methods, in showing the ultrastructure of tissues, have led to further understanding of disease processes. There is no doubt that in such conditions as chondrocalcinosis one can see the phagocytised crystals within the phagosomes with aggregation of dense lysosomes around them and indeed this characterises this disease. However, in many others, e.g., certain malignant and even benign bone tumours, rheumatoid arthritis, etc., there is little, if any, particulate matter which can be seen and therefore characterise the change of the cell or its content from normal to abnormal. However we must continue to search for even the most minor morphological change in cells, their membranes and their matrix if we are to develop further understanding in the difficult field of the musculo-skeletal system.

This new book is a "must" for all laboratories using any form of microscope for any form of orthopaedic histology or pathology.—R. B. DUTHIE.

Calcium, Parathyroid Hormone and the Calcitonins. Proceedings of the Fourth Parathyroid Conference, Chapel Hill, N.C., U.S.A., March 15–19, 1971. Edited by Roy V. TALMAGE and Paul L. MUNSON. 27×17 cm. Pp. 560, with many figures and some tables. Index. 1972. Amsterdam: Excerpta Medica. Price Dfl. 136.00. U.S. \$47.70.

The theme of the symposium was calcium metabolism and the influence of parathyroid hormone, calcitonin and vitamin D (now also regarded as a hormone as well as a vitamin). As seems inevitable with such symposium reports there is a rich feast of undigested, and to the average orthopaedic surgeon undigestible, material. There is no doubt that the important advances in this field are contained in this book together with a number of contributions of more ephemeral character.

The orthopaedic surgeon will recognise the relevance and importance of this subject to his speciality and will be impressed and grateful that so much research is being undertaken as is represented in these fifty-plus papers; however, his own educational needs may be better served by one of the standard textbooks on bone physiology and biochemistry. This is a book for the biochemist and research worker in mineral metabolism, who will find it an essential work of reference.—John CHALMERS.

Symposium on Myelomeningocele, Hartford, Connecticut, November 1970. Produced by the Committee on the Care of the Handicapped Child and under the sponsorship of the Committee on Continuing Education, the American Academy of Orthopaedic Surgeons. With twenty-five contributors. 25×17 cm. Pp. xiii+317, with 216 figures and 27 tables. Index. 1972. Saint Louis: The C. V. Mosby Company. Distributed in Great Britain—London: Henry Kimpton. Price £10.80.

Its stated aim is to present an up-to-date appraisal of the whole field of myelomeningocele and related disorders, and it represents the combined experience of workers from both sides of the Atlantic. Inevitably in a publication of this type, where material is drawn from papers, exhibits and discussions, the contents are of variable quality and several of the chapters still have the flavour of material prepared for oral presentation. As is also to be expected in a field which has developed considerably over the last ten years, most of the contributors can attempt little more than an outline of their topics. Some authors have however succeeded in introducing sufficient detail to make their chapters useful works of reference, and this is particularly true of the sections on pathology and of a valuable chapter on antibiotic therapy. Much of the information is available elsewhere, usually in a more detailed form, and the publication has therefore little to offer the specialist in his own field. It should, however, be of considerable value to those workers who wish to keep abreast of developments in the subject as a whole. Most important of all, the symposium conveys more than a hint of the growing concern about the social and ethical problems associated with spina bifida and a foretaste of the reappraisals and philosophical discussions which since 1970 have begun to dominate this difficult field.—T. DUCKWORTH.

Instructional Course Lectures. Volume XXI. The American Academy of Orthopaedic Surgeons. With thirty-nine contributors. 28.5×22 cm. Pp. xiii+331, with 515 figures and some tables. Index. 1972. Saint Louis: The C. V. Mosby Company. London: Henry Kimpton. Price £10.10.

The high standard and variety of this traditional record of lectures given to the American Academy of Orthopaedic Surgeons is once more apparent in this recent volume. Two subjects predominate, slipping of the upper femoral epiphysis and hallux valgus in the adolescent and adult. There are multiple sections on the prevention and therapy of pyogenic infections in orthopaedics and the management of chronic orthopaedic pain. Other subjects spread over a wide range make this a very worthwhile volume.—P. H. NEWMAN.