

## BOOK REVIEW

**Arthritis and Allied Conditions. A Textbook of Rheumatology.** Edited by Joseph Lee Hollander. 6th ed., 1960. Pp. 1306. Kimpton, London. (150s.)

The sixth edition of this well-established textbook, originally based on Comroe's "Arthritis", has been largely re-written and nineteen new chapters have been added. The contributors include many of the leading authorities in the sphere of rheumatic diseases in North America and the volume is packed with up-to-date expert views in this field.

Dr. John Lansbury has a new chapter on methods of evaluating rheumatoid arthritis. This is a most important subject in view of the many clinical trials of anti-rheumatic drugs which are now being carried out. The author has given a clear summary of the present position, pointing out many inadequacies in the methods in use at the present time. He gives stimulating ideas for improvement in techniques though the reviewer doubts whether morning stiffness can yet be measured.

Dr. E. P. Engleman has an excellent chapter on the basic treatment of rheumatoid arthritis, pointing out the necessity for systemic, emotional, and articular rest with good advice on analgesics and diet.

Dr. J. J. Bunim has contributed a first-class review of the chemistry, physiology, and metabolic effects of corticosteroids, and has included the new work on the cortisol-binding protein transcortin as well as the latest views on absorption and distribution of steroids and of the metabolic fate and excretion of these substances. This is one of the outstanding chapters in the book. He also has an excellent chapter on the use of synthetic corticosteroids in rheumatoid arthritis, including the clinical considerations, limitations, and adverse effects with most helpful advice on individual steroid preparations.

Dr. Hollander himself, from his large experience, has written most wisely on the value of intra-articular steroid therapy with helpful diagrams and photographs showing methods of injection for various joints. He deals sensibly with the recent reports that "Charcot's arthropathy" may occur after this treatment, pointing out that it is a possibility and that careful radiological supervision is necessary. In his very large series the incidence of this complication is a fraction of 1 per cent.

Dr. Wallace Graham has a wise chapter on the relation-

ship of infection to rheumatoid arthritis, pointing out the absence of any controlled observations as to the validity of this theory; yet, as he says, "As long as the cause of rheumatoid arthritis is unknown, the possible role of as yet unknown infectious agents remains a possibility."

The diffuse connective tissue diseases, systemic lupus erythematosus, polyarteritis, and dermatomyositis are superbly covered by Dr. L. E. Shulman and Dr. Harvey, with clear descriptions of the clinical and pathological features. They point out that the introduction of corticotrophin and cortisone provided the first significant advance in the management of patients with systemic lupus erythematosus, but that the basic disease process is not fundamentally altered by these drugs. They observe that the relationship between polyarteritis and rheumatoid arthritis is not yet clearly understood. They discuss at length the role of peripheral neuritis in polyarteritis and in rheumatoid arthritis treated with steroids and quote the opinion of Sokoloff and Bunim, that "Polyarteritis in rheumatoid arthritis may be interpreted as an exaggerated form of rheumatoid arthritis rather than an independent finding."

There is an excellent chapter on gout and the newer uricosuric agents by Dr. C. J. Smyth, who points out the curious paradoxical effect of salicylates which in small doses raise the serum uric acid level yet in very large doses cause uricosuria.

The one disappointing section of this textbook is that on degenerative joint disease. Admittedly there is not nearly so much clinical or pathological research being undertaken in this field as in rheumatoid arthritis or the diffuse connective tissue diseases, but out of 1,280 pages only about fifty are devoted to the very common condition of osteoarthritis. Phenylbutazone, which is used so widely, is covered in only a few lines of the text.

Dr. Joseph Hollander and his team of contributing editors are to be heartily congratulated on the new edition of this magnificent volume. The book has grown in size owing to the increasing interest of the whole medical profession and to the increasing amount of research which is being carried out. No physician or surgeon with an interest in this large group of common diseases can afford to be without this book.

OSWALD SAVAGE.

## BRITISH COUNCIL

The following is a resumé of a paper given by Prof. Nestorov and Dr. Sachkov, of the Academy of Medical Sciences of Moscow, entitled "An Elaboration of a Special Method for the Diagnosis of Rheumatic Fever and the Degree of its Activity".

The most important deficiency of the known methods for the diagnosis of rheumatic fever is their non-specificity.

When considering rheumatic fever and other collagen diseases as auto-immune diseases, in the pathogenesis of which streptococcal infection plays the main part, we

believe that the study of the main antigens and antibodies which participate in the process is most promising.

Changes in the antigenic structure of human protein in the affected organisms are essential for diagnosis, as is partly apparent when examining the antigenic properties of human serum.

In typical cases of rheumatic fever and rheumatoid arthritis, we separated electrophoretically homogeneous fractions of the serum proteins and used them for the immunization of rabbits in order to obtain appropriate antisera.

Antisera for single fractions were studied in cross-experiments with sera of patients with rheumatic fever, rheumatoid arthritis, lupus erythematosus, scleroderma, and other collagen and non-collagen diseases, as well as with sera of perfectly healthy individuals.

Various immunological processes were worked out and used for this purpose as well as certain physicochemical methods, such as di-electrical measurements, immuno-electrophoresis in gel and on paper, gel-precipitation, etc.

The results of our investigations carried out by various methods showed, as a rule, the presence of antigens in the serum of rheumatic fever, rheumatoid arthritis, and of other collagen diseases, which were apparently specific for a given group of diseases.

Apart from the common antigen in blood serum, it is possible, we believe, to determine the antigen which is specific for rheumatic fever.

Accordingly, we propose to apply this method to the specific diagnosis of rheumatic fever and the degree of its activity.

The basis of this method is the reaction of the investigated serum with the diagnostic rabbit antiserum against serum gamma-globulin of rheumatic fever patients by means of immuno-electrophoresis.

There is reason to believe that a further study of the antigenic properties of serum proteins can lead to more differentiated clinico-immunological characteristics of different forms and stages of rheumatic fever and, possibly, to a specific diagnosis of other collagen diseases.

## NEW ZEALAND RHEUMATISM ASSOCIATION

### *Annual Report, 1960*

The 13th Annual General Meeting of the New Zealand Rheumatism Association was held at Palmerston North Hospital on October 6-7, 1960. The President, Dr. A. Rowatt Brown, and nineteen members were present. The following officers were elected for the period 1960-62:

<i>President:</i>	Dr. B. S. Rose.
<i>President-Elect:</i>	Dr. F. H. Swan.
<i>Secretary-Treasurer:</i>	Dr. I. C. Isdale, Queen Elizabeth Hospital, Rotorua.
<i>Committee:</i>	Dr. C. Gresson. Dr. Moore Tweed. Dr. J. Valentine. Dr. T. C. Highton. Mr. C. Milsom.
<i>Ex officio:</i>	Dr. A. Rowatt Brown. Prof. E. Sayers.

A programme for 1960-61 was outlined to enlarge the scope of the New Zealand Branch of the Empire Rheumatism Council, and Dr. Wrigley was congratulated on being appointed Empire Rheumatism Council Travelling Fellow for 1960. It was proposed to discuss future appointments with the Australian Rheumatism Council at the B.M.A. Conference in Auckland in 1961.

Dr. C. Gresson reported for the Advisory Committee on Research on the work being done in the Medical School at Dunedin; a vote of thanks to the

Empire Rheumatism Council was passed and a hope expressed that the grant might be continued in the future.

Dr. A. Rowatt Brown took as the subject of his Presidential Address "Rheumatism, A National Problem".

A clinical session of interesting cases was arranged, with a pathological demonstration, and the following papers were given:

DR. T. C. HIGHTON and DR. E. J. WILLIAMSON (*Department of Medicine, University of Otago*): The Influence of Some Nitriles and Some Pyrrolidine Compounds on the Formation of New Collagen.\*

DR. I. C. ISDALE and DR. B. S. ROSE: The Vanishing Hip.

DR. R. D. WIGLEY, DR. H. E. HUTCHINGS, and DR. B. P. MACLAURIN: The Relationship of Chronic Ulcerative Colitis to the Rheumatic Disorders.

DR. B. S. ROSE and DR. I. C. ISDALE: Ankylosing Hyperostosis.

MR. DAWSON reviewed a series of cases treated by surgery and presented a short film showing his cures.

MR. CHRISTIE presented a paper on aspects of surgery in rheumatic disease.

DR. I. BROADFOOT gave a paper on electronography in rheumatic disease.

\* Our thanks are due to the New Zealand Medical Research Council for paying the salary of T. C. Highton and to the Empire Rheumatism Council for a very generous grant which paid the salary of E. J. Williamson and is paying the expenses of this and related research programmes in this Department.