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PROGRAMME OF MEETINGS, 1966

March 25: Clinical Meeting, Rheumatism Research Wing, Birmingham.

May 20: Meeting at Harrogate.

October 7: Heberden Round conducted by Dr. R. M. Mason at the London Hospital.

November 18: Heberden Oration by Prof. E. G. L. Bywaters and Annual General Meeting at the Wellcome Foundation, London. Annual Dinner at the Royal College of Physicians, Regents Park, London.

DR. HUGH CLEGG

Dr. Hugh Clegg retired from the Editorship of the *British Medical Journal* at the beginning of this year and so also from the Editorial Board of the *Annals*. It was due to his foresight and help that our Journal was adopted by the British Medical Association as one of their quarterly specialist journals which he inaugurated

in 1945, soon after the war. He has always exerted an active influence and rheumatology in Great Britain owes him much.

The Editor and members of the Editorial Committee and Board will miss his wise guidance, but wish him well in his retirement.

LIGUE INTERNATIONALE CONTRE LE RHUMATISME

XI International Congress of Rheumatology, Argentina, 1965

The report of the Secretary-General, which was presented at the recent Congress held at Mar del Plata, Argentina, from December 5 to 11, 1965, mentioned the progress made during the past 4 years, but stressed the continuing shortage of funds. In more cheerful vein he reported the increasing interest in rheumatology which had been stimulated in the World Health Organization (WHO) since the publication of the excellent Report of its Expert Committee on Rheumatic Diseases (No. 78) in 1954.

Professor Delbarre of Paris has been appointed representative of the Ligue to the World Health

Organization. In 1963 the Pan-American section co-sponsored a Symposium on Rheumatic Fever in the Americas. The President and Secretaries of the Ligue have recently been appointed *ex-officio* members of the advisory Committee on Arthritis for the International Society for Rehabilitation of the Disabled (ISRDI). Plans are in hand for a further intensification of effort and an improvement in the financial structure of the Ligue.

The Congress was attended by over a thousand doctors; 347 scientific papers were read and another

forty were accepted by title only. Teaching symposia took the form of up-to-date reviews of progress in the following fields: biology and pathology of connective tissue; nomenclature and classification; immunology; experimental models of arthritis; gout; epidemiology; osteo-arthritis; rehabilitation and orthopaedic measures; therapeutics. For the first time, simultaneous translation was available at all the sessions of the Congress.

Education.—The Congress itself was preceded by an international forum on education in rheumatism. This was a valuable session, since it produced for the first time internationally agreed minimum standards for the training of rheumatologists and the establishment of rheumatism units in relationship to the numbers of population and facilities for research and university education. It is to be hoped that the recommendations of this forum will be published in the *Annals* at a later date.

Experimental Studies.—Of the experimental work, the star paper was undoubtedly that of W. J. Fahlberg and his colleagues from Baylor, Texas. They had developed a new and successful technique for the culture of mycoplasma organisms from swine arthritis, using a medium containing mucins, and with this they had fulfilled Koch's postulates—for the pig. Using the same techniques, they had isolated an immunologically homogeneous mycoplasma strain from the synovial fluid or biopsy of seventeen out of nineteen patients with juvenile or adult rheumatoid arthritis (RA). Synovial fluid cytology produced a spate of papers and observations. The "ragocyte" (or to some, the RA cell) is a synovial cell which, when examined under phase-contrast microscopy, contains rounded translucent bodies. These vary in number from one or two, to such a large mass that the cell looks like a transparent blackberry. Delbarre and others (*Paris*) found this cell in 50 per cent. of synovial fluids from patients with inflammatory arthritis. The phenomenon did not seem to be related to RA factor, and could be reproduced experimentally by inducing an Arthus reaction in animal joints, suggesting that it represented the pinocytosis of soluble antigen-antibody (AG-AB) complexes. Broder and Baumal (*Toronto*) had found circulating AG-AB complexes in rheumatoid arthritis which were chemically distinct from rheumatoid factor and had the property of causing tissue injury. (It seemed that these rather than rheumatoid factor might be the cause of the specific inclusions of the ragocyte.) A similar inclusion body was studied in RA and other inflammatory arthritides by Wilkens and Healey (*Seattle*) who also found that its presence correlated with inflammation but not with rheumatoid factor either in the synovial fluid or in extracts of leucocytes from the effusion. Pekin (*New Jersey*) found a distinctive and previously unrecorded leucocyte-containing macrophage in the synovial fluid of eight patients with Reiter's syndrome, and Coste (*Paris*) reviewed studies on virus-like inclusions found in

urethral cells in 24 out of thirty and in the synovial fluid cells in ten out of sixteen patients with this syndrome.

Clinical Studies.—Three papers, from Curry and others (*London Hospital*), de Sèze and his colleagues (*Paris*), and Serre and co-workers (*Paris*), discussed the problem of chondrocalcinosis articularis. The two new points which emerged from these papers were, first, that haemochromatosis had to be added to the list of diseases which could predispose articular cartilage to calcification (and it was confirmed that the radio-opacity was due to calcium salts and not to deposited iron) and secondly, that a much more exact technique of crystallography than that commonly employed was needed for the further study and analysis of this phenomenon.

The surgery of rheumatoid arthritis attracted a number of review papers, but few new principles emerged except perhaps that of the so-called hemi-arthroplasty of the knee described by Swanson (*Toronto*) and based on the work of his surgical colleague, Macintosh. The total experience of this operation was over 170 cases with up to 11 years' follow-up. However, Swanson's paper reviewed only those 56 operations done in 36 patients with rheumatoid arthritis with a follow-up of at least 3 years. Striking relief of pain occurred in all, without loss of movement, and, unexpectedly, a reduction in the titre of rheumatoid factor in some. The operation was particularly indicated in flexed and/or laterally unstable knees and could be combined with wedging procedures to correct deformity. Severely bedridden patients were best got up in calipers for a year or so in order to correct osteoporosis and other adverse factors before submission to operation. The "hanging hip" operation of Voss came in for a critical review from Zinn (*Bad Ragaz*), who had found that on follow-up this operation compared very unfavourably with the more usual intertrochanteric osteotomy procedures. Rehabilitation or, when necessary, second operations were severely prejudiced by the Voss procedure.

Jones and Engleman (*California*) following histological studies pointed out that fat embolism could be the cause of avascular necrosis of articular bone in corticosteroid-treated patients. In their patients, this had followed unusually high doses given for immuno-suppressive reasons. In an interesting discussion, they suggested that fat embolism might arise from fatty changes in the liver, and similarly that fatty livers might account for the avascular necroses which sometimes occur in severe alcoholism. It was suggested that fat embolization, from rupture of fat-bearing cells, rather than free nitrogen gas bubbles, might be the immediate cause of bone pain and avascular necrosis in Caisson disease. Bravo (*Denver*) had noted arthritis of various sorts (including five patients with avascular necrosis of bone) in 43·6 per cent. of 55 patients surviving operations for renal transplants. Thompson (*Newcastle*) and McEwen and Kulka (*New York and Boston*) read papers of considerable academic interest to those concerned with the classification of chronic arthritis. On the basis of capillary microscopy and three-dimensional reconstruction of the small vessels of the skin, they had shown

that there was a change in the microcirculation of the skin in areas remote from the rash in patients with psoriasis and arthritis. Moreover, these changes could be detected in certain patients with sero-negative polyarthritis. Thompson found that a weak or absent response to Trifulin (in the absence of therapy) correlated well with this capillary change and might be used as a clinical or screening test. Olhagen and Franksson (Stockholm) had produced thoracic duct fistulae in two patients with severe disseminated lupus erythematosus. Drainage of lymph resulted in the loss from the body of a high proportion of antibody-forming lymphocytes and was followed in their two patients by impressive temporary remissions of serious disease.

Gout.—A number of papers confirmed that allopurinol was a very effective agent for decreasing uric acid synthesis and that, so far, in an experience of up to 2 years of therapy, there has been few adverse effects of continuous treatment. Thus, this drug is now becoming established as the only one which can prevent and remove tophaceous deposits in gouty patients with poor renal function. As these are the poor-risk patients for whom conventional anti-gout therapy has little to offer, it is to be hoped that this drug will be released from its present very restricted distribution before too long, for this type of case. Ogryzlo (Toronto) had, unfortunately, found that there was as yet no evidence that renal disease in gouty patients actually improved as a result of the use of this drug.

Rheumatic Fever.—There were very few papers on rheumatic fever, which no doubt reflects the decreased importance of this disease as a cause of morbidity. Fischel (New York) presented the 10-year and final follow-up of the U.S.-U.K. co-operative rheumatic fever study. At this stage the study had become mostly an exercise in natural history. It demonstrated again the mildness and generally good prognosis of the vast majority of attacks of rheumatic fever in the countries concerned. Rheumatic deaths were practically confined to patients who had evidence of previous carditis when first seen—emphasizing that potentially dangerous drugs such as steroids are needed in the treatment of only a tiny minority of cases.

Therapy.—As is usual at such congresses, great numbers of papers were devoted to various forms of treatment. Thus, no less than twenty papers concerned Indomethacine. The fresh wind of Bradford Hill had not blown very widely over the endless pampas of this part of the medical world, and most of these papers were anecdotal recitals of the speakers' own impressions. The main justification for publishing or giving programme space to accounts of large uncontrolled series of patients on this or that treatment is that this is the only way in which the more serious but very rare complications of a drug can be picked up. Yet the voice of Robinson (Sydney) was almost alone in the wilderness, drawing attention to serious complications which may follow the use of Indomethacine. These included epilepsy and several deaths, possibly related to the drug.

Another lone voice, heard by some with considerable scepticism, was that of Traut (Chicago) reviewing up to 10 years of placebo therapy by tablet or injection. "The number of rheumatic patients (mostly with degenerative joint disease) benefiting from placebos equals or exceeds those favourably influenced by any or all methods of therapy, including salicylates or cortisone." This voice had clearly not been heard by most of the protagonists of "Rumalon" (an unspecified extract of cartilage and bone marrow) given by injection for osteo-arthritis (fifteen papers) with, of course, the inevitable 70 per cent. of good results, and even higher in early cases. Yet some experimental evidence was offered that this extract has indeed some biological activity in stimulating cartilage repair and in protecting cartilage from enzymic damage, and it cannot be dismissed entirely, although the clinical evidence, in so symptomatically variable a disease as osteo-arthritis, is as yet unconvincing. Dimethylsulphoxide (DMSO) came out for a brief clinical airing, several papers being presented on studies of possible "anti-rheumatic" activities done before supplies of this drug for clinical purposes were withdrawn because of possible damage to the eyes. Of most interest here was the demonstration by Weissman (New York) that this universal solvent was effective *in vitro* in the microphysiology of inflammation; Weissman showed a striking ability of DMSO to potentiate both cortisone and chloroquine in stabilizing suspensions of lysosomes against rupture. (Lysosomes are subcellular organelles containing tissue-destructive enzymes, rupture of which is thought to be the initiating mechanism of damage in inflammatory states.)

Organization.—Congresses such as these must provide something for everybody, so that there is a wide range of topics and levels of presentation, and simultaneous sessions must be held. Yet these enormous numbers of papers on single topics, often repeating the same experiences, are difficult to listen to, and obstruct by sheer numbers the main purpose of the congress, namely the dissemination of scientific information. The listener comes to feel that a gramophone record (accompanying a mechanical gesticulator) would be equally effective. Congresses continually grow in size and the participants often depend for financial support for their attendance on the acceptance of their papers for reading. Yet, if an ever-increasing number of papers is accepted, the system will grind to a halt. Already the programme of this congress was so tightly organized that little or no discussion took place even after papers of major interest. The "Rapporteur" system is one answer: all papers are accepted and are published in the proceedings of the congress, but they are grouped together by subject and are submitted to a "rapporteur" who extracts the important points from each paper and reads his summary which is then discussed by all the author-

represented. In this way, much useful time can be saved without loss of scientific interchange. Star papers or specially invited papers are read in the usual way as at present. It is to be hoped that the

Rapporteur system may be adopted for future congresses.

The next International Congress is to be held in Prague in 1969.

BRAZIL

Dr. Jacques Houli, head of the Division of Rheumatology of the Faculty of Medicine of the University of Brazil, has been appointed Professor of Internal Medicine in the School of Medicine and Surgery, and will retain control of the Division of Rheumatology.

GAIRDNER FOUNDATION AWARDS

Ontario, Canada, 1965

The Gairdner Foundation award winners for 1965 include several workers whose researches are of importance in the field of rheumatology.

DR. CHARLES P. LEBLOND, Head of the Department of Anatomy, McGill University, Montreal, has received wide recognition for developing the procedure known as autoradiography.

DR. JEROME W. CONN, Professor of Medicine, University Hospital, Ann Arbor, Michigan, was the first to describe the clinical significance of aldosterone.

DR. R. R. A. COOMBS, Reader in Immunology, Department of Pathology, Cambridge University, London, England, introduced a special test to demonstrate the presence of an antibody on the surface of red blood cells. This test, devised 20 years ago, has led to important research on the involvement of antibodies in disease.

DR. CHARLES E. DENT, Professor of Human Metabolism, University College Hospital, London, England, first applied the technique of paper chromatography which has led to the discovery of disease caused by an imbalance of amino acids.

DR. DANIEL J. MCCARTY, Associate Professor of Medicine, Hahnemann Medical College and Hospital, Philadelphia, has discovered that gout, and possibly rheumatoid arthritis, may result from a type of indigestion of certain body cells. He demonstrated first with uric acid crystals, then with calcium crystals, that acute arthritis may be produced if the white blood cells of the fluids in and around the joints take them up and try to digest them. Once the crystals reach the interior of the blood cells, they cause a reaction whereby the cells release a substance which then produces inflammation of the joint. This may have a bearing on the occurrence of acute attacks of gout.