NOW AND THEN

Rheumatology in the past

1935–1955

A popular television series in the past, *Dr Findlay's Casebook*, I think it was called, gave an entertaining and accurate picture of medicine as it was practised in this country around 1928. Diagnosis and prognosis were important and a kindly sympathetic bedside manner helped more than most of the drugs then available. In those days the drugs available for the treatment of the rheumatic disorders were the salicylates, particularly aspirin, phenacetin, and codeine, but little else. Gold salts were being used in the treatment of pulmonary tuberculosis, and in 1929 Jacques Forestier, of Aix Les Bains, published his results of their use in rheumatoid arthritis, the rationale being that the inflammatory changes in the tissues were in some respects not dissimilar. This became popular in the next few years and Professor Stanley Hartfall and his colleagues in Leeds published results on large numbers of rheumatoid patients so treated, but it was not until the war years that a controlled series was published in 1942 by T N Fraser in Glasgow.

Treatment of gout in the 1930s was by avoidance of alcoholic and dietetic indiscretions and the use of colchicine in the acute attack. Treatment of rheumatic fever was by salicylates and for the chronic arthropathies physical measures, graded rest, and salicylates and other analgesics were used. Spa treatment was available in this country at Bath, Harrogate, Droitwich, and several other centres for those who could afford it, but at the hospitals most patients with rheumatoid arthritis, osteoarthritis or other forms of chronic arthritis were treated in the departments of physical medicine or orthopaedic surgery. Such patients were rarely admitted and treated as inpatients as so many other patients with more serious infective or neoplastic disorders were considered more suitable for admission. Tuberculous disease was catered for in special hospitals and sanatoria, and patients with rheumatic heart disease were present in almost all paediatric and adult medical wards throughout the land.

I set my first date in this paper as 1935, for this was the year that the sulphonamides first made their appearance in this country as *prontosil rubrum*. These sulpha drugs had a dramatic effect on streptococcal, gonococcal, and some other infections, and their therapeutic and prophylactic use rapidly became evident; rheumatic fever, already diminishing in incidence, became for the first time a preventable disease. In one general hospital in 1935–8 the children's ward under Dr Bernard Schlesinger of Great Ormond Street, a doctor keenly interested in the rheumatic disorders, always contained patients with Still's disease and rheu-

matic fever, but the adult wards rarely held a rheumatoid patient.

Then came the war in September 1939. At that time there was no such specialty as rheumatology. Rheumatologists as medical specialists equivalent to neurologists or dermatologists did not exist, though several doctors and surgeons in London were already deeply involved with rheumatology—Drs Philip Ellman and Francis Bach at St Stephens Hospital in Fulham; Dr W S C Copeman at the Hospital of St John and St Elizabeth in St John's Wood and the West London Hospital at Hammersmith; doctors at the Charterhouse Clinic and the British Red Cross Centre in Peto Place. The International and European Leagues Against Rheumatism had been formed in 1928, the Heberden Society in 1936, and this was later to become the British Society for Rheumatology when it merged with the British Association for Rheumatology and Rehabilitation in 1984. There were many doctors and surgeons in Great Britain who were active in the field in these prewar years—Lord Horder in London, Lord Cohen of Birkenhead in Liverpool, Professor Stanley Davidson in Edinburgh, Dr George Kersley in Bath, and many others, but, as stated above, there was no such thing as a rheumatologist in Great Britain and no professors of rheumatology in its universities. The first journal devoted to the arthritic disorders, the *Annals of the Rheumatic Diseases*, started in 1939, preceding the first similar American journal, *Arthritis and Rheumatism*, by some 20 years. In those early days several eminent American rheumatologists, including Philip Hench, were on the editorial board of the *Annals*.

Penicillin in 1939 was being produced in small amounts in Oxford but did not become available in the armed services until around 1943–4, when it made a dramatic difference to war wounds and infections of bone and joint in doses of 30 000 units three hourly by intramuscular injection. The treatment of ankylosing spondylitis before the war had been to apply plaster casts to prevent the spinal flexion leaving the unfortunate patient looking at his feet and serial plaster casts aiming at straightening the spine. This later gave place to a more active programme of exercises, activity, and spinal mobilisation. During and in the first few postwar years officers in the Royal Army Medical Corps were much more aware of the condition, diagnosing it more often, so that after the war the average time between onset of symptoms and diagnosis of the condition was three years in the services but seven years in civilian medicine. Reiter's disease, first described by Reiter in the first world war, became more

evident after the second world war, but the most dramatic events after the war were the conquering of rheumatic fever and tuberculous disease.

In rheumatology the most dramatic event was Philip Hench's demonstration in 1949 in New York of the anti-inflammatory effects of cortisone, for which he was awarded a Nobel prize. This led to a great demand for cortisone world wide and at the high dose often used gave rise to a wave of unpleasant side effects, resulting, as has so often happened in therapeutics, in the wonder drug of yesterday becoming the toxic agent of today. In Great Britain the National Health Service had been started in 1948 and supplies of cortisone were not made available until multicentre controlled clinical trials had been completed with cortisone generously provided by George Merck (of the firm who made it in Rahway, New Jersey) and thus fewer of the bad effects of overdosage were seen than overseas. Side effects were still seen here, however, and although Hench and his colleagues had been careful to refer to the highly dramatic anti-inflammatory effects in rheumatoid arthritis as physiological demonstrations and not as practical therapeutics, the tendency was to give a higher dose than was strictly necessary to get a dramatic improvement, and to reduce or stop treatment prematurely or too rapidly, often with disastrous results.

Nevertheless, the advent of cortisone and corticotrophin did a great deal for rheumatology as many clinical and research workers entered the field, which now looked much more interesting. The dramatic anti-inflammatory effects of these agents affected all specialities and benefited some disorders of almost all systems, ocular, respiratory, vascular, and others, but with not infrequent side effects. Thus when phenylbutazone (Butazolidin, Geigy) appeared in 1952 it was marketed not as another antipyretic analgesic agent, like aspirin, but as a non-steroidal anti-inflammatory drug (the first so-called NSAID). In the same year the first agent marketed to lower serum uric acid, probenecid (Benemid, Merck, Sharp & Dohme), appeared, so for gouty sufferers 1952 could thereafter be called *anno podagrae* as not only had they now an agent to control their acute symptoms rapidly without causing colchicine induced diarrhoea but also one that would control their serum urate concentrations and prevent or diminish tophaceous deposits. But soon afterwards drugs previously used widely in rheumatology—phenacetin, amidopyrine, and some others—were withdrawn because of toxic side effects. Indeed it was the dislike of amidopyrine that led to the splitting off of phenylbutazone in the compound irgapyrine where it was used as a 'solubilising and potentiating agent' for amidopyrine. That led to the discovery that phenylbutazone was an effective anti-inflammatory analgesic antipyretic agent in its own right.

In the immediate pre- and postwar years the medical profession and the general public in Great Britain had become more conscious of the importance of the rheumatic disorders and the suffering and loss of work they caused. Clinics

devoted to the rheumatic disorders with beds set aside for investigation and treatment of these patients began to appear, my own being at Westminster Hospital in 1946. The Empire Rheumatism Council (now the Arthritis and Rheumatism Council) in its programme of research and education in the rheumatic disorders financed professorial chairs in the subject, the first three being in Manchester (J H Kellgren in 1953), followed by London (E G L Bywaters), and Edinburgh (J J R Duthie). As mentioned above, the controlled trial of gold salts in the treatment of rheumatoid arthritis by Fraser in 1942 was the first of its kind in the assessment of the therapeutic and toxic effects of a therapeutic agent, but after the war such clinical trials and clinical research in general became a regular part of rheumatological practice in many hospital centres. Surgeons became more involved and rheumatological and orthopaedic clinics worked closely together in many hospitals, though modern joint replacement had not yet arrived. Departments of physical medicine, from early days the main treatment centres for patients with chronic arthritis, played an even greater part, though the prewar spas had not been taken into the National Health Service.

At the close of a lecture I gave on clinical trials in 1951 an eminent senior colleague in the discussion afterwards stated that he would never allow any patient of his to participate in such a trial. He knew what was best for his patients and acted accordingly. I had to reply that in his practice with the drugs he was then using every treatment was an uncontrolled trial of one patient, and in fact many of the drugs he was then using were subsequently withdrawn—irgapyrine, amidopyrine, phenacetin, and an antigout agent, atophan.

So times have changed since 1955 in medicine and greatly in rheumatological practice. Rheumatologists are now accredited specialists, rheumatism clinics are more plentiful, clinical and laboratory research goes on in many centres, and the arthritic disorders are recognised as a dangerous, painful group of illnesses causing much loss of health and wealth. Many new therapeutic agents are available, as are many surgical operations, in their control. I often think of visits I used to pay with friends in Scotland before the war, staying the night before returning south. It was only on my third visit in 1933 they said, 'Oh, I don't think you've ever met granny' and took me upstairs to a cheerful elderly woman crippled with rheumatoid arthritis who had been in that upstairs room for some four years, looked after loyally by her family, her disability being accepted as unpleasant, inevitable, and largely untreatable. Although this is still half true, medicine, surgery, and community services have advanced very considerably since then, but only because more attention and more research has been devoted to the disorders which Lord Horder used to call 'the Cinderella of medicine'.

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