

# THE SOCIOLOGICAL ASPECTS OF THE TREATMENT OF ARTHRITIS

## NOTES ON A VISIT TO THE UNITED STATES

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By means of a grant made to him by the Empire Rheumatism Council the writer was enabled to spend some months in the United States studying various problems connected with the care and treatment of sufferers from the chronic rheumatic diseases. The greater part of the time was spent at the Robert Brigham Hospital, Boston. The writer would like to take this opportunity of expressing his gratitude to the members of the staff for their kindness in granting him free access to the various departments of the hospital, and also to record his appreciation of the courtesy and consideration which were shown to him at all the centres visited.

This report is concerned mainly with certain aspects of the organisation and methods of treatment in clinics for chronic rheumatic diseases which were visited.

Before any attempt is made to discuss treatment, it might serve a useful purpose to say something regarding the study of the ætiology and clinical course of the various forms of chronic arthritis. Many physicians in America believe that until sufficient knowledge is acquired of the natural course of the disease, it will not be possible to forecast with any degree of certainty the particular course which an individual case will follow. Likewise it will be impossible to assess accurately the significance of the various ætiological factors concerned or the value of any form of treatment employed. Only by studying large groups of patients over prolonged periods (throughout life if possible) can such knowledge be acquired. Such study includes details of family history, the anatomical and physiological make-up of the patient, environment, type of onset, factors believed to be of ætiological significance, the course of the disease before the patient was first examined, and a complete investigation, clinical and laboratory, which is repeated at regular intervals for as long as circumstances

permit. When a sufficiently large number of patients have been followed throughout the active phase of their disease and the data carefully analysed, it may become possible to divide cases of chronic arthritis into definite ætiological and clinical groups, and to foretell with some degree of accuracy what course the disease is likely to follow—*e.g.*, whether it will progress rapidly and result in severe incapacity early, or whether it will run a prolonged course with exacerbations and remissions. It should then be possible to distinguish the natural remissions of the disease from the remissions following various forms of treatment, or the permanent effects of some specific agent which may be discovered. A great deal of valuable work has already been carried out on this problem by Nissen, and his original papers provide illuminating reading. It is obvious that for the successful accomplishment of such a study the Rheumatic Centre must be established in the area from which the patients are drawn and not at a spa to which patients come from long distances and only stay for short periods.

#### SOCIAL AND HOME SERVICE

Although a great deal can be done for cases of chronic arthritis by prolonged treatment in hospital, it is too often the case that, when a patient returns to a home where conditions may be far from ideal, relapse takes place. To obtain the best results care and supervision must be extended beyond the patient's stay in hospital. On discharge the patient has to readjust himself to a mode of existence in which he has to assume a certain degree of independence and responsibility, and too often he finds himself unequal to the task. The result is that he either gives up the struggle and becomes a burden on relatives and friends or returns to hospital with an exacerbation of symptoms. In order that the transition from hospital to home may be made easier and the likelihood of relapse reduced to a minimum, physicians in American clinics have established Home and Social Service Departments whose function it is to see that everything possible is done to help the patient on his return to home and occupation. At such home service clinics patients report at regular intervals for medical and orthopædic overhaul, adjustments are made in the régime of treatment when necessary, and the patient's activities regulated and supervised. In addition, members of the social service staff pay periodic visits to the patient's home in order to

ascertain living conditions, and whether the orders of the physician in charge of the case are being carried out. Where home conditions are unfavourable, it is the duty of the social service workers to do all that lies in their power to improve them. Advice is given with regard to diet, clothing, personal hygiene, hours of rest, exercise in the fresh air, etc. In the case of a housewife, she is instructed as to how her day's work can be carried out with the minimum of fatigue, or, in certain cases where there is a young family, arrangements are made for them to be looked after elsewhere until the mother is capable of reassuming their care, or extra help is provided. Where the patient is incapable of following the régime prescribed because of financial difficulties, money is provided from whatever funds are available, charitable or otherwise. Where the occupation of a male patient is regarded as too strenuous, where surroundings at work are likely to exert a harmful influence on his disease (when work has to be done in damp, cold workrooms or shops, or outside in inclement weather, or is of such a nature as to throw undue strain on the affected joints), and where a change has been suggested by the physician in charge, it is the duty of the social service staff to enquire into all suitable alternatives and to give the patient every help in finding more congenial employment. When patients are unable to come to the home service clinic, the home visitor reports to the physician regarding their progress, and, should this be unsatisfactory, arrangements are made to have the patient brought back to hospital for a day or two, when the situation can be reviewed and the necessary measures adopted. At any arthritis clinic a certain number of patients will present themselves who are unsuitable for treatment for one reason or another—*e.g.*, because of a hopeless degree of crippling or because of organic visceral disease. The Social Service Department takes care of such patients and arranges for their disposal.

For the running of such a department a highly trained staff is essential. At American colleges courses in social service work are available, and young women are trained for this branch of medical work. The courses include instruction in the effect of environment on disease, in dietetics, in housing conditions, etc. Arthritis clinics also function as teaching units, where practical instruction is given to college students training for social service work. Volunteer workers undertake many of the duties which do not require special training, such as arranging

for financial aid where necessary, and seeing that the patient is receiving proper care at home.

Anyone who has been associated with the treatment of chronic arthritis will know only too well how prone the patients are to give up the struggle to get well as soon as the care and encouragement of doctor and hospital staff are removed. When assurance is given that care and treatment will be carried on by the home service staff, and that everything will be done to overcome the various problems which have to be faced on the resumption of an active existence, the transition from hospital to home is rendered much more agreeable, the maximum benefit can be derived from a stay in hospital, and the tendency to relapse reduced to a minimum. In actual fact the duration of hospitalisation may be materially shortened because there is no danger of a serious breakdown occurring without the knowledge of the physician in whose care the patient has been. In the writer's opinion, the establishment of such departments at all arthritis clinics would greatly increase their efficiency, and would amply justify the additional outlay entailed.

#### OCCUPATIONAL THERAPY IN THE TREATMENT OF CHRONIC ARTHRITIS

One of the most difficult aspects of the treatment of chronic arthritis of the rheumatoid type is the rehabilitation of the patient once the active stage of the disease has passed. Even when treatment has been instituted early in the disease and deformities have been prevented, the patients are left with varying degrees of muscular weakness. Carefully prescribed exercises may do a great deal to restore muscular tone and power, but the re-education of the patient in the co-ordinated use of various groups of muscles requires something more. Occupational therapy is used for this purpose in American clinics, and the excellent results obtained more than justify the expenditure required to establish departments with trained personnel. Its value in other diseases is well recognised in this country, but its use in the treatment of chronic arthritis appears to have been somewhat neglected. Occupational therapy, in addition to re-educating the patient in the use of the limbs, supplies a mental stimulus of great psychological value. The fact that the work undertaken has a definite object in view results in the patient's interest being

aroused, and his thoughts are occupied to the exclusion of morbid brooding on his physical disability. This promotes a healthier state of mind, and acts as an added incentive to get well.

In addition to being a valuable form of treatment, occupational therapy may be a means whereby a patient who cannot return to his former occupation may be enabled to earn a livelihood, or at least to contribute something towards the cost of his care. The money from the sale of goods manufactured by patients may be used to defray the cost of running the occupational therapy department, which can also function as a teaching unit for students, whose fees form another source of income.

In a high proportion of cases of rheumatoid arthritis the greatest disability results from deformities of the wrists, hands and fingers. In many instances the degree of deformity present is so marked that any return of useful function seems impossible, but it is truly remarkable how a course of occupational therapy under skilled supervision may enable the patient to perform highly specialised work, and to produce articles of real artistic merit. Examples of suitable occupations for such cases are weaving, basket making, leather work, painting, rug making and metal work. In cases where the elbows and shoulders are also involved the controls of a hand loom can be adjusted to secure any degree of motion desired in the affected joints. As improvement occurs, greater ranges of movement can be obtained by further adjustments. It is not necessary to wait until the patient is ambulatory before occupational therapy is started. Many types of work can be performed in bed or chair. When the patient is considered fit to resume walking, a preparatory course of work at a loom with foot controls or at a fretwork saw driven by a treadle or pedals will do a great deal to strengthen the legs before actual weight-bearing is begun.

In all forms of occupational therapy it is essential to arrange the work so that the patient maintains a good postural position while engaged in it. Much harm may result from allowing a patient to slouch over a bench or to sit hunched up in bed. Short-sighted patients should not be given fine work which will tend to make them assume a stooping position.

The writer was greatly impressed by the beneficial effects of such therapy and by its wide application in the treatment of the chronic rheumatic diseases.

MEDICAL AND ORTHOPÆDIC CO-OPERATION IN THE  
TREATMENT OF CHRONIC ARTHRITIS

Many of the problems to be faced in the treatment of chronic arthritis are orthopædic in nature. A thorough knowledge of orthopædic principles is necessary for the management both of the early stages of rheumatoid arthritis, when the object is to prevent deformity, and of the later stages, when it is necessary to correct established deformities. It occurs not infrequently that an orthopædic surgeon is called upon to perform an operation for the correction of a deformity which should never have arisen. On the other hand, a patient may be submitted to a major surgical operation when his general condition renders him totally unfit for such a procedure. Only by the closest co-operation between physician and surgeon can such disasters be avoided.

In the Robert Brigham Hospital, Boston, the medical and orthopædic staff share equally the responsibility of deciding what lines of treatment are to be adopted in each case. Every patient is seen at frequent intervals by the physician and surgeon. The problems of the individual case are discussed and measures are adopted which are calculated to produce the best results from both a medical and surgical point of view. For example, if it is decided that an operation is necessary to correct an established deformity, it is the duty of the physician to ensure that the patient is in the best possible condition before it is performed. Great emphasis is laid on this pre-operative period of preparation. It is claimed that post-operative results more than justify the delay. Not only is treatment directed towards improving the patient's general health, but by carefully planned exercises postural faults are corrected and the tone of the body musculature is improved. As a result, after the operation has been performed the patient is in the best possible condition to undertake the often arduous task of reclaiming the function of a joint long disused. The physician, in addition to attending to the physical condition in the pre-operative period, must also discover the patient's attitude of mind towards the operation and towards recovery in general. Many chronic arthritics who, on account of disability, have been confined to bed for long periods become apathetic. They no longer desire to return to active life, with its accompanying responsibilities. Such patients are regarded as very poor material from the surgical point of view, because,

no matter how successful the operation may be in securing a mechanically perfect result, the functional result may be negligible. Before any operative procedure is decided upon, both physician and surgeon must be satisfied that the patient understands what the operation means to him and his full co-operation secured. If the patient has lost the wish to get better, and where pre-operative psychotherapy fails to reanimate this desire, surgical interference is not advised.

The collaboration between physician and surgeon does not end with the patient's discharge from hospital. A member of the orthopædic staff is in attendance at the home service clinic, where all patients report at regular intervals. If, after an operation, a patient has been discharged with a supportive apparatus, such as a walking caliper or knee cage, adjustments soon become necessary, and these are carried out under the surgeon's supervision, and he also decides when the apparatus is to be discarded. At the same time the physician examines the patient and adjusts the medical régime as the need arises.

As a result of this close association of the physician and orthopædic surgeon in the treatment of patients during and after their stay in hospital, a surprisingly high proportion of cases of chronic arthritis return to active occupations and become wholly or partially self-supporting.

#### THE ORGANISATION OF AN ARTHRITIS UNIT

While visiting centres for the treatment of chronic rheumatic disease in America, the writer was impressed by the efficient manner in which these units were organised. The impression created at first was that much larger staffs are employed than is the case in an institution in this country with a similar number of beds. Closer study revealed that each member of the staff was fulfilling a function which was regarded as essential to the study and successful treatment of chronic rheumatic disease. The number and diversity of the services required is a striking commentary on the complexity of the problems involved. For the investigation of cases all the routine services must be available—radiological, biochemical, bacteriological, etc.—and, if the unit is to be independent of any other institution, the cost of supplying these facilities constitutes a serious obstacle to the establishment of new centres. The most obvious solution to this problem is that centres should be organised in connection with general

hospitals where such services are already available. In American clinics there are laboratories where special investigations can be carried out, and where ætiological problems are studied. It is only by providing such facilities that the best use can be made of the material, clinical, pathological and biochemical.

A rheumatism clinic should be equipped to treat both out-patients and in-patients. No limit should be imposed on the length of time that a patient may occupy a bed. The majority of cases require at least two to three months in hospital (the average stay of patients in the Robert Brigham Hospital, Boston, was two months six days), and some cases require much longer. As a result, the number of in-patients treated in a given period may appear relatively small in comparison with the number treated in the wards of a general hospital, but in organising a treatment centre the policy of adequate and prolonged treatment of the individual case should be strictly adhered to, as only thus will satisfactory, permanent results be obtained.

As has already been emphasised, a vitally important part of the work of the unit is the treatment and supervision of patients after their discharge; therefore, in planning the various departments (occupational therapy, physiotherapy, hydrotherapy) it must be borne in mind that the majority of in-patients will continue after discharge to attend the clinic for treatment, and provision must be made accordingly with regard to staff and equipment, as the number of such patients will become progressively larger the longer the clinic has been in existence.

Many sufferers from the less serious forms of rheumatic disease can be treated adequately as out-patients, and accommodation for examination of such patients should not be forgotten.

The successful treatment of chronic rheumatic disease depends far more on the skill of the physician in charge and his assistants than it does on various forms of treatment requiring complicated and expensive apparatus, and where funds are limited money is best spent on the provision of properly trained personnel. A great deal can be done with relatively simple equipment if treatment is in the hands of a skilled staff. This is well illustrated in certain American clinics where there is a surprising absence of many forms of apparatus which have come to be regarded as essential fittings in any physiotherapeutic department.

In conclusion a word might be said regarding the maintenance of case records. The writer was bewildered by the number of



different systems employed in the various hospitals and clinics visited. Such diversity of method renders it exceedingly difficult to compare the records of one clinic with those of another, and many valuable data, which might otherwise become available, are lost. The adoption of a standard method of recording history, clinical findings, results of special investigations, progress notes, and follow-up notes would greatly facilitate the comparison and analysis of the records of different clinics. By this means information regarding the ætiology, pathology and clinical course of large numbers of patients suffering from the different types of the chronic rheumatic diseases would become available.