Cardiac rehabilitation

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If skill in diagnosis singled out the physicians of the earlier part of the twentieth century, then the lure of drug therapy has surely been the main preoccupation of the doctors of today. But are either of these disciplines sufficient? Labelling a disease and handing out a bottle will not necessarily cure a sick man. The whole process to complete recovery, known by the rather unattractive term 'rehabilitation', is much more comprehensive than this and more interesting and satisfying to the doctor when properly managed. Almost neglected by practitioners of medicine, rehabilitation is practically ignored by teachers and unknown to students. The full return of a patient to his or her former state as a healthy person is, of course, our proper responsibility, requiring not only our diagnostic skill and therapeutic knowledge but also a careful application of humanity and frequent involvement with social and psychological factors. Not all of these are always directly within the doctor's province but he must recognize the need and know how to apply the available services.

Cardiologists in particular have special responsibilities in this direction. The emotions evoked by heart disease make it at once a form of illness feared by patients, their relatives, and even by their employers; it is, more than most conditions, liable to cause neurosis and prolonged invalidism which can be prevented by proper management. In addition there are strong economic claims for more active rehabilitation of cardiac patients at a time when ischaemic heart disease is being diagnosed in increasingly large numbers and particularly in younger age groups. It is vital to keep this productive section of the population as healthy as possible and to minimize periods of illness even if, by promoting longevity, other economic and social problems may be produced. Already a cost-benefit analysis study

of socioeconomic results of rehabilitation of patients with myocardial infarction has been planned in Sweden, with the expectation that the results may convince the government of the advisability of providing suitable services (Helander, 1970).

In the case of ischaemic heart disease the problem need not end after a successful return to work since there is a strong impression that an active, preferably supervised, programme of physical training and measures to prevent recurrence will enhance the physical efficiency of most patients. Admittedly these are formidable tasks.

Opponents of the 'cult' argue that rehabilitation is only necessary for patients who have not been properly managed in the early stages of their cardiac illness. This is partly true, and one would like to believe that it is a reason for its slow progress in the U.K. There is good evidence, however, to show that patients other than cardiac failure invalids, who have not made a rapid and complete recovery from a coronary episode, will benefit from some form of organized rehabilitation and that progressive training exercise, especially when supervised, improves efficiency in much the same way as it does in athletes, and will do the heart no harm.

What does rehabilitation involve? First of all, at the earliest possible stage, it implies reassurance for the patient who sees his life and livelihood threatened; this is achieved by discussing the topic of his future way of life and activities early on in the illness in a sympathetic and encouraging way. Simple explanation and positive and progressive programmes of early ambulation have helped enormously in diminishing the kind of frightened, neurotic state induced by rigid and prolonged periods of immobilization and invalidism, at one time advocated as essential. Discussion of a planned convalescence with the patient, and his relatives, the issue of a guidance booklet, and positive instructions about exercise, sleep, diet, smoking, and even

sexual activity (Hellerstein and Friedman, 1970) are most valuable but unquestionably time consuming for the doctor. Much can be lost at this stage if the family doctor is not taken into full co-operation by a timely discharge letter from the hospital with detailed instructions, indicating the severity of the infarct and the amount, if any, of estimated residual incapacity.

During convalescence the patient will not be under the care of the cardiologist directly, but there is value in his seeing all patients who have had a myocardial infarction at least once and preferably twice on follow-up. The first visit, at or about six weeks after discharge, permits reassessment of the patient's condition and his residual incapacity, discussion about further activity and possible return to work, as well as allowing serious consideration and explanation of measures to prevent recurrence. The second visit, preferably after return to work, allows for reassurance, further observation and assessment, and for arranging further review if return to work has been delayed or unsuccessful.

Thus one enters the third and often most challenging phase of rehabilitation, dealing with the hard core of patients with work problems of one sort or another. It is easy to quote figures indicating that 80 per cent will return to work without help (Sharland, 1964; Groden, 1967) and to argue that the remaining 20 per cent are employable. Such arguments beg the question. Figures such as 80 per cent usually come from departments already interested in rehabilitation to some extent; moreover, this figure may not be achieved for six to nine months after the infarction. There is reason to believe that a more positive approach to the problem can improve this proportion and reduce the period of convalescence and invalidism. This will demand an alteration in attitude and education of patients, relatives, family doctors, and employers as well as much greater involvement by cardiologists. In countries such as America and Germany, rehabilitation activity has often been stimulated and financed by industrialists who have quickly appreciated its importance. Most of Europe, including Eastern Europe, and also Australia are more advanced in this field than the United Kingdom where interest in rehabilitation, except for orthopaedics and neurosurgery, has been slow to develop despite this country's immediate postwar lead in traumatic rehabilitation.

The problems of the 'hard-core' cases are challenging. Psychological and social factors are often the most important and there are

genuine difficulties to be overcome in job suitability. The emergence of Work Classification Clinics consisting of cardiologist, social worker, psychiatrist, and disablement resettlement officer indicate the need for further consideration of these often tragic human case problems. Pitifully few such clinics exist in Britain today as a recent survey revealed (Groden, Semple, and Shaw, 1971), though visiting Hospital Resettlement Clinics are an attempt, albeit inadequate, to tackle the problem. The difficulties, of course, do not end with the work classification clinic. There are the hurdles of high unemployment figures, waiting lists at Government Industrial Rehabilitation Units and at retraining centres, and also generous sickness insurance benefits to be overcome. In addition there is a need to have more precise information about a patient's capabilities and the energy requirements of his employment and of his travel to work. Techniques for assessing these are now largely worked out (Asmussen, Klausen, and Poulsen, 1960), but their application to the clinical situation offers a challenge to the research-minded young cardiologist working in hospital or in co-operation with industrial physicians. There are also organizational difficulties in relation to Industrial Rehabilitation Units. Many doctors are not fully aware that these are run not by the National Health Service but by the Department of Employment, thus adding to all the problems which may arise between departments. Nor is it widely appreciated that their function is mainly assessment and not retraining, for which separate Retraining Institutes exist. Cardiologists from the N.H.S. are not employed by these rehabilitation units, despite the fact that 8 per cent of the patients admitted have a cardiac problem and this figure would be higher if more patients found their proper way directly from hospital. Perhaps the institution of small unsophisticated cardiac laboratories in the Government Industrial Rehabilitation Units, staffed on a part-time basis by young cardiologists and capable of assessing physical capacity in coronary patients (Bruce, 1970), would help to bridge a serious gap in our cardiac rehabilitation resources.

Finally, there comes the question of a positive programme aimed to prevent further coronary attacks. This involves consideration of all possible factors – diet, smoking, hypertension, abnormal lipid patterns, and exercise. The role of exercise should be further fully investigated and critically appraised in this country. The techniques are already in existence but their application in

properly controlled clinical trials is fraught with difficulty and remains almost untouched even in the more enthusiastic countries.

The World Health Organization has recently shown great interest in the problems of cardiac rehabilitation and all who are interested will find their reports valuable reading (Pisa, 1970). The Scientific Rehabilitation Council of the International Society of Cardiology also has been very active since its inception in 1968 (International Society of Cardiology, 1969; Cardiac Rehabilitation Council: Hohenried Symposium, 1969; Cambridge Symposium, 1970). Council members from five countries staged a roundtable conference on the role of exercise for patients with myocardial infarction at the recent VIth World Congress of Cardiology in London. In general British cardiology is not to the fore in this subject and not much has been published here. It is clear that the need is there and it should also be obvious that a new field for research and activity is waiting to be explored.

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