Progress in care

The Wessex Faculty of the Royal College of General Practitioners held a successful symposium at Southampton on 20–21 April 1974 in conjunction with the Spring General Meeting of the College. The symposium was sponsored by Geigy Pharmaceuticals.

A NEW LOOK AT CANCER

The morning session of this symposium was on *A New Look at Cancer*, and was introduced by the Faculty Provost, Dr J. Henneman.

Professor P. S. Byrne

Professor P. S. Byrne, Professor of General Practice at Manchester University and President of the Royal College of General Practitioners, opened the session in style. There are many theories of carcinogenesis—viral, immunological, chemical and even psychosomatic. In fact, there are many triggers, but only one bullet, though this comes in different sizes.

Progress was being made and would continue to be made in diagnosis largely because of heightened awareness and suspicion. Knowledge was expanding through studies like the ORC survey which has covered 46,000 patient-study years. (ORC, the French Embassy state stands for the European Organisation for Research on Treatment of Cancer.) The need to subject patients to many of the mutilating operations and iatrogenic radiotherapy trauma which we have hitherto believed offered the patient the best chance of survival or recovery is now being questioned.

Oncology centres

Professor Sir James Fraser

Professor Sir James Fraser, Professor of Surgery at the University of Southampton, described the setting up of an oncology centre. Oncology he defined as " that part of medical science concerned with the care of patients with cancer."

Reappraisal is needed. Cancer is a major health hazard and is second only to cardiovascular disease as a cause of death. Although some of our centres are the equal of any in the world, there is a lack of uniformity among them. Oncology is a multidisciplinary specialty; no one person has sufficient expertise to deal with all aspects.

There are three possible lines for improving the management of cancer: the establishment of ' cancer institutes ' solely directed towards cancer (but this concept is not acceptable here, as they would probably be regarded as " large death houses "); or, oncology could be allowed to develop in competition with other specialties (but we do not have the time for this as the problem is more urgent); or ' oncological centres ' can be set up.

This is a term coined advisedly by the Department of Health and it embraces the idea of a complex rather than a unit because the programme by which a patient is treated involves more services than can be housed in just one building.

In planning such a centre the deficiencies in the particular geographical area must be identified. It should be regarded as a community responsibility to care for these patients and one function of the centre itself should be to bring together field workers and research workers; it should also be self-critical.

Four centres are already established, including the Christie Holt Institute, the Royal Marsden, and the one in Southamption. They have achieved almost identical development plans.

The important features in such a project are: (a) creating a cancer profile for each of these regions; (b) launching a major public relations campaign, for the public must understand its scope; and (c) starting the organisation to run it. All concerned must be represented—the specialist, the general practitioner, the laboratory staff, and the epidemiologist.

Two other patterns of development have emerged. In Manchester, for example, the accent is on paediatrics, while in Southampton it is on the breast, lymphoma, and the pattern of care of the cancer patient, including the home, financial aspects, and humane considerations.

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Secondly, efforts have to be made throughout the whole region to answer the questions: how do we educate staff and public, how do we set up advice centres, what special treatment facilities must be provided, and can we orientate research towards solving specific problems—for instance, can we improve survival rates by early diagnosis in a small area such as Basingstoke?

Finally, Sir James said, at the outset it is easy to gain enthusiasm, support and cooperation, but this is an ongoing programme and these must be maintained, which needs communication.

Professor D. Acheson

Professor Donald Acheson, Dean of the Faculty of Medicine in the University of Southampton and Professor of Clinical Epidemiology, gave a stimulating account of an epidemiological investigation of the incidence of nasal cancer. This neoplasm occurs on or near the middle turbinate, presents when about the size of a 5p coin, and may be a papilliferous adenocarcinoma, squamous cell, or a transitional cell carcinoma; it invades the ethmoid.

Up to 1966 reports of nasal cancer related to occupation had been rare: in 1890 there were two cases among chromate production workers, in 1933 more than 60 in nickel refinery workers, and in 1952 four in workers involved in isopropyl alcohol production.

Then in 1966 Professor Acheson received a letter from Mr Ronald Macbeth, the Oxford ENT surgeon, saying that the number of patients from the High Wycombe area with malignant disease of the ethmoids seemed disproportionately large for the population involved: the condition seemed to affect male workers in the furniture trade and was most commonly adenocarcinoma rather than squamous celled, contrary to what is usually found. The incidence in Southern England as a whole is given below in the table.

TABLE 1

INCIDENCE PER MILLION POPULATION OF NASAL CARCINOMA IN SOUTHERN ENGLAND 1961–1965

	Men	*Women*
Adenocarcinoma	0·8	0·4
Squamous-celled carcinoma	7·0	3·5
All	9·4	5·6

A survey was therefore mounted in an area comprising Oxfordshire, Northamptonshire and parts of Buckinghamshire, Berkshire and and Wiltshire and a population was studied which by a happy coincidence numbered exactly one million.

The region included High Wycombe, where furniture making has been carried on since the seventeenth century using the local beech forests. In the nineteenth century this ceased to be a cottage industry and became industrialised, accounting for about one third of the whole furniture industry in Britain and producing 70 per cent of the nation's chairs. Since the Second World War the industry has been using less wood and more plastics and metal.

The survey revealed that there was indeed a microepidemic of nasal cancer among High Wycombe furniture makers, in whom the incidence of adenocarcinoma was between 500 and 1,000 per million per year.

The factors which might be operating were examined. There are three main categories of, work involved—the machining of the timber, the actual making and assembling of the furniture and the spraying and polishing. The question was whether the harmful agent resided in the first two processes, which caused dust, and the third, in which there were sprays but no dust. Between 1950 and 1973, it was found, 15 cases had been working in the machine shop, and 21 in the 'making' room, but only two in the polishing department. This suggested that the carcinogens were present in the hardwoods. Strangely enough, however, carpenters and joiners seem to be spared this hazard.

Professor Acheson and his colleagues then undertook an exercise in "epidemiological archeology" covering the period from 1890–1970, and reached the conclusion that for this carcinoma there is a latent period of about 40 years; in other words, cases appearing now reflect conditions in the industry between 1910 and 1935. These conditions may not still prevail, as exhaust ventilation was introduced in the late 1930s, but on the other hand they may. It is

perhaps justifiable to feel optimistic, though, for if one looks at the recent incidences in five-year periods, it looks as if a peak has been reached and is now declining.

A different situation exists in Northampton, where there is no significant amount of furniture making but where the boot and shoe industry employs about 15,000 men and 13,000 women. Nasal cancer among these workers was restricted to the men. Dust was limited to the 'preparation' and 'finishing' departments where all the workers were men. This unfortunately is a continuing epidemic and the risk is about half of that for furniture workers, or equivalent to the risk of developing Ca stomach. Shoe repairers are also liable to it.

Other trades have been identified with specific risks of this growth. They include inhalation of organic dusts by workers in the coalmining, textile manufacture, brewing and baking industries.

Childhood malignancy

Professor C. Normand

Professor Colin Normand, Professor of Child Health in the University of Southampton, presented some of the problems involved in childhood malignancy.

Although there has been a marked fall in deaths from all causes among children in the last 40 years, thanks mainly to improved treatment of infections, childhood mortality rates from malignant disease over the same period have hardly changed at all. Even so, the childhood component of neoplasm as a whole is small.

Between the ages of one and four years the commonest causes of death were accidents and poisoning; between five and eleven, neoplasia was the second commonest cause of death in boys, and the commonest in girls. Some tumours have been iatrogenic: for example, in the 1930s there was a vogue for studying the radiological appearances of the thyroid, and this increased the risk of subsequent carcinoma of thyroid by a factor of 1,000.

Many problems remain to be solved: why, for instance, are children with Down's syndrome hundreds of times more likely to develop leukaemia than other children? We could make progress, though, if we applied what we already know about malignancy in childhood.

In the case of intracranial tumours, prognosis still depends very largely on the histology, and there is no evidence that early diagnosis, neurosurgery, or radiotherapy help. The outcome for neuroblastoma, for example, is usually still bleak.

Wilm's tumour, leukaemia, and Hodgkin's disease account for one half of all childhood tumours. In the former, the survival rate is 80 per cent when the tumour is localised, and 50 per cent when metastases are present; there may be an extension into the renal vein and so it is inadvisable to subject the patient to palpation by too many people (which unfortunately includes students), as there is a danger of breaking off metastatic emboli.

Thirty per cent of all malignancies in children are due to leukaemia; 50 per cent of these are of the lymphoblastic type, in which survival may be five years. The problem with leukaemias is the difficulty of eradicating *all* the malignant tissue; as little as one gram of residual malignant tissue is capable of proliferation. While increasingly effective chemotherapeutic agents and regimens of agents have been discovered, some leukaemic cells remain sequestered—in the cerebrospinal fluid, for example—and not exposed to chemotherapy.

Over the years, though, different treatments have led to an increasing number of survivors. The induction course often chosen nowadays consists of prednisolone with vincristine, which has the advantage of causing relatively little damage to the haemopoietic precursors; cerebrospinal leukaemia is treated by intrathecal methotrexate. Complicated programmes of chemotherapy have been formulated for subsequent courses as a result of which 50 per cent or more of patients may be expected to survive for a long time.

Breast cancer

Professor Fraser

Professor Fraser then returned to describe breast cancer. Survival rates differ almost regardless of the extent of treatment, and there is a proportion of survivors even among those who are not treated at all. The tendency nowadays therefore is to undertake less and less operative intervention.

The vast majority of patients dying of their disease do so because it has already extended

before operation. It is now known that local and distant metastases appear simultaneously—a fact which may weigh in current attitudes towards radical mastectomy. Certainly there is plenty of room for improvement in assessing operability: Galasko has said that 25 per cent of assessments are incorrect. One means of correcting this is by scanning to pick up secondaries, for there is heightened activity in metastases.

An interesting study by Shapiro of New York concerned prognosis in 31,000 patients with carcinoma of the breast found by early screening, and 31,000 patients in whom it was recognised clinically. After a four-year observation period 90–92 per cent of those picked up early were alive. It is however too early to draw any hard and fast conclusions. Were these survivors just at an early stage, and will they perhaps die not at five but at seven or ten years, for example? We must wait and see.

As is being found in antituberculosis programmes, screening of all those at risk may be too expensive, but for high-risk persons it is worthwhile. Mammography certainly has a place but small tumours are best detected by palpation.

Also to be taken into account is the difference in death rates from this condition in different countries: in England and Wales, for instance, they are high, and in Japan low.

Regardless of whether geographical factors or ethnic susceptibility play a part, however, it seems that in the individual case the *nature* of the disease is more important than its *extent.* Patients who show lymphocytic infiltration with sinus histiocytosis will by and large do well. When cultured carcinoma cells are destroyed by lymphocytes *in vitro,* the outlook is better *in vivo.* Lymph glands contribute a good, strong, positive activity against tumour cells and by virtue perhaps of this property a patient with extensive carcinoma may survive untreated. Treatment, on the other hand, may mutilate.

Discussion

Dr W. G. Tait, Chairman of the Research Committee of the College opened what turned out to be a lively and constructive discussion. Apart from papers on cervical smears, he said, over the last ten years there have only been 13 publications by general practitioners on the subject of oncology. This is surprising when one considers that on average five new cases of malignancy occur in a practice in a year.

There had however been a study of unrecorded carcinoma in Yorkshire. Professor Wilks of Sheffield found that nine per cent of patients with cancer never attended hospital at all. Plainly the general-practitioner has a role in screening his patients, for there is a high success rate when this is done. Dr Tait saw the oncology centre as becoming a kind of wheel, helping the periphery where help is needed.

A NEW LOOK AT REHABILITATION

Lord Hunt of Fawley

Lord Hunt noted that so much depended on the courage and calibre of the individual. On the one hand, he said, we have the example of a Douglas Bader, who, in spite of having lost both legs, got his golf handicap down to two, and on the other, the patient who gave up golf altogether because he had a corn.

Rehabilitation, the community, the hospital and the future

Dr P. J. R. Nichols

Dr P. J. R. Nichols of the Nuffield Orthopaedic Centre, Oxford, spoke with 16 years' experience of rehabilitation in the Royal Air Force. Mair's definition of rehabilitation, given in 1972, was: " Rehabilitation implies the restoration of patients to their fullest mental and social capability." In its " acute " form, it was part of the definitive management of acute illness or injury; the " intermediate " form aimed at " reablement," functional retraining, and resettlement in the home and at work; in " long term " rehabilitation the aims were necessarily more limited, because of the chronicity of the disablement.

One function of the rehabilitation team can be to speed up communication and decision-making in the management of the patient. The process itself has four stages—medical, functional, social and industrial. Dr Nichols found that most patients need to have their will or motivation to recovery intensified and worked on. The notion of " active convalescence " is useful here.

Of five million patients discharged from hospital 1·5 million attend for physiotherapy. One in every three or four hospital discharge patients would benefit from physiotherapy for temporary disability. In the case of chronic disability, though, the first imperative is to accept the disability; the contribution of physiotherapy to physical improvement is likely to be small, although useful for building up the morale for both patient and doctor.

The states which physiotherapy seeks to correct are:

(1) Impairment (defective organ or bodily mechanism),

(2) Disablement (reduced functional ability),

(3) Handicap (disadvantage caused by disability).

Physiotherapy is also given as placebo treatment—as a substitute for social services—in which case it should be recognised as such. This raises the question of the physiotherapist's role.

Three to six per cent of the population (up to three million in the United Kingdom) are disabled. The top ten disabilities are: for the young, cerebral palsy, fracture, and spinal cord lesions; for the middle-aged, rheumatoid arthritis and multiple sclerosis; and for the elderly, cardiorespiratory disease, osteoarthrosis, stroke, amputation of the lower limb, and degenerative neuromuscular disease.

If the total of physically disabled amounts to 3–6 million, Amelia Harris has estimated that there are 15,000 very severely handicapped and needing special care, 36,000 severely handicapped and needing considerable support, and 616,000 appreciably handicapped. Against this, the following specialist rehabilitation staff are available in the U.K.: Consultants (including rheumatologists, and specialists in physical medicine) 120, senior registrars 40, physiotherapists 6,000, and occupational therapists 1,500. Confusion exists over the role of the therapist and there is a tug of war for her services, as rehabilitation is made up of separate remedial and social components. Ninety per cent of the occupational therapist's patients, for instance, have had a stroke. Relative needs have been incorrectly assessed, and priorities should be reconsidered.

Rehabilitation must embody among other things:

(1) Clear, early definition of the problem and likely outcome,

(2) An agreed realistic programme,

(3) Appropriate industrial resettlement,

(4) No gaps in active rehabilitation,

(5) Skilled assessment of the social help needed.

The functions of a rehabilitation unit therefore are intensive physiotherapy for the temporary acute phase, assessment of the patient's potential, opportunity to prove the patient's capability, and organisation and co-ordination of physical and social resettlement.

The extent of the need is enormous. In 1974 Dame Evelyn Sharpe said that there are in this country 350,000 people whose mobility is reduced by severe physical disability not occasioned by old age. Many aids exist to alleviate their lot—dressing aids, eating aids, special rails alongside lavatory seats, and so on. Chairs can be designed for different purposes. The pushchair or the foot-propelled chair is mostly used out of doors; it should be collapsible so that it can fit into a car boot, yet it should be able to accommodate a 14-stone patient in comfort for six hours at a stretch. There are also power-driven chairs. Other devices such as hoists and lifts giving mechanical advantage may seem indicated but they may be too bulky to fit into the available space.

The general practitioner is the lynchpin of rehabilitation: he can identify the appropriate part of the service and have access to it, if not control. To this end clinical assistantships and links with the community-based services are particularly valuable.

He concluded by repeating that rehabilitation was " the whole process of restoring a patient to his fullest mental and social capability as early as possible." In 1971 over three million adults in the United Kingdom had some degree of physical impairment, while five sixths of handicapped adults were of pensionable age. His message therefore was very clear: " Don't confuse rehabilitation with intermittent palliative physiotherapy."

Rehabilitation: The disablement resettlement officer

Mr J. W. Daniel

Mr J. W. Daniel, Rehabilitation Officer of the Royal National Orthopaedic Hospital, Bath, reported a lack of liaison between the medical and the rehabilitation teams, lack of continuity in rehabilitation, and inadequate training of team members.

It is important that the hospital resettlement officer contact the patient as early as possible after admission and form some assessment of the problem. The patient welcomes this opportunity to play a part in his own resettlement. It is also important for the resettlement officer to introduce himself early on to the patient's employer and find out what the job involves. This is the best way of helping the patient return to his previous employment, or of arranging for his job at the same place to be modified to suit his reduced capabilities, or even of finding him a new job there.

The requirements of the job are best assessed by carrying out an ergometric study on the shop floor and by photographing the various activities involved. In this way a pictorial report can be compiled and this will be useful to the hospital. It is also necessary to consider what facilities are available to the patient when he returns to work—the accessibility of lavatories, for instance.

As regards the ultimate capability of the patient, one must be realistic and set attainable goals; at the same time the patient must be motivated to co-operate as vigorously as possible.

What constitutes failure? The main factor is non-co-operation on the part of the patient; for this reason, if he is not amenable one day, try again the next. Another factor is lack or loss of continuity in his rehabilitation, but this can be overcome by following him up by letter for five years.

Psychiatric rehabilitation—mania and schizophrenia

Dr C. A. H. Watts

Dr C. A. H. Watts described the part the general practitioner can play in rehabilitating psychiatric patients.

Mania and schizophrenia may be rare but they often extend over a lifetime. The family doctor may only be involved in time of crisis but the repercussions of the illness on family and neighbours are considerable.

The number of patients treated for mania, the schizophrenias and depression in Dr Watts' practice between 1946 and 1973 were:

TABLE 2
DEPRESSION MANIA AND SCHIZOPHRENIA IN ONE GENERAL PRACTICE

Type of illness	*Number of cases*	*Admitted to hospital*	*Percentage admitted*
Mania	8	8	*100*
Schizophrenia	75	59	*79*
Endogenous depression	2,600*	132	*5*
Hypomania	180*	0	*0*

* Approximately

Mania is one of the most difficult illnesses to cope with, and recurrences are common. The patient nearly always has to be admitted to hospital each time. It is a very different matter from hypomania, in which the patient is usually witty, amusing and harmless; mania on the other hand is devastating and far more destructive of family life. In the depressive phase, at least the patient may accept help and support, but mania can even drive the patient's spouse to suicide.

The manic patient feels so well that he is angry and resentful at attempts to get him into hospital, although he does not harbour ill-feeling against his general-practitioner. Dr Watts

emphasised that it was well worth-while visiting the patient when he is discharged from hospital; for one thing, he will maintain that the admission was unnecessary and it is most important that he be made to face up to reality in front of his family. " The misery of his family must be underlined," Dr Watts said, " and the dangers of financial ruin must be pointed out to the man who was all for buying an ocean-going yacht and going on a world cruise, in his state of elation."

Lithium appears to prevent mania. The blood level should be kept between 0·8 and 1·2mg/l for a therapeutic effect; if it goes higher, the patient is in danger of suffering toxic effect including gross tremor, nausea, vomiting and ataxia. He therefore recommended that the blood level be monitored monthly until stabilised, then three monthly; 10ml of whole clotted blood is needed and most laboratories now have the facilities to carry out the test. Some patients are reluctant to start on lifelong treatment but it is a small price to pay for freedom from mania, and the periodic blood tests have the added advantage that the patient is seen at regular intervals.

Schizophrenia is a much more common type of illness. In his practice ten (18 per cent) had made a full recovery, and another 46 per cent were living and working at home, though the disease had left its mark. " Some were constantly on drugs, often over many years. Others were odd people but they managed to live useful lives in the community." Another 25 per cent were at home but unemployable. Six (11 per cent) were long-stay hospital patients.

By their very nature most schizophrenics are quiet, solitary people who seldom come to see their doctor and except in a crisis they take very little of his time. Nevertheless they much enjoy having friendly contacts if they are helped and encouraged to maintain social relationships. The schizophrenic, unlike the manic, knows he has been ill and is socially disabled; he is usually most grateful for his doctor's interest and friendship.

The one exception is the paranoid patient; he, like the manic, is completely lacking in insight. Here the general practitioner starts off with two advantages over any psychiatrist: firstly, the paranoid is suspicious of strangers, but the general practitioner is a familiar figure, and secondly, the mere suggestion of the need for a psychiatrist implies that both the doctor and the family think the patient is mad and are plotting together to get rid of him. This is one reason why the general practitioner must make every effort to show that he is on the patient's side; another is that he may then earn enough influence over the patient to persuade him to take the phenothiazines which may very well keep him out of hospital. Dr Watts then gave four vivid case histories which illustrated clearly what a valuable role the general practitioner can play in supporting such patients and in minimising the effects of the illness both on the patient and on his family. The good general practitioner, by keeping in touch with the schizophrenic whether at home, in a hostel or in hospital, does a unique job of rehabilitation.

The role of the social services

Mr D. Allen

Mr Dennis Allen, Director of Social Services in East Sussex, gave a practical summary of the whole problem of rehabilitation.

The contribution of the social services, he said, should not be looked at in isolation; all the agents involved should interlock and their contribution be joint. Social workers should be attached to or associated with general practitioners and with the rehabilitation team, and become liaison agents. They should remain in hospital too. It is a false dichotomy to distinguish between " hospital-based " and " community-based " social workers; the actual base is irrelevant —what matters is the essential personal contact between all concerned.

Social workers must be alert to the changed family situation after disabling injury or illness, and to the emotional factors resulting from it. Rehabilitation is therefore a family affair and is not just addressed to the individual or his employer. It is sometimes seen as a " return to independence "; in helping people adjust to new roles, it helps to examine what is meant by independence.

In the past the accent has tended to be on the physical aspect of rehabilitation, but the socially inadequate, the delinquent and the handicapped are equally in need of rehabilitation. The very word is derived from " habilare—to live in," so how much time should the social services departments spend in helping people find somewhere to lay their heads? The " single homeless " are a particular problem. Another is that people in care on account of antisocial

behaviour may behave well " inside " but become institutionalised and fail miserably on discharge. A law journal once stated words to the effect that " justice must be seen to be done but rehabilitation must be pursued in secret." Mr. Allen did not agree. There are many untapped resources among the public; many private persons are eager to offer help and some voluntary organisations exist for this purpose. The public should be educated in its attitude towards those needing rehabilitation. Stigma attaches to almost all minorities—even hyperintelligent children are stigmatised in their way. The public should therefore be persuaded to accept that disability is normal, and that rehabilitation is not something you do to others—it is enabling others to help themselves.

The extent of the problem facing the social services is that 300,000 people are in institutional other than hospital care and are attended by staff totalling 65,000, only four per cent of whom are properly trained. Every individual is of equal worth and every age group has been recommended to the social services as deserving priority, but one cannot approach this work by discriminating.

Summing up

Lord Hunt summed up. He stressed the importance of early contact and communication with the patient's employer, so that the job could be assessed and kept open.

C. A. S. WINK,
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TWENTY-FOUR-HOUR COVER IN GENERAL PRACTICE

" General practitioners are required to provide 24-hour cover for their patients, but it seems apparent from the evidence we have received that this requirement is not always discharged effectively. We have already discussed criticisms which were made of inflexible appointments systems and the use of deputising services. A further point relates to inefficient organisation of group practices. One witness referred to a practice in which all three doctors took the same half-day. Although we have no information about the extent to which this occurs, it is a criticism that such a situation should exist at all. A special allowance, currently £270 per annum, is paid to each doctor who is a member of a group practice, in addition the rent and rates of practice premises and 70 per cent of the wages and salaries of ancillary staff employed in practices are reimbursed directly in relation to actual expenses incurred.

" The making of such payments gives a suitable opportunity for the detailed scrutiny of the organisation of practices. We recommend that doctors in group practices should stagger their time off so that cover might be provided by the practice itself for the fullest possible time. We further recommend that the Secretary of State should investigate the organisation of practices, and that it should be made a condition for the receipt of payments that adequate cover round the clock is provided."

REFERENCE

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