Development of free flaps has permitted the transfer in one stage of tissue to a hostile environment where routine flaps would normally not survive because of the poor vasculature or because of infection. Such procedures, which are now becoming far more routine, although they undoubtedly take more operating time and require the surgical technique of microsurgery, permit a safer and more sophisticated reconstruction than was formerly possible and a greatly reduced stay in hospital compared with the original tube pedicles, which could take at least six months to move into the position in which they were required and had a 50% failure rate.

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Needs and Opportunities in Rehabilitation

Rehabilitation after stroke—2: Language and memory training and the requirements of rehabilitation services

DAPHNE GLOAG

"On the one side of the city was an area marked 'thoughts.' On the other side of the city was an area marked 'speech.' Down the middle was an unscaleable brick wall." So wrote Lord Smith of Marlow of one type of aphasia, a "Berlin Wall" that he himself did eventually scale (Chest, Heart and Stroke Association's magazine *Hope*, Spring 1983).

Communication problems and speech therapy

Patients who have been without speech often say later how upset they were at being talked about as though they could not understand.¹ Few staff, even doctors, are trained to communicate with aphasic patients and Mulley lists the simple do's and don'ts that make such a difference—including talking to the patient and avoiding tests and questions that may diminish him.¹ He urges the referral of all patients with language problems to a speech therapist as soon as possible for a precise diagnosis; different forms of aphasia, which may include poor comprehension, will need different forms of management, and these in turn will differ from the approaches needed for dysarthria and speech dyspraxia—and many patients have more than one type of disturbance.¹ Besides providing a diagnosis and if possible some form of speech stimulation, the speech therapist is important for general counselling of patients and family, for teaching the use of some communication aid if appropriate (usually in cases of dysarthria), and for advising staff. The broad elements of speech therapy are discussed by Code and

Müller² and alternative methods of communication by Rowley.³ Publications and other materials for those giving therapy are produced by, for example, the Winslow Press, Buckingham, and Action for Dysphasic Adults (ADA).

Develop communication by any means, said a consultant running a rehabilitation centre: any form of communication makes a great difference to the family as well as the afflicted person. Even the sexual relationship is apparently vulnerable in the face of speech loss.¹ *Coping with Disability*,³ *Help Yourself*,⁴ and pamphlets by the College of Speech Therapists, ADA, and the Chest, Heart, and Stroke Association are useful. Even if the patient never says a word again speech therapy may help to sort out the "muddle in the head," as this consultant put it. Language and communication generally, and not just speech, are the point. In this respect many studies of speech therapy may have too narrow a perspective.

Nevertheless, speech therapists are not plentiful and therapy as distinct from diagnosis and advice must be justified by hard evidence. Are there improvements that are not due simply to spontaneous recovery and are sufficient to justify all that goes into it? Do different forms of speech therapy have different degrees of success, and is therapy more than general stimulation and support—in other words, are speech therapists essential or can other people provide similar "treatment"? Finally, is timing crucial: should speech therapy coincide with the period of natural recovery (chiefly the first three months⁵) or take over where nature leaves off; and is it never too late for it to help, as individual cases would suggest? Theories of recovery, methods of treatment, and evaluation are discussed by Miller.⁶

Among more than 20 studies of speech therapy after stroke reviewed in 1979 most appeared to show benefit.⁷ Miller, however, reviewing the evidence (for aphasia of different types and causes), argues that there is no convincing evidence so far that speech therapy has a *specific* effect on aphasia.⁶ A recent trial suggested that

twice weekly speech therapy for patients with stroke for 24 weeks (a fairly typical or even generous course for Britain) was no better than no treatment.⁸ There were criticisms and counter-criticisms.⁹ The authors point out that a more intensive course, or more specifically tailored approaches, might have worked, and also emphasise the importance of advice by speech therapists to relatives and staff about how to cope.⁸ Some patients, however, could not stand very intensive therapy; only about eight of 50 new dysphasic patients each year in a health district of 200 000 are thought suitable for it on the basis of experience in Bristol (R Langton Hewer, personal communication).

General support and counselling is seen to be one element in speech therapy,⁷ but more specific effects are also claimed. Spontaneous recovery of speech and language functions may be limited to the first two or three months^{5,7,10} and improvement after this is assumed to be due to the treatment. There is some evidence that late treatment (median time after stroke five months) is just as good as early treatment.¹⁰ The aim is usually to start as soon as the patient is fit enough, to capitalise on the natural recovery. But by extending the period of recovery might late therapy contribute more? One unit believes in waiting until neurological and emotional stability has been reached, making for better motivation and insight (Williams *et al*). A consultant I met thought that trials had often been spoilt by giving speech therapy too soon, as well as by faults of design. A Veterans Administration trial in the United States has been looking at timing. But early contact with a speech therapist is thought to be important for helping communication generally, as distinct from tackling specific language deficits, and for counselling the family.

Two studies have appeared to show similar improvements from sessions with speech therapists and with untrained volunteers.^{10,11} They were criticised, though some of the criticisms were answered.⁵ They illustrate two distinct approaches—leaving the volunteers free to use whatever methods seem suitable¹⁰ and having speech therapists to give them detailed guidance.¹¹ With both approaches speech therapists gave them detailed assessments of the patients' deficits. Volunteers may provide valuable stimulation for otherwise empty hours, and carry on (or start) when speech therapy is not appropriate.¹²⁻¹⁴ The outcome and the aims may be more general than with speech therapy but very important in human terms: improved morale, for instance, and more interest in life.¹⁴ The organiser of the Volunteer Stroke Scheme (box) said that even 10 years after a stroke someone could be given general help, enabling him to get back into life and into the community. According to reports from general practitioners, speech therapists, families, and volunteers, general confidence improved in 90-95% and speech in at least 70% of clients, many of whom had been taken on a considerable time after the stroke.¹⁴

The Volunteer Stroke Scheme arose out of the success of intensive work with one sufferer, the actress Patricia Neal.¹³ She was relatively young and fit, and for six hours a day, five days a week, 15 friends and neighbours gave her a programme of work. She learnt to speak, read, and write again. The detailed suggestions for work of this kind (which includes interesting outings) provide a springboard for relatives and friends even if there is no local scheme.^{12,13} Experience has now accumulated^{2,14} and the aim is to have schemes all over Britain.

A strength of this approach is that it may be built on common interests and rapport between clients and helpers. The organiser of the Volunteer Stroke Scheme emphasised to me the importance of giving these people something they *want* to talk about: even well people may have nothing to say if they are bored, so how can the victim of a stroke be expected to struggle with speech "if nothing lovely happens in his life"? This fits in with the theory that speech therapy works not by retraining but by stimulating the occurrence of speech, though this is quite unproved.⁶

With sufficiently detailed assessments from speech therapists and guidance about what to do, could volunteers in fact administer most of the treatment, freeing therapists to give guidance on more patients? The study suggesting that volunteers can do this effectively was small¹¹ and more work is needed. Increasingly scientifically based speech therapy locating and using the "under-study systems of the brain" (Williams *et al*) might call for a wider

The Volunteer Stroke Scheme

People suffering from language problems as a result of a stroke are offered a small team of volunteers, who visit one at a time for sessions of about an hour according to a weekly rota. They build a personal relationship and aim to stimulate language and communication, memory, and so on—or, failing that, increased confidence and enjoyment—through activities that are relevant and interesting to the individual, such as crafts, cooking, shopping, and outings. There is also a weekly speech club. This enterprise started in 1973 and schemes now exist in 59 health districts, about five new ones being set up each year. They are run by the Chest, Heart, and Stroke Association, which asks for a promise of local authority funding for each one (about £5000 a year) after 18-24 months. Information from the organiser, Valerie Eaton Griffith, St Martin's, Grimm's Hill, Great Missenden, Bucks HP16 9BG.

spread of expert strategists and untrained tacticians. The efficacy of treatments based on the many ideas about aphasia and its therapy should be more widely studied, it has been argued, with more research based on single case studies, which can be done cheaply in the course of normal clinical work² (p 194),^{6,9} though Pickersgill (p 644)⁹ points out the pitfalls. Alternatively, as Miller has suggested on the grounds that genuine recovery of speech may be difficult to influence by therapy, it might be best simply to teach a patient to make the best use of what communication he has left within the contexts of his real life and not in the clinic—for example, while travelling.⁶

Regarding volunteers as supplementing speech therapists and not as substitutes is of the greatest importance. A speech therapist I met was worried that in places where volunteers provide the only service the volunteer scheme might distract the authorities from the need for speech therapists to provide, at the least, guidance and repeated assessments. The shortage of therapists means that domiciliary speech therapy is possible in few places and frail housebound people are denied help.

Dealing with memory problems

A recent study suggested that rehabilitation should concentrate less on physical function and more on cognitive ability.¹⁵ Several units I visited regretted that they had no clinical psychologist or only a small share of one. In practice much "cognitive" retraining is carried out effectively by speech and occupational therapists in the context of their own therapies. But this may not be enough for the more severely impaired. Management decisions on the creation of more posts for clinical psychologists, and the necessary funding, are thought to be needed—especially as the possibilities of psychological approaches, with the call for evaluation, are increasing. When available psychologists usually concentrate on assessment of cognitive and emotional problems and advising other staff, and perhaps relatives. (Some believe that there is scope for volunteers guided by psychologists, but they are little used.) In a few places—for example, Rivermead Rehabilitation Centre, Oxford—a neuropsychologist does take part in treatment.¹⁶

Speaking of the rather poor results from memory training generally,⁶ one psychologist told me that he believed help with memory problems was best left out of the early rehabilitation programme, which may be crowded with other concerns, and left to be dealt with according to individual needs later. Wilson and Moffat favour delay so that, for example, speech and motivation may improve first—though critical stages for cognitive recovery may thereby be missed.¹⁷ Successful memory groups as well as individual work have been described¹⁸; interaction with others who have

similar problems is helpful. Memory training is concerned with finding strategies that will enable individuals to get round their memory deficit—genuine restoration of lost memory functions probably does not occur in adults.

Microcomputers are beginning to be used for various “cognitive” training tasks for patients with stroke,¹⁷ including reality orientation (see 16 February, p 542) for the minority who suffer from confusion; but there is not much experience yet or much suitable remedial material (I heard of a child’s program on dressing sequence being used in a modified form). I will return to memory training and other cognitive approaches next week in the context of head injury.

Better stroke rehabilitation services

“They ring me up weeping and they write long letters,” said the Chest, Heart, and Stroke Association’s counsellor about relatives who seek her help. The lot of someone disabled by a stroke and of those close to him or her may be irreparably a matter for despair; but things are often mended or assuaged with help. Clearly much suffering remains unhelped; it is too difficult to find someone with time to listen and explain; and, as this counsellor said, prospects and sources of help are not well enough known (she herself sends out the CHSA’s handbook for the family¹⁸ as a start).

Some patients may require quite modest but more individual help to quicken their particular potential and interests. I was reminded of this while taking part in a somewhat lifeless music and movement class at a unit for early stroke rehabilitation. The week before, I was told, the members had come to life while photographs were being taken—this had triggered off memories. At a previous class an aphasic man had been moved by hearing music from Burma, where he had spent the war, it was discovered. Meaning and relevance may be important to the success of rehabilitation. Interests as well as the process of re-education may spring from a wide variety of activities, including games, at a rehabilitation unit; and relatives and friends can help to encourage these at home.

The essential elements of a stroke service have been identified by Langton Hewer and Holbrook, from their experience at Frenchay Hospital, Bristol,¹⁹ and others as looking after the patient in the most appropriate place—whether in hospital or with proper support at home; careful management of the paralysed body; dealing with referrals quickly and making thorough assessments; rehabilitation geared to the patient’s needs and limits of tolerance (usually three or four half days a week), with regular review and goal setting and a tapering of the programme to avoid an abrupt end; transport in the shortest possible time; encouraging families to take an active part in treatment and providing support for them, perhaps with relatives’ groups; dealing specifically with psychological and social problems (all members of the rehabilitation team should be able to do so); long term follow up, perhaps with a support group (with a range of recreational activities) for those who would otherwise be at home doing nothing; prompt attention to complications; prompt home alterations and services; staff who are trained in the management of disabilities caused by stroke; and communication (including good record keeping) between all the staff concerned—“failure to communicate adequately can result in a rehabilitative shambles.” These principles, it is thought, could be widely applied in district general hospitals and in the community.¹⁹

For most people with stroke an effective service clearly can be based on local facilities; only a proportion of those suffering a stroke will need rehabilitation,²⁰ though opinions differ on how many need appreciable help. For those with severe but helpable disability a specialised rehabilitation centre providing intensive and comprehensive programmes offers a better prospect. Many believe that a purely neurological unit is best, others that a mixed centre makes for better morale—though within a mixed unit, as at Camden Road Rehabilitation Centre now, a separate enclave may be created for patients with brain damage. Nowadays different therapists may work with patients in the same room in an attempt to reinforce each other and make treatment more coherent. New ideas are burgeoning. What is disheartening is to find excellent specialist centres threatened with closure.

A professional man who had suffered a stroke receiving treatment in the heavy workshop at Northwick Park Hospital, Harrow, after his discharge from hospital; his hemiplegic right arm holds the felt in a fixed position while a staple gun staples this to the wood.

There are many possible ways of providing good services and treatments, with scope for present resources to be used with greater effectiveness. Some questions have to be answered by research—especially on the optimum timing and treatment for different patients—and alternative ways of using present resources need to be explored: “We need more flexible and imaginative services,” someone said.

The general practitioner may be the best person to get things moving for the patient at home: initiating a domiciliary visit by the geriatrician, neurologist, or rehabilitation specialist, or referral for outpatient or day hospital assessment—even months or years after the stroke; ensuring that all possible aids, services, and cash benefits are provided; and putting all who wish it in contact with a stroke or speech club.

One way ahead is to mesh volunteers—where they are readily available—more closely in with professional services, as in Bristol with its range of long term support and activity groups¹⁹ and in the Volunteer Stroke Scheme. But however things are organised one requirement does seem to be to bring everything together by means of a rehabilitation team or unit.

Meanwhile there remains a pressing need for more specialists. Only 23 senior registrar posts in the United Kingdom give creditable training in rehabilitation and 18 of these are linked to rheumatology. Most patients under 65 suffering from stroke are said to be looked after by general physicians with no special training in neurology or rehabilitation. Neurologists likewise do not have rehabilitation included in their training and tend not to want responsibility for it; consultants in rheumatology and rehabilitation, though they did in the past take some responsibility for rehabilitation in neurological conditions, do so no longer. So long as the ideal of all specialists taking rehabilitation on board is unfulfilled, consultant physicians specialising in rehabilitation may be the answer.

Certain human needs stand out from all that I have heard and seen and read. One is that restoring and preserving the patient’s dignity is an important part of rehabilitation. Others have to do with morale and hope. In the Chest, Heart, and Stroke Association’s film *Why Me?* a man is said to have been told he would never walk again (he did); how common is this? Another important point is that even if cost effectiveness and practicability mean concentrating efforts on disability of moderate severity everyone can be helped in *some way*, perhaps with the emphasis on emotional support and taking care that no one in need is finally bereft of any kind of help. And if

possible every patient and family should be helped to find something that makes life worth living.

I am grateful for help from many people, especially Dr Margaret Agerholm, Heenan House Rehabilitation Centre, London; Dr K Andrews, Department of Geriatric Medicine, University of Manchester; Miss Valerie Eaton Griffiths, Volunteer Stroke Scheme, Great Missenden; Drs R Langton Hewer and D Wade, Department of Neurology, Frenchay Hospital, Bristol; Dr D G Jenkins, Wolfson Medical Rehabilitation Unit, Atkinson Morley's Hospital, London; Professor D L McLellan, Department of Rehabilitation, University of Southampton; Dr G P Mulley, Department of Medicine (Elderly), St James's University Hospital, Leeds; Dr Elizabeth Rushworth and Mrs Barbara Wilson, Rivermead Medical Rehabilitation Centre, Oxford; Mr C Skilbeck, district psychological service, Newcastle General Hospital, Newcastle upon Tyne; Dr Annemarie Tupper and staff, Stroke Rehabilitation Unit, St Pancras Hospital, and Camden Road Medical Rehabilitation Centre, London; and Dr Marcia Wilkinson, formerly director of the Regional Neurological Unit, Eastern Hospital, London.

Addresses

Action for Dysphasic Adults Northcote House, 37A Royal Street, London SE1 7LL (advice, information, and publications, including advice on starting a speech club)

Chest, Heart, and Stroke Association Tavistock House North, Tavistock Square, London WC1H 9JE

College of Speech Therapists 6 Lechmere Road, London NW2 5BU

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For Debate . . .

The need for sexual assault centres in the United Kingdom

MAY DUDDLE

Introduction

In the past few years it has become apparent that the actual incidence of sexual assault is much higher than that reported to the police. Statistics supplied by the Federal Bureau of Investigation (FBI) in America in 1979 indicated that only one in 10 sexual assaults is reported (Uniform Crime Reports of the United States reported for the FBI, 1979). The actual number of assaults occurring is difficult to assess, but a recent paper, again from the United States, gave the results of a questionnaire administered to 500 women from the general population of a mid-west city. Three hundred (59.9%) of these women confessed to having experienced an event of this type, some very trivial, but 41 of the women had actually been raped, and only four of these 41 had reported to the police.¹ In Greater Manchester, which has a population of 2.5 million, 76 cases of rape and 662 of indecent assault were reported to the police in 1983, 63 in 1982, and 52 in 1980 (annual reports of the Chief Constable of Greater Manchester, 1981, 1982, and 1983).

The immediate effect of sexual assault is usually obvious, the victim reacting to the crisis with shock, anxiety, a hysterical reaction, or sometimes apathy and denial.² Long term effects are difficult to assess but can be extremely disabling and sometimes only become apparent years later.³ One study in the United States

reported interviews with 41 victims after one to two and a half years; of these victims, half were still frightened of being alone, three quarters were suspicious of others, and many had depressive and sexual problems.⁴ McCrombie *et al* found that 73.6% of the victims they studied had some symptoms, including sleep disturbance, suicidal thoughts, and withdrawal from people, and 56.6% had severe phobias.⁵

It has been suggested that immediate help followed by counselling for up to a year is necessary, and several studies show that most victims recover after such treatment, at least when there is no history of emotional or psychiatric problems.² Longer term prospective studies are needed.

In this country the way in which these victims are dealt with varies widely but there are not as yet easily available centres where they can receive both forensic examination and psychological help. In some places rotas of police surgeons have been formed, all of whom have been trained in the important minutiae of the forensic examination, and usually some of these are women, but in many areas the victim may have no choice in the sex of the doctor examining her and the examinations often have to be done in very unsuitable premises, usually in a police station.⁶ Often also the doctors doing the examination are not trained in the correct procedures, thus making eventual legal proof of the crime difficult or impossible, and adequate prophylaxis may not be offered against pregnancy or sexually transmitted disease. Apart from the physical side few of the victims are offered any counselling help, either at the time of acute crisis or in the often traumatic later stages. When the victims are children it is even more important for the physical examination to be carried out by trained, sympathetic doctors, and referral may be