PHYSIOTHERAPY PILOT SCHEME — A Contribution to Geriatric Services

By ALFRED ROTHBERG, *Vice-Chairman*, S.A.S.P.

The care for the aged as an organised effort on a nation-wide basis is comparatively new in South Africa. The National Council for the Welfare of the Aged was instituted only just over six years ago. Its third biennial congress took place at the end of 1962, in Johannesburg.

At that conference it was apparent that much good work for the care of our aged has already been achieved—yet much remains to be done.

Physiotherapy is only sporadically found in a few institutions, but is hardly anywhere employed to its fullest potential.

One can explain this unsatisfactory state of affairs, but only with reasons which are not altogether convincing, and which are certainly not of permanent validity.

It must be realised that the care for the aged is a vast field, and has many facets. Many of those enthusiastic people who sponsored welfare work for our aged citizens, were prompted by a sincere desire to help, but were not always familiar with the many aspects of this task, nor its varied requirements. First things had to come first, and to most of these pioneers the elementary problems of housing and feeding seemed to cover the subject exhaustively.

To provide accommodation, sustenance and nursing for the aged was already a formidable enterprise. Depending largely on support from the general public, fund-raising was a major concern, and occupied the minds of the various management committees, often more than anything else. Gradually, however, it became evident that additional needs had to be satisfied. Comparatively early the social workers were recognized as an essential part of the team looking after the elderly. One after another, voluntary organizations and enthusiastic individuals interested in brightening the evening in the lives of our aged, joined in. Sunshine Clubs, Candlelight Clubs, Time Clubs, to name only a few, took groups of elderly out to spend a day in the open, to go to shows, or to enjoy other entertainment. Individual helpers provided transport to take patients to dentists and out-patient departments of hospitals.

Certain services were sometimes available at the homes themselves. In annual reports of several institutions mention is made, e.g. of regular chiropody services, physiotherapy, however, hardly figured in such reports.

To an organisation such as the S.A. Society of Physiotherapy, this was rather a disappointment. We had become interested in the care of the aged quite some time ago. We had focussed the attention of our members and our students on the great contribution physiotherapy can make to geriatric services. With the growing interest of the general public in the welfare of the aged, we expected to be in the forefront of services laid on for the benefit of the aged. When this expectation was not fulfilled we felt compelled to search for reasons.

We found, that in many instances Management Committees were not ready for the introduction of physiotherapy. Generally, there existed considerable ignorance of the nature, aims, and objects of physiotherapy. Bluntly, it was stated that physiotherapy as such was not for the aged. When attention was drawn to leading institutions overseas, where physiotherapy had become an integral part of geriatrics, the usual reply from individual homes was, that among their particular residents or patients there were none suitable for physiotherapy. And between the lines one could always read that the introduction of physiotherapy was considered an expensive venture, and that there were no funds for such an experiment, anyhow. Doctors and specialists, too, felt that they were up against a formidable wall when they tried to persuade the boards of management to incorporate physiotherapy in their treatment plans.

There was only one way of overcoming such ingrained preoccupations. Substantial proof had to be produced, that physiotherapy was an essential item in the programme of a well-run home for the aged, and that the finance involved was within the limits of most institutions. This proof was provided by some voluntary workers from our midst, who offered their skill and experience to help in the rehabilitation of our aged.

The experiences of these members were closely watched by our Central Executive Committee, and when their success showed that physiotherapy was making valuable contributions to the care of the aged, the C.E.C. offered the assistance of the S.A.S.P. to the Johannesburg Council for the Aged. The S.A.S.P. was invited to join the Council, and from this has resulted the development of pilot schemes, by which, on a voluntary basis, physiotherapy was provided in establishments for the elderly, for groups of residents and patients, selected and referred by their medical officers.

These efforts did not remain unnoticed. The appreciation expressed by the Chairman of Committees of Bramley House, in the Annual Report for 1962 of the Rand Aid Association showed that physiotherapy had made its impression.

The Johannesburg Council for the Care of the Aged brought the scheme to the notice of the National Council. Within less than a year the S.A.S.P. obtained representation on both the National Council and the Executive Committee of the Johannesburg Council for the Care of the Aged.

At the General Meeting of the National Council for the Welfare of the Aged in November, 1962, when for the first time the S.A.S.P. was represented as an affiliated organisation, with its delegate as a member of Council, a unanimous resolution was passed expressing the Council's thanks to the S.A.S.P.

Judging from their success, Pilot Schemes of the type developed and tried in Johannesburg, although not a patent solution, seem to supply within limits one answer to the demand for physiotherapy in geriatrics. Such Pilot Schemes do not call for a voluntary effort of more than an evening of two hours per week. They have met with the most grateful response from the elderly themselves, and have inspired members of allied professions, such as the nursing and social services, as well as interested helpers from the general public, to link hands with us to form teams which work in splendid co-operation.

Of course, there must be no misunderstanding of our attitude to such voluntary services. While the S.A.S.P. is most appreciative of the fact that we have in our ranks enthusiastic members who are rendering this service to our aged, it is not suggested that their generous offers should be exploited. We are fully aware that we are dealing with a pilot scheme, operated by voluntary workers, in their spare time, after a busy day in their hospital departments, and suitable only for patients who are still receptive and co-operative in the evening.

Of necessity this can only provide a service of limited scope. It must restrict itself to those carefully selected cases, where even with little time at our disposal we can be of substantial use. Not much more can be done than marginal physiotherapy, where we can enlist the assistance of the nursing staff, other voluntary helpers, or members of the patients' families. In limited fields, e.g. re-education in walking, improvement of general mobility, and certain routine exercises, such schemes may already produce striking results. They are sufficient to prove that without physiotherapy a modern institution for the aged is not complete in its services. But for any sizeable establishment, such a voluntary service is not adequate.

Notes on the Application of Wet Ice

By Dena Gardner, M.C.S.P.

The application of cold has proved an effective means of physical therapy. The physiological effect of cold applied for a short duration is remarkably similar to that of heat; it appears moreover that the effect of the former lasts longer and is a more suitable preparation for activity because the patient feels refreshed, as for example, after a cold bath or shower, in contrast to the feeling of ennervation which results from the application of heat. Normal functional activity is the ultimate aim of most physiotherapeutic procedures and cold applications help to accelerate the patient's physical rehabilitation.

Equipment

The requirements are simple and inexpensive, i.e. some medium-sized turkish towels and an ordinary household bucket three-quarters full of ice. Flaked or shaved ice is preferable because it is not lumpy and adheres more readily to the surface of the towels, however finely crushed ice is quite satisfactory and easier to obtain. Two wet and folded towels are placed between layers of ice in the bucket and water is added to a depth of about two or three inches in the bottom of the bucket. It is essential that the temperature of the ice and water mixture is as low as possible so that the flakes or fragments of ice adhere to the surface of the towels; ice cubes are unsuitable as they fail to reduce the temperature sufficiently and also make the application uneven and uncomfortable for the patient. Plinths upholstered in plastic materials make the use of waterproof or plastic sheeting unnecessary, a spare towel is all that is required to dry the patient and to mop up after the application.

Technique

When the patient is adequately undressed and ready for treatment the therapist takes one folded towel from the ice bucket, rings it quickly and thoroughly, unfolds it to the required size and places it firmly on the patient's skin. As the towel is unfolded flakes of ice are seen to adhere to the towel, any delay or shaking of the towel must be avoided as this would raise the temperature and consequently reduces the effect of the application. Once the towel is in contact with the patient's skin its temperature rises rapidly, it must therefore be removed after two or three minutes and replaced by another which has been soaking in the bucket. Three or four towels are usually sufficient.

Effects and Uses

1. The Relief of Pain

Cold decreases the speed of nerve conduction therefore the feeling of pain is reduced. Ice towels are applied to the painful area as frequently as possible. Pain is a factor which limits movement and inhibits muscular contraction, it is therefore often possible to obtain an increased range of movement or a more satisfactory contraction of muscles while the ice towel is *in situ.*

2. The Relief of Spasm

Cold decreases the speed of nerve conduction and the stretch stimulus is inhibited. For the reduction of spasm the ice towel must cover the whole length of the affected muscles. Reduction of spasm in a whole limb is usually most satisfactory when cold is applied to the distal parts first. Subsequent treatments produce reduction in spasm in a shorter time and the effect is more prolonged.

3. Active Hyperaemia

Cold applications of short duration reduce the superficial blood supply initially but this is followed by an active hyperaemia which is apparent when the towels are removed. This local increase in the circulation is useful for the reduction of swelling and prior to joint mobilisation. Ice towels are applied over the required area, or a hand or foot may be put directly into the bucket, immersion of hands or feet must be of short duration initially however, as sensation is acute in these areas.

Contra-indications

There appears to be very few contra-indications to treatment with ice, most parients like it and find it more effective than heat. Patients with circulatory disorders such as Reyauds and Buergers disease are however unsuitable for this type of treatment.

Advantages

The use of wet ice as described has many advantages: (*a*) it is effective in a wide variety of conditions, (*b*) it is time-saving for both patient and therapist as many active and passive exercise techniques can be continued while the ice towels are *in situ*, (*c*) applications of cold can safely be carried out at frequent intervals by the patient in his own home provided a refrigerator is available.

As in the case of any other technique of physical treatment, care and accuracy in the application is essential together with acute observation of the results obtained.

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The obvious development is that once such a pilot scheme operates successfully, it creates a demand for an augmented service which cannot reasonably be expected from voluntary workers. It will, of course, be realised, that not every establishment will require a daily, full-time, physiotherapy service. Part-time physiotherapists could be employed, or several institutions could pool their efforts and organise physiotherapy on alternating days.

Two Johannesburg institutions which started physiotherapy through pilot schemes, have indeed already introduced regular day sessions, fully integrated with the medical services, so as to fulfil the increased demand for physiotherapy.

Summary

It is felt that at this early stage of the organisation of comprehensive geriatric services in our country, physiotherapy cannot afford to sit back and wait for invitations. In view of the great contribution that physiotherapy can make in the care of the aged, we should not be reluctant to come forward and offer our services. Our branches, and individual members, could be of great value to local establishments for the welfare of the aged, and should express their willingness to co-operate, advise, and assist as members of the team.

They would thus enhance the efficiency and scope of existing services and ensure for physiotherapy the place it deserves in the care for the aged.

Where locally physiotherapy services already exist, and branches and members are participating in the care for the aged, the S.A.S.P. should receive detailed information. The C.E.C. will then be able not only to express appreciation of the contributions made by our members, but also to correlate the experience of all our workers, provide an exchange of views and increase the value of our effort.