Some Aspects of Physiotherapy

Maria Hollingsworth, MCSP. Dip.P.E. MPPA. A.Obst.CP.

A physiotherapist was once described as someone "who switched the heat lamp on and off and looked decorative." As this was said by a doctor to an audience of physiotherapists some of whom, though not necessarily decorative, were using advanced techniques, it was not considered tactful. But it is possible that in the long and comprehensive span of his medical training he had only heard one lecture on physiotherapy. Even this was probably given by a doctor and not a physiotherapist.

The history of physiotherapy is one of change and adaptation. Originally massage and remedial gymnastics formed the basis of the work, but, with advances in electrical equipment, the use of heat, light, faradic and galvanic currents, diathermy variations and ultrasound were introduced. As more patients could be treated by machines than manually, and massage was thought to be too pleasant for the patient, the physiotherapist gave less massage and more exercise and electrical treatments. Now that manipulation is recognised as an important branch of the work, there is a shortage of the sensitive touch necessary, because of lack of massage training and practice.

Although all chartered physiotherapists have always worked only under the direction of a doctor, the view of the physiotherapist as a member of a medical team is a comparatively new one. This emphasises the importance of cooperation with other medical staff, especially in chest surgery and intensive care units. Most large hospitals in England now work a shift system so that a physiotherapist is available for treating respiratory complications, both medical and pre- and post-operatively. The stethoscope is now accepted as necessary to those working on respiratory cases. To check the force of expiration and measure vital capacity, the doctor may order a Vitallograph to be taken and calculated.

In obstetric work the physiotherapist is also part of the team which aims at a healthy mother and baby. Ante-natal classes, given by the physiotherapist are combined with the ante-natal clinic so that patients' travelling is reduced to a minimum. To prospective mothers are taught foot and ankle exercises which they will do throughout pregnancy and continue post-natally in order to minimise trouble with varicose veins, fallen arches and swollen ankles. Apart from instruction in getting up from the floor, and the best position from which to make beds, they do not do any energetic exercise. They learn to relax, and to take up the examination position with relaxed abducted legs, and to lie on their side in the "position of rest". They are trained to breathe gently and not too deeply during their contractions — never described as pains (a passive suffering mind-picture.) The process of birth is described in simple terms. The emotional problems of pregnancy and the puerperium are discussed, emphasizing that these are common to most mothers. It is important that they should gain confidence to ask for information from doctor, nursing sister or physiotherapist and to forget the harrowing description of blood-baths and permanent invalidism kindly told to them by well-meaning friends and relations.

During labour, if there is co-ordination between doctor, midwife and physiotherapist, the latter is present to help the mother to carry out the relaxation and breathing techniques which have been learned in class. Naturally the midwife or doctor gives the orders as far as the baby is concerned but it is the job of the physiotherapist to be at the head of the bed and concern herself with encouraging the mother, and otherwise to be as unobtrusive as possible.

Postnatal exercises aim at leg circulation from the first possible moment, progressing to adduction of legs and strengthening of muscles of the pelvic floor, balancing exercises for the recovery of good posture, and trunk exercises for recovery of figure. Naturally this programme is only possible in hospitals where the mothers stay a week after the birth of the child. If they return home in 48 hours, there is only time to repeat the ante-natal leg exercises.

After gynaecological operations, exercises similar to post-natal ones should be given as soon as possible. Emphasis should be on strengthening the pelvic floor muscles, and good posture in walking. Should there be post-operative incontinence which continues after the wound is healed and the patient returned home, treatment by vaginal faradism can be given. A good percentage of recoveries has been obtained by Miss Tanner, MCSP Dip. TP. (late of Guy's Hospital) in what she calls her "wet clinic" in London. The technique can be applied for vaginal prolapse (cystocele, urethrocele) and sometimes for uterine prolapse. Third degree prolapse is not in the province of physiotherapy and requires surgery.

The value of physiotherapy in re-habilitation is well understood in Malta, and the bulk of the cases treated in the out-patients' department of St. Luke's are hemiplegic, paraplegic or amputees. The great value to these patients is to feel that they are not maimed wrecks but can do something to help themselves towards a useful or at least partly independent life. The spectre of the bedridden patient sapping the life out of a devoted spouse or daughter is less in evidence nowadays, when early passive movement keeps the channels of recovery open. As soon as active re-education is started, the remedial exercises, now re-decorated with the impressive name of proprioceptive neuro-muscular facilitation, use muscle groups in habitual actions, so that weak muscles are encouraged to function through well-worn nerve paths, assisted by undamaged muscle tissue. Walking with aids at the first possible moment is a great help

to morale and the physiotherapist should be able to make temporary splints which can be discarded when no longer necessary. Plastazote is a useful splinting material, as it is light to wear and can be fitted accurately to individual requirements. All these patients could have the help of the pamphlets from the Society for the Disabled to ease everyday difficulties. Perhaps essential parts of these are already translated into Maltese. Rehabilitation covers a wide field, sometimes including occupational therapy and schooling, and cerebral palsied, spastic, myelomeningocele, and cystic fibrosis children should ideally combine their education with physiotherapy so that they do not deteriorate physically or mentally.

Recent injuries of soft structures are treated with heat or cold therapy, or ultrasound. All these treatments aim at preventing too much swelling and reducing haematoma. Treatment should begin at the first possible moment after injury in order that adhesions should not form. If the injury has already become stiff, then mobilisation of some sort, geared to the extent of tissue destruction, must be started as soon as possible. Scar tissue can be kept supple by gentle frictioning of the surrounding skin. Burns causing contractures can be helped by loosening scar tissue when healed, massaging with cream, and stretching contractures. Skin grafts must never be given infra-red radiation.

When a fractured limb is taken out of plaster, the patient will be reluctant to move unless maximum possible movement has been encouraged while in the plaster, and immediate increase of movement urged when the fracture has joined. The physiotherapist must show the patient that it is now safe to move the joints in spite of painful stiffness. Thickened oedema in a limb can be softened by massage followed by elevation for draining. Without this help the patient is unlikely to be able to strengthen weak muscles quickly.

As a member of the team dealing with psychosomatic illness and (preferably) non-violent psychiatric patients, the physiotherapist has a place in helping to distract the over-introspective types by working them in exercise classes. Only experienced teachers can attempt this type of work, as a recreational atmosphere can get out of hand without quick thinking in giving instruction. Sometimes in cases of functional paralysis, electrical treatment with faradic current can be given in unorthodox ways. These minds are susceptible to suggestion and although such treatment may sound like witch-doctorng, a consultant in psychology at St. Thomas', has some respect for the African witch doctors' use of rhythmic trance-production for the relief of tension. Any means of physiotherapy which can relax tension can therefore help these disturbed patients. Naturally the physiotherapist cannot take the place of the trained psychiatrist, but, given information by him, can sometimes help to cut down the recovery time, on lines of treatment which he thinks advisable. If the hyperaesthesia stage of the drug addict has passed, massage can help relaxation in some cases, but these patients are unpredictable.

It is more satisfactory to treat the patient who is likely to recover and be a credit to the medical team than to struggle for long periods with geriatric or very ill patients. Both from the point of view of the person treating them and the patients it is better that these long-term cases should attend a general clinic than be herded into a department with an applied "Abandon hope!" notice over the door. The older people, however, have so much to offer us in return for the little we can do for them, and it is important that they should feel cared for. In Malta care affection is more the lot of the old than it is in other places, but in addition there are practical aids such as hoists, pulleys and slings which the physiotherapist can co-ordinate with occupational therapy to make life more interesting and independent for them. A patient with only partial use of one hand, and confined to a wheel chair can paint if a spring sling is used to support the arm. The ideal is treatment at home by mobile clinic so that they can be part of the family without disrupting family life. By this means or by the day-hospital system, physiotherapy, coordinating with the surgeon, can avoid contractures giving rise to sores; and safety devices can help to avoid falls and other accidents;

Cancer patients can be helped by physiotherapy and, as Raven said in a paper read to the British Council for Rehabilitation of the Disabled:

"The rehabilitation of the cancer patient is rewarding, for many have a good prognosis following modern treatment and are able to earn their living in their usual employment. In fact, many are really better life-prospects than a lot of patients following coronary thrombosis, provided they are well rehabilitated."

It is most important in treating cancer that the doctor should instruct the physiotherapist in exactly what he wishes to be told to the patient. It may be that the patient will give the physiotherapist a fairly accurate prognosis of his own case, and it must be agreed what is to be the answer.

It is not possible to mention more than the main trends, and there are many other uses for physiotherapy, some of which are discovered by chance. There was a physiotherapist called in to help a Bertram Mills circus elephant, who could not elevate his trunk. She succeeded in curing the poor animal, and her photographs to prove it!