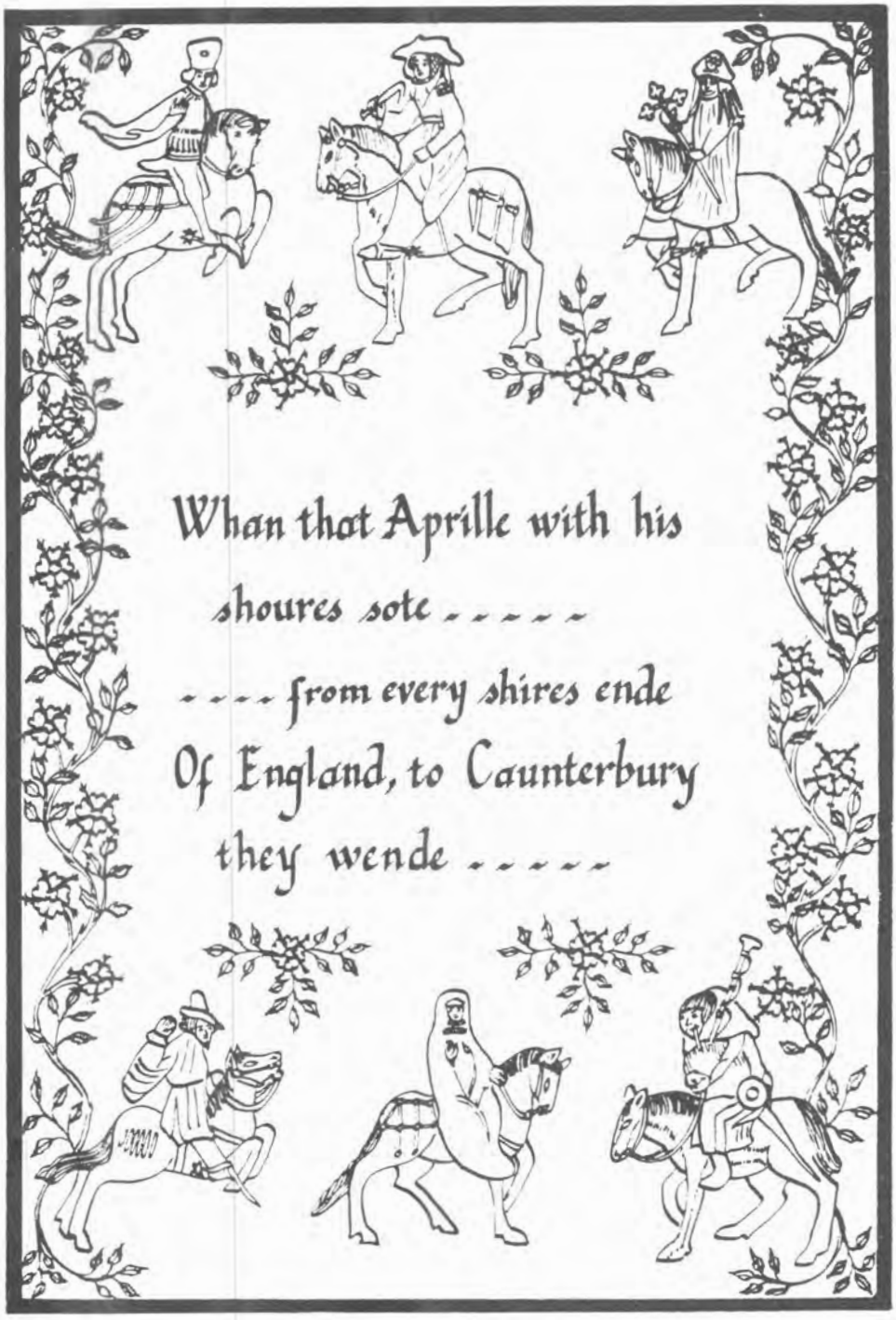
ASSOCIATION OF

PAEDIATRIC

CHARTERED PHYSIOTHERAPISTS

NEWSLETTER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Association of Paediatric Chartered Physiotherapists

Number 39 **May 1986**

"CANTERBURY TALES"

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CONTENTS

EDITORIAL

Many of our members have just been on a professional pilgrimage to the University of Kent at Canterbury, and as our Chairman - Ann Grimley said in her opening speech to this the 13th Conference; "We have come as professional pilgrims from all shires and Celtic outposts, to seek support of one another, looking for guidance in our professional lives and practices, from exemplary practioners. We seek to wend our ways through the fellowship of learning and sharing, to improve the lot of the children and families we serve in our clinical specialism".

Truly, we found much guidance - as you will see from the synopsis of lectures in this Newsletter, and as always we found fellowship and renewed acquaintances, we were also made most welcome by the hard working committee of the South East, who contrived a most well organised and smooth running Conference, and for this we 'give them thanks in fullest measure.'

At the A. G. M. our Chairman for the last three years stepped down from office because of other heavy commitments and that 'worthy woman from beside Norwich city - Maggie Diffey - took on the mantle of responsibility for our collective well being. Linda Hanraads, who as treasurer has been 'stately in administration, bargains and negotiations' has also passed on her duties and we welcome Jill Brownson as Treasurer.

As an Association concerned with children it seems appropriate that the beautiful art work for the Conference, by Lea Beach - a 13 year old at Patcham School for the Physically Handicapped, be shared with all others of like mind, hence the reproduction of the programme cover for our 'Canterbury Tales.'

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ANNUAL C. S. P. CONGRESS

Owens Park, University of Manchester

SEPTEMBER 17 - 20, 1986

Members are reminded of this Congress, which is compounded of a variety of Courses, particularly some for the paediatric physiotherapist. i.e. Overt Handicap Mental Handicap, Minimal Handicap.

Do make every effort to attend what promises to be an exceptional Congress.

The LAST DATE for submission of Material for the August Newsletter will be JUNE 30th. Material submitted after that date, will not be included.

NEURO -MUSCULAR DISEASES

Dr. Richard Robinson, M.B.B.,Chir.F.R.C.P. Consultant Neurologist

Neuromuscular diseases comprise any condition affecting the peripheral motor unit anywhere from the anterior horn cell to the muscle fibre. Nearly all cause weakness to some degree, and therefore directly concern physiotherapists. Many are inherited. I have decided to touch on some of the aspects of the different conditions which have been of interest to me as a Paediatric Neurologist who is therefore serving his apprenticeship in physiotherapy.

Duchenne Muscular Ldystrophy (DMD)

Genetic studies are moving rapidly in this condition. 80% of carriers can now be confidently identified using a combination of C. P. K. estimations and D. N. A. analysis. Gene probes are not yet sufficiently accurate to provide satisfactory prenatal diagnosis, but at the current rate of progress this is likely to be possible within about the next 3 years. This of course is only feasible if there is a positive family history. Since about 60% of boys represent new mutations, we will still have to maintain a high index of clinical suspicion for new cases. The diagnosis should always be suspected in any moderately mentally handicapped male infant - particularly of the 2 or 3 year old will reveal the characteristic lack of spring. Running and jumping are rarely, if ever, achieved. Early diagnosis is essential to prevent the tragedy of the birth of a second affected brother.

I will not presume to suggest what the place of physiotherapy is in the walking boy with DMD, but one aspect which has increasingly impressed me is the prolongation of a form of walking with ischial bearing calipers. Walking for some boys and their families is a worthwhile end in itself; weightbearing retards the onset of osteoporosis. Possibly of even greater importance is the effect of prolonged ambulation on the spine in encouraging lordosis.

About 80% of boys with Duchenne's lose their lordosis in sitting. This unlocks the posterior facets of the vertebral column and allows the development of a scoliosis. This causes asymmetrical sitting, loss of 2-handed functions, increasing discomfort, compromise of ventilation and a decreased life expectancy. The other 20% continue lordotic in sitting, experience less discomfort and die later. We do not yet know if prolonging ambulation always prevents scoliosis. My approach for the last 5 years has been to prescribe a light polypropylene jacket which encourages a lordosis. The two boys who have developed a scoliosis in this time have been those who wore the jacket least. The remainder - about fifteen, who have worn it almost all the time they have been out of bed have remained with straight backs.

For those who develop an uncontrollable scoliosis, operative intervention is now feasible. Previously, a spinal fusion has been too major an undertaking in a person with such a limited life expectancy. The Luque procedure, which involves wiring each vertebra to a pair of

paravertebral rods, is followed by sitting within 2 - 3 days, no post-operative jacketing, and discharge home in 1 - 2 weeks. Although there is little experience of this procedure as yet in this country, it appears to offer a feasible alternative to attempting to accommodate a curve with increasing difficulty in some form of moulded seating.

We have become increasingly aware in recent years of the cardiac involvement in DMD. At autopsy, narrowing of the coronary arteries and fibrosis of the posterior ventricular wall is a common finding. It seems likely that a proportion of boys die as a result of an acute cardia arrhythmia rather than ventilatory failure. Before surgery of this kind is undertaken therefore, it would seem prudent to have a careful evaluation of cardiac function.

Spinal Muscular Atrophy (SMA)

It is now generally appreciated, is a spectrum of conditions. At one end is the acute infantile form - Werdnig Hoffman's disease, with death towards the end of the first year. At the other end is the young adolescent who has relatively slight proximal weakness with a waddling gait - the Kugelberg-Welander variety. Those in most therapeutic need lie between these two extremes - the so-called intermediate group. All of these get to maintaining a sitting balance independently, and a minority achieve walking. The weakness seems non-progressive, and with appropriate management we have no reason to suppose that their life expectancy is other than normal. As in the Duchenne group - one of the major complications is scoliosis, and here again the Luque operation may prove valuable.

Guillain-Barre Syndrome (GBS)

The GBS, or acute post-infective polyneuritis is now generally recognised as an immunologically mediated disorder. The Schwann cells responsible for peripheral nerve myelination bear the brunt of the attack. This occurs in patches along the nerve, giving rise to segmental demyelination. Thus, N. C. V. testing may show normal conduction velocities along one length of a peripheral nerve, but diminished velocity elsewhere on the same nerve. Steroids are now known **not** to help clinically. The majority of cases of course get better. The course of the disease is deteriorating strength for 1 - 2 weeks, followed by a period of maximal weakness, before recovery begins. The length of that period is important prognostically. If it lasts longer than 16 days, the proportion of people with subsequent morbidity rises sharply. It is in this group that we would look to for the effects of treatment. Plasmapheresis is now known to hasten the onset of recovery. This is a technique whereby blood is drawn from the patient, the red cells are separated from the plasma, the plasma is rejected, the red cells are resuspended in donor plasma and then returned to the body. Whether this blood-washing procedure removes harmful antibodies or angry lymphocytes is not known. Although it sounds simple enough to do, it requires special equipment and trained staff and is not without its hazards. Its use therefore should probably be confined to those with severe weakness in whom the onset of

recovery seems delayed.

An autonomic neuropathy is frequently part of the GBS. This may lead to a disturbance of gut motility, sweating, temperature control, heart rate and arterial pressure. A slowing of the heart rate may precede heart block and the advent of asystole. This complication can be spotted by continuous E. C. G. monitoring and prevented by insertion of a temporary pacemaker.

Congenital Myopathies

The numbers of congenital myopathies appear to increase daily. Some are diagnosed by disordered structural changes which may be visible only by electronmicroscopy. Although microscopic changes may appear striking and characteristic, they may not be specific for a single cause with a uniform prognosis. For example, in nemaline myopathy, dense bodies with a lattice-like structure form from degenerating Z bands in the muscle fibres. However, we know now that there are three forms of this condition. One, a mild form, is inherited as an autosomal dominant, as is the form with predominantly bulbar involvement in the neonatal period and infancy. An autosomal recessive form, presenting in the neonate with hypotonia and generalized weakness, may be sufficiently severe to mimik birth asphysia with delayed onset of ventilation.

Other congenital myopathies affect particular reactions of fat or carbohydrate metabolism. Still others involve energy generating mechanisms in the muscle mitochondria. The more fundamental the process involved, the less likely is it that the process will be confined to the muscle. An example of this is the Kearn's Sayer syndrome. This is a mitochondrial disorder which most frequently presents with external ophthalmoplegia, ptosis and weakness of the limbs. However, it is commonly associated with short stature, a pigmentory retinopathy, sensori-neural deafness, mental handicap, heart block and a variety of endocrine disorders. Although the effect of the disease may be most apparent in the muscles, its effects elsewhere may be equally important.

An extremely interesting biological feature of the Kearn's Sayer syndrome is that it is inherited via the mitochondria. We generally think of inheritance being mediated by nuclear DNA. However, about one-third of the cell's DNA is carried in the mitochondria. Sperms do not carry mitochondria, and this condition is the first documented example of cytoplasmic inheritance - which occurs only via the mother's ovum.

Another interesting example of a predominantly maternal effect in an inherited disorder is congenital dystrophia myotonica. The textbook description of this condition is usually applied to adults with myotonia, lugubrious expressions, cataracts, dementia, frontal balding and, in males, testicular atrophy. It is inherited as an autosomal dominant. In the adult, the onset may not be apparent until the 30's or 40's. However, where the mother, who herself has the gene but may not be old enough to express it, has a baby who also has the gene - the baby is severely affected with severe hypotonia and weakness at birth and subsequent mental

handicap. There is something about the intrauterine environment which hastens and amplifies the advent of the genes effect.

Arthrogryposis Multiplex Congenita

One outcome of neuromuscular disorders which have their advent in utero is the presentation of stiff, contractured joints at birth. This may also be caused by collective tissue disorders such as Marfan's syndrome as well as anything else which produces foetal immobility such as lack of amniotic fluid or a cramped uterus. The implication of this is that in the absence of an obstetric cause, these children need careful investigation for a variety of conditions, many with important genetic implications. However, the commonest cause is unknown. There is a lack in these cases of anterior horn cells confined to a segment of spinal cord on a sporadic, i.e. non-inherited basis. This occurs very early in gestation, and the muscles served by the anterior horn cells involved are frequently rudimentary. Straightening of limbs can often be effectively achieved by serial plastering rather than by surgery, and is always worth trying in the first instance. Surgical correction is frequently difficult because of the abnormal anatomy; for the same reason muscle and tendon transplants are rarely successful.

SYNDROMES

Dr. Caroline Berry, Consultant in Clinical Genetics, Guy's Hospital

Syndrome diagnosis is important, partly with a view to prognosis but chiefly so that accurate genetic counselling can be given. The term 'syndrome' is used very loosely. We now try to label congenital abnormalities according to their cause, when known. They may arise in a number of ways:

1. An entirely normal foetus may be **DEFORMED in utero** by external forces, e.g. positional talipes from oligohydramnios. These abnormalities are often mild and self correcting and usually non genetic.
2. A foetus programmed to develop normally may be affected by some **DISRUPTIVE** agent acting during the pregnancy.

   e.g. The foetal alcoholic 'Syndrome'
   Rubella embryopathy
   Some limb reductions

   Usually non genetic and often preventable.

3. A specific organ or region may fail to develop correctly in the embryo giving rise to a **MALFORMATION.**

   e.g. Goldenhar/First Arch 'syndrome'
   Poland anomaly

   Tend to be non genetic or sometimes polygenic.

4. Some malformations give rise to a cascade of further malformations known as a **SEQUENCE.**

   e.g. Potter's sequence
   Pierre Robin sequence.

   Like (3) tend to be non genetic or polygenic.

5. A specific embryonic **TISSUE** fails to develop properly leading to abnormality in all organs derived from that tissue (TISSUE DYSPLASIA). Often determined by a single gene.

   e.g. Ectodermal dysplasia (some X-linked)
   Osteogenesis imperfecta (mostly autosomal dominant, some recessive).

6. **Syndromes.** A pattern of multiple anomalies thought to be causally related. Many may eventually be fitted into one of the above groups as we learn more about them. Their aetiology may be known:

Chromosomal	e.g. Down, Prader Willi syndrome
Single gene	e.g. Laurence Moon Biedl
Recessive:	e.g. COFS (cerebro-occulo-facio-skeletal)
Dominant:	e.g. Freeman Sheldon. May vary in expression and severity.
Unknown	e.g. Cornelia de Lange

Hopefully our study of these rare conditions will increase our understanding of normal development and eventually enable us to prevent errors occuring.

POSTURAL ASYMMETRY

Dr. David Scrutton, Superintendent Physiotherapist, Newcomen Centre, Guy's Hospital

Postural Asymmetry

Some asymmetry is normal. We are not only "handed" but also "footed"; most people have a preferred side to sit and cross their arms in a preferred way; the medial arches of the feet in standing usually develop at different times and adult foot sizes are frequently different. Data presented on slides showed the asymmetry of step lengths and foot angles to the line of march in normal children.

Therefore what concerns physiotherapists is not asymmetry as such but degrees of asymmetry which are causing, or are likely to cause, problems.

Excessive Asymmetry

Is uncosmetic - both at rest and in motion.

inefficient - upsetting the naturally balanced body actions

inconvenient - buying clothing and in particular shoes
leads to postural asymmetry elsewhere in the body
psychologically hard to bear - both the child and the parent can see the person who "might-have-been" on the unaffected side.

Some Examples of Asymmetry Were Described

1. Babies who preferentially turned their head to one side develop a number of postural asymmetries throughout their body which disappear when they learn to sit at around 6 - 7 months (Robson, 1968).
2. Leg length inequality. Up to ½" is probably acceptable but greater than that leads to equinus of the short leg, hip and knee flexion of the long leg and/or tipping of the pelvis. The differences between true and apparent shortening were described and that, although a raise may make **apparent** shortening more cosmetic and movement more efficient, it would not correct pelvic (and therefore spinal) posture.
3. Unilateral equinus. Either fixed or dynamic leads to a longer leg and also to a lack of heel strike which disturbs the normal floor reaction force victors. The lack of the ability to lengthen the leg at toe-off creates less rhythmical gait and greater vertical displacement of the centre of gravity. Equinus in infantile hemiplegia was discussed together with the use of an AFO which was seen as primarily to teach correct hip knee gait function; allow more symmetrical standing; and only secondarily to teach plantigrade walking and perhaps prevent fixed deformity. This is because both fixed and dynamic equinus can be dealt with quite easily, whereas incorrectly learnt hip/knee action is very hard to displace.
4. Windswept hips. The natural history of windsweeping was described with slides together with the dangers of bilateral adductor tenotomies in windsweeping. The cause was seen primarily as a pathological retention of normal infantile preferred head turning (Fulford and Brown, 1976).

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References.

Fulford, G. E. Brown, J. K. (1976) Position as a cause of Deformity in l Palsy. Children with Cerebral Palsy. Developmental Medicine and Child Neurology. 18,305 - 314.

Robson, P. (1068) "Persistant head turning in the Early Months. Some effects in the Early Years.

SPINAL DEFORMITY IN THE PHYSICAL HANDICAPPED

Mr. Timothy Morley, Consultant Orthopaedic Surgeon, Royal Nat. Orthopaedic Hospital

Spinal deformity in association with physical handicap is common, may be very severe, and may be a significant factor limiting both mental; and physical development.

The underlying causes of spinal deformity are of four main types:

(a) Congenital
(b) Neurogenic, both paralytic and spastic
(c) Myogenic
(d) 'Idiopathic' in association with known syndromes which are also associated with physical handicap.

The Indications for treating these Deformities

Spinal deformity can significantly affect attempts to rehabilitate the physically handicapped. Correction allows therapists to maximise their efforts in both physical and mental development.

The deformity may also have more specific problems.

(a) Seating - loss of seating balance
(b) Standing balance
(c) Skin problems
(d) Stomal problems
(e) Progressive loss of neurology
(f) Pain

It must be understood that these children often have mental impairment, but despite this, if the surgery is carried out in a centre used to managing such children they tolerate surgery remarkably well.

The Treatment of Spinal Deformity

This may be conservative, bracing and seating, or surgical. Conservative treatment may be valuable, particularly in paralytic deformities and should not be excluded out of hand, even in the face of absent sensation.

Surgery, usually by the nature of the deformity, has to be extensive, and result in a solid fusion, both at the front and at the back. There have been very significant advances in the types of surgery and fixation over the last few years. Although surgery is often a major undertaking the benefits to a physically handicapped child, in terms of total achievement can be very rewarding.

RECENT DEVELOPMENTS IN SEATING

R. L. Nelham, B.Eng., C.Eng., M.I. Mech. E., M.B.E.S.,
Technical Director, Rehabilitation Engineering Unit, Chailey Heritage, Lewes, Sussex, BN8 4EF.

There is an ever increasing interest in the provision of appropriate seating for handicapped children. In particular, there is a growing awareness of the role that seating can play in the overall treatment programme for each child. The days when a wheelchair was considered to be merely a means of conveying a child from point A to point B are hopefully numbered. From the therapists' point of view, what is the point of spending many hours over a long period of time treating a child if between those treatment sessions the posture adopted by the child counteracts all the hard work and progress achieved? Every seating system that provides postural support should therefore be therapeutically correct and, hence, manufacturers of seating systems must work closely with treating therapists to achieve that objective.

Seating systems must apply forces to the body in order to achieve the desired result. It is therefore important to remember the causes of tissue trauma and avoid them by correct design of the support surfaces. These should be aligned with the body contours in order not to create localised high pressures or shear forces.

Simple postural control can be achieved by harnessing systems but complex support requires the manufacture of moulded seating. It should be borne in mind, however, that if correction of a deformity is required then an orthosis should be considered before seating.

There are certain disadvantages with moulded seating. The base of a moulded seat is often constructed as a smooth curved surface to support the buttocks. This can lead to inadequate lateral control of the pelvis and in the antero-posterior direction lead to or even promote sacral sitting. The orthogonal moulded seat which has a flat ischial support and a vertical sacral pad is designed to overcome this problem and the many clinical fittings carried out so far are proving to be successful.

The constraints and disadvantages of intimately moulded seating systems have led to the continuation of cut and fit systems such as the plywood and padding seats. These will have less constraints on the development of sitting posture but are expensive to produce, often complicated in nature and usually require the siting of workshop facilities adjacent to the clinic. Since a workshop is the exception rather than the rule, intimately moulded seating is the most common solution for seating problems. Recent developments at Chailey Heritage have taken advantage of the vacuum moulding process to produce vacuum formed padded inserts which offer the same degree of postural control as conventional padded inserts but at a more economic cost. Workshop facilities are no longer required adjacent to the clinic but various simple padded components are required to be fitted into the casting bags during the shaping of the seat.

There is a need for seating systems capable of assembly and adjustment without workshop facilities and which will provide graded degrees of postural control for children with different sitting abilities. Two recent developments,

the Dundee Modular Nursery Seat and the Chailey Adjustable Postural Support (CAPS) Seat are designed to meet these needs. The Dundee MNS is based on a Britax car seat and different shapes of padding are inserted under the upholstery to provide an attractive supportive seating system. It can be used on a buggy or a free-standing frame which can be transferred to a car for use as a safety seat.

The CAPS seat is a new design of modular seating system to cover the age range of approximately five years old to adult. Different components are adjustable or can be left off altogether and only two tools are required to assemble and adjust the complete system. It fits any standard wheelchair and further developments are required during the coming year before its commercial availability towards the end of 1986 or early 1987.

In order to assist in the prescription of the most appropriate seating system, current work at Chailey Heritage and at the Centre for Spastic Children, Cheyne Walk, has led to the formulation of prescription criteria. Seven levels of sitting ability have been established where level 1 is an unplaceable child and level 7 is a child who can attain a correct sitting posture but is still learning to stand or learning to walk. Children of sitting ability level 1 are those who require intimately moulded seats whilst those at level 2 and above require the orthogonal moulded seat and the CAPS seat. The exact prescription criteria for the Dundee MNS are yet to be established.

For some years, handicapped children in Sweden have been able to use saddle-type wheelchairs and these have recently been imported into the U.K. Work at the Royal Hospital and Home for Incurables at Putney has demonstrated the significant advantages of this type of sitting posture on a wheeled vehicle and the availability of the Swedish Annika Saddle Chairs should enable some previously intractible problems to be tackled if not solves.

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Evaluation of The Chailey Adjustable Postural Seat

It has been our privilege to be involved in the evaluation of the Chailey Adjustable Postural Seat, which has been developed at Chailey Heritage under Roy Nelham, Technical Director, and Dr. Elizabeth Green, Medical Director of the Research project.

This seating method seems to answer the problems of positioning the asymetrical children, which many of us have been unable to solve satisfactorily in the past. The seat has highly and easily adjustable features, giving trunk and pelvic stability - it has flexibility of depth and width of seat, depth and width of abduction and foot rest adaptability. In all we have found it gives the children the foundation for sound postural development.

We are excited that this form of seating will become available to all of us - we will surely be thankful to Roy Nelham, Dr. Elizabeth Green and their colleagues for many years to come.

Gay Hall,
Head Paediatric OT
Willows CDC
Preston, Lancs.

Barbara Edwards,
Senior Paediatric Physio,
Mayfield School
Chorley, Lancs.

SEATING — HOW CAN WE HELP?

Ruth Cartwright, MCSP, Chris Foster MCSP, Chailey Heritage.

Many seating problems are universal, some very specific and there may well be more than one way of solving the difficulty.

Over the years Physiotherapists and Occupational Therapists at the Heritage have tried to construct answers to the problems brought to them by Doctors, Parents, Nurses, Care Staff and Teachers. They used available facilities and materials to "have a go" and where possible produced as simple an answer as possible.

Using slides and video and looking at home, school and outdoor activities the aim is to show what can be achieved with time, patience and a little skill!

Over the latter years techniques and materials used have changed for the better. There are many commercially available pieces of equipment which can be used or adapted fairly readily. As Physiotherapists, we have an obligation to know what new products are available on the market, not only in this country but also from abroad, as many foreign companies now have outlets in this country. The DHSS provide a comprehensive range of wheelchairs, pushchairs and tricycles at local ALACs (Artificial Limb and Appliance Centres) which can be adapted as long as the Therapist knows precisely what is required. It is essential that the appropriate information and reasons for the adaptations is given to the Technical Officer, as he may not have the required medical knowledge on which to base the prescription. The DHSS will also issue non-schedule items if that is the only appropriate equipment available.

Finally the decision is a multi-disciplinary one and no one person should adjust the seating without reference to the mother and child and other members of the team.

INDICATIONS AND CONTR-INDICATIONS FOR CHEST PHYSIOTHERAPY

Mrs. Annette Parker, Senior Physiotherapist, Kings College Hospital

Important things to remember are: Every child is an individual - even those of the same age vary considerably in what they can understand and do.

Treatment should never be 'routine'. It is important that a patient should be assessed prior to every treatment.

Regularity of treatment will depend on the patients condition i.e. a child with a lot of secretions will need more frequent physiotherapy, than a child who has only a few.

Chest physiotherapy should only be given as often as necessary and there should be definite indications, and no definite contra-indications before treatment is carried out.

Indications for Chest Physiotherapy.

1. Increase/retention of secretions.
2. Lung collapse due to mucus plugging.
3. Decreased thoracic expansion.

Contra-indications.

1. Severe respiratory distress.
2. Moderate/severe bronchospasm.

Mild to moderate bronchospasm is not a contra-indication, but treatment should proceed cautiously, and stop if bronchospasm worsens. Whenever possible, treatment should be given following administration of a bronchodilator, allowing time (about half an hour) for this to take effect.

Bronchiolitis

In the acute stage where there is severe respiratory distress, physiotherapy is not indicated, though it is often worth assessing the patient, to ensure that they have good humidification, and that their noses are kept clear by regular suction. Otherwise they should be handled as little as possible.

In the less acute stage, when wheeze has decreased, physiotherapists may be asked to treat the child if there are areas of collapse. However, physiotherapists in Nottingham have studied the effects of chest physiotherapy on Bronchiolitis, and could find no obvious benefits. They concluded that physiotherapy should not be given routinely to patients with bronchiolitis.

Asthma

In status asthmaticus children are best left well alone, as with bronchiolitis. As the bronchospasm lessens, children will often carry out their own physiotherapy by rushing around like mad things and coughing up their sputum well. Older children may benefit from percussion and breathing exercises if there are areas of collapse on expiration due to mucus plugging. They may also need to be taught relaxation, diaphragmmatic breathing exercises and posture awareness. Some hospitals run asthma classes which both patients and parents find helpful. Physiotherapists can also play an important role in teaching the use of spinhalers and rotohalers.

Cystic Fibrosis

Chest physiotherapy is an important part of the management of Cystic Fibrosis, treatment beginning as soon as the diagnosis is made, and continuing for life. The frequency of treatment being dependent on how productive the chest. Parents should be taught chest physiotherapy but should always have recourse to a physiotherapist so the treatment can be adapted as the child grows, and also for assistance during a chest infection. This can be as a hospital out-patient, or by a home visit from the Community physiotherapist. It is important to remember that the physiotherapist can be of great psychological support to the family. 20% of patients with cystic fibrosis can develop cirrhosis of the liver, leading to the development of oesophageal varices, which can bleed and cause massive haematemesis, often needing surgery. Physiotherapy is contra-indicated until the bleeding is controlled, and then should proceed with care, avoiding tipping. When the child goes to theatre physiotherapy and suction can be given in the anaesthetic room once the child has been intubated. Post-op physiotherapy should again be given cautiously, although the child should be seen frequently and tipping should be avoided for the first 24 hours post-op, unless there is a severe chest problem.

Pertussis 'Whooping Cough'

Most children with this condition are not admitted to hospital so are not seen by a physiotherapist. Infants who may have caught the disease from an older sibling, will be admitted, but should not be given physiotherapy, as handling could precipitate a coughing attack leading to hypoxia and apnoea. However, children are often seen as out-patients some weeks after the attack, with persistant lobar collapse - usually RML. They should be seen as often as necessary, and their parents taught how to continue the treatment at home, the best times being before breakfast, before bed and as many other times during the day as they can manage. Treatment should be avoided after meals, as the child may vomit after treatment if swallowing instead of expectorating mucus.

Pheumonia

As with all other conditions - Look and See - If the child is non-productive then no treatment is necessary, but the child should be regularly assessed and treatment begun if sputum is produced.

Foreign Body Inhalation

Unless physiotherapy is given shortly after the foreign body has been inhaled, treatment will not be effective as the object will be firmly wedged in the airways within a few hours. Bronchoscopy will be necessitated in order to remove it.

Post bronchoscopy vigorous physiotherapy is needed to remove secretions caused by the imflammatory response to the object.

Croup, Epiglottisis

These infections only need physiotherapy if the child has been intubated, and then only if secretions are present. Regular assessment is necessary as secretions may become a problem 24 - 28 hours after intubation, due to the pressure of the endotracheal tube. After extubation, treatment is usually no longer necessary.

Upper Respiratory Tract Infection

Children with an U.R.T.I. can have mucus trickling down the backs of their throats, causing them to cough as if they had a chest infection. No physiotherapy is needed, but teaching them to blow their noses may be useful.

Points to consider when a child is in ITU with a medical chest condition.

1. Assessment is essential before each treatment, as the childs condition may change rapidly.
2. Patients having regular physiotherapy should be allowed one rest period e.g. midnight - 4 a.m./6 a.m. in 24 hours.
3. Manual hyperinflation with a bag can cause hyperinflation of the alveoli, and pneumothorax maybe leading to permanent lung damage. It should, therefore not be routinely used as a physiotherapy technique, and should only be given by staff experienced in its use.
4. ITU is very frightening, and stressful for children, and physiotherapists should do all they can to lessen this.
5. Treatment should be given as far as possible to coincide with nursing procedures to avoid overtiring the patient.

NEBULISERS AND INHALED THERAPY

Dr. Richard A. Lewis D.M.B.Sc.MRCP Consultant Physician, Worcester Royal Infirmary

Inhalation as a means of delivery of drugs to the lung has been practiced since time in memorial and has recently gained new momentum because of the advantage that therapeutic concentrations, required to produce the same effect, were much less than when the drug was taken by mouth with a consequent reduction in side-effects. The Nebuliser has an advantage over pressurised metered dose inhalers in the very young, the very old, the infirm and the incoordinate. It enables a higher dose of drug to be delivered, and does not require coordination on the part of the patient. The higher dose of drug is of benefit in patients with severe asthma, not only because it enables maximum bronchodilation to take place, but it also leads to a longer duration of action of the bronchodilator.

The recent epidemic of Nebuliser use has resulted from the ready availability of relatively cheap domicillary air compressors to drive the Nebuliser units. In the hospital setting Nebulisers should be driven with oxygen at a rate of around eight litres per minute except in those very few patients who have chronic hypercapnia in whom the use of oxygen may lead to suppression of hypoxic respiratory drive.

Increasing oxygen flow rate results in decreased particle size, but increasing suction rate from the Nebuliser results in an increase in particle size. Patients should therefore inhale from a Nebuliser using slow tidal breathing. Particles entering the lung deposit by infection, sedimentation and defusion. Nebulisers must produce particles with a mass median diameter of less than 5 microns in order to enter the conducting airways.

The recommended dose of drugs for a metered dose inhaler is very much less than that of a Nebuliser. However, both direct radio labelled deposition studies, and dose response studies would indicate that a Nebuliser is as efficient as the metered dose inhaler at delivery of the drug to the lung. The main difference between the two devices is that the majority of drug in a metered dose inhaler ends up being impacted in the mouth where the majority of drugs from a Nebuliser is retained within the apparatus and tubing or passes to the atmosphere.

Some concern has recently been expressed about the high dose of drug being delivered from a Nebuliser and it has been suggested that this may be responsible for a recent increase in deaths from asthma in New Zealand. It is more likely that these deaths have been due to delay in hospital referral and inadequate use of steroids. However, both angina and arrhythmias have been reported as a result of Nebuliser beta agonists.

Bronchoconstriction can occur when hypotonic solutions are Nebulised. This is more marked from an ultrasonic than from an air driven (jet) Nebuliser. Cough is also produced by ultrasonic nebulised hypotonic solutions and this appears to be a result of the electrical charge characteristics of the inhalation. A second cause of the constriction occuring in response to inhalation from the Nebuliser may be due to the cooling effect of the inhalation on the airways. This effect appears to be responsible for some previously reported cases of asthma induced by this suggestion.

Not all patients require a nebuliser if they are unable to use metered dose inhaler. The spacing attachments for the metered dose inhaler such as the Nebuhaler result in increased lung decomposition because, since the need for coordination is removed, there is much less oropharangeal deposition of drugs.

CHAIRMAN'S REPORT

In her Annual Report to the Canterbury Conference, the Chairman - Miss Ann Grimley - stressed the amount of work done by the National Executive Committee during the year, emphasising that being on the NEC is no easy option, and noted the regular attendance of members and Regional representatives.

With an increasing membership - 239 new members in 1985 - APCP is one of the largest and most active of the S.I.G.'s. Working parties have been set up, and are involved, in such diverse subjects as:— Guidelines on APCP Conferences and procedures, Approaches to differing treatment techniques, Book Lists, Audio Visual programmes, Distance Learning, Health and Safety aspects of Community Work, Aids and Equipment Survey, Work Loads and weighting factors in Paediatrics for Physiotherapists. Committee members have also attended numerous workshops on these and other subjects, and the voice of the Association has been called for, and heard by the DHSS, DES, ADSCP and many others. The Education committee has continued to tackle

the effects of the 1981 Special Education Act, mounted an 'Introduction to Paediatrics' course and is currently investigating the possibility of a joint PT/OT course.

Elma Bell our PRO meets annually with the Regional Representatives, and continues to 'show the flag for the Association' both nationally and internationally.

Touching on the implementation of the Griffiths and Korner reports, and their direct consequences to members of the NHS, Miss Grimley exhorted members to avail themselves of every opportunity to educate themselves in the knowledge of the mechanics of management, staffing and budgeting. She also emphasised the necessity for clarity of thought and speech, objectivity and planning for the future, within your team/site/District. She closed her report by exhorting APCP member to be vigorous in the maintenance and care of their clinical expertise, and thanked the Association for support during her term of office, she also expressed her appreciation of the work done by the retiring committee members, Mrs. Celia Ball and Mrs Linda Hanraads.

"Stand up for Joe"

Following the recent showing of the emotive problem - children with Brain Damage - on BBC Television recently, and the story of Doran Scotson on Q.E.D. a little later, Miss Grimley has written to 'Therapy' drawing attention to the comments of the members of APCP. Should readers have missed these comments, it is suggested that they contact 'Therapy' or Miss Grimley for the context of her letter.

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A copy of the A.P.C.P. letter to the B.B.C. is printed elsewhere in this Newsletter.

RESPIRATORY DISEASES OF CHILDHOOD

John F. Price, F.R.C.P., Consultant Paediatrician, King's College Hospital, London.

Childhood respiratory disease is very common. Acute respiratory infections comprise a half of all illness in children under the age of 5 and a third of all illness in primary school children. Most of these infections are mild but about 5% are more serious and involve the lower respiratory tract. Acute viral bronchiolitis affects about 1% of infants with a peak age incidence of 2-4 months. The infection is most commonly due to the respiratory syncytial virus and causes corysa followed by cough, tachypnoea, wheezing and hyperinflation of the lungs. Treatment is with oxygen and maintenance of an adequate fluid intake. Drug therapy and physiotherapy have no influence on the outcome. Fortunately this is a self-limiting condition with a very low mortality. Whooping cough can occur at any age but causes a much more serious and life threatening illness in early infancy. Severe hypoxia may occur during paroxysms of coughing and bronchopneumonia may result from secondary infection. Fortunately with proper treatment long term sequelae such as bronchiectasis are rare. Overall about a half of pneumonia in childhood is viral and a half bacterial. Respiratory syncytial virus, parainfluenza A cause a bilateral bronchopneumonia. Certain adenovirus subtypes can cause particularly severe pneumonia in young children with a high frequency of long term lung complications. Bacterial pneumonia in neonates is often due to gram-negative bacteria and group B streptococcus. Beyond the neonatal period a pneumococcus is a much more common cause of pneumonia than haemophilus influenzae. Mycoplasma is an important cause of pneumonia in adolescence. Nowadays staphylococcus aureus rarely causes pneumonia and when it does one should consider the possibility of immune deficency or cystic fibrosis.

Cystic fibrosis is genetically determined and inherited as an autosomal recessive. Incidence is approximately 1 in 2,000 and the carrier rate 1 in 25. Ten to 20% of children with cystic fibrosis present in the perinatal period with intestinal obstruction due to meconium ileus. All cystic fibrosis children are prone to serious chest infections and about 85% have malabsorption due to pancreatic failure. The diagnosis is made by measuring the sweat sodium content. In cystic fibrosis this is 70 - 125 mmol/l. Chronic and recurrent infection of the lungs leads to airways obstruction and lung hyperinflation, bronchiectasis, the formation of small peripheral abscesses and fibrosis. Treatment is with high doses of antibotics and regular physiotherapy. Some children are helped by an inhaled bronchodilator before physiotherapy but in general the response to bronchodilators in cystic fibrosis is variable and unpredictable.

Asthma affects 10 to 12% of primary school children and there is some evidence that the prevalance is rising. Genetic influence is important in the development of asthma and environmental factors also play a part. The pathological changes in the bronchi are hypertrophy of smooth muscle, an inflammatory response in the mucosa and submucosa, mucus gland hyperplasia and the formation of mucus plugs. Chronic or severe airways

obstruction leads to gas trapping and in young children characteristic chest deformity. There is however a broad spectrum of asthma severity in childhood. About three quarters of asthmatic children have acute intermittent attacks usually triggered by viral respiratory infections and are completely well between attacks. These children need intermittent treatment with bronchodilator drugs. About a quarter of asthmatic children have more frequent attacks triggered by infection, exercise, allergic reactions to environmental agents, atmospheric pollutants and emotional upset. These children need regular treatment with chromoglycate or theophylline and those with more severe symptoms require inhaled steroids. In general treatment is best given by inhalation and the selection of inhaler device depends on the age of the child. Very few children are able to manage an unmodified pressurised aerosol but most over the age of 4 can manage a spacer, rotahaler or spinhaler. A nebuhaler, a pear shaped spacer with a one-way valve can be used in younger children still. High dose bronchodilator therapy given via a nebuliser remains the most effective initial treatment for acute severe asthma. Wherever possible a child's asthma should be monitored by objective measurement. The simplest way to do this is with a peak flow meter but sometimes more complex measurements are needed to assess airways obstruction or lung mechanics.

Most wheezing in childhood is due to asthma but there are other causes. The inhalation of a foreign body (most commonly peanuts) into the trachea or main bronchi can cause wheezing and in a young child the diagnosis may go unrecognised for weeks or even months. Chest x-rays taken in inspiration and expiration may show a localised area of gas trapping. After bronchoscopy to remove the foreign body vigorous physiotherapy is necessary to prevent lung collapse and to reduce the risk of lung damage. Another cause of wheezing is compression of a main bronchus by tuberculous hilar lymphnodes. Tuberculosis in childhood is now uncommon but approximately 700 new cases are notified each year in children under the age of 15.

The long term prognosis for children with respiratory problems is good. Nowadays it is rare for bronchiectasis to develop after an acute pneumonia. About 50% of children with asthma will have lost their symptoms by the time they become adults.

ASSOCIATION OF PAEDIATRIC CHARTERED PHYSIOTHERAPISTS

SUMMARY OF ACCOUNTS FOR THE YEAR ENDED 31 DECEMBER 1985

INCOME	**1985**	**1984**
Courses	14,149	9,980
Book Sales & 1985 Stock	3,908	2,626
Subscriptions	5,031	4,425
Bank and Building Society Interest	1,343	1,078
Sponsors and Donations	1,637	1,821
	26,068	19,930

ASSETS		
Stock of Books	3,057	2,051
Banks and Cash	6,256	5,699
Building Societies	9,085	11,113
Corporation Tax	255	238
	18,653	19,101

EXPENSES	**1985**	**1984**
Lecture Fees & Accommodation	12,539	7,251
Book Production and 1984 Stock	4,068	2,626
Committee Expenses	3,684	1,866
Contribution CSP Scottish Board	500	—
Administration	6,027	4,897
Corporation Tax Transfer	(245)	(238)
(Deficit/Surplus)	(505)	3,528
	26,068	19.930

LIABILITIES		
Creditor	402	345
Corporation Tax	—	—
Balance Brought Forward 1984	18,756	15,228
(Deficit)/Surplus for Year	(505)	3,528
	18,653	19,101

NOTES: A Corporation Tax rebate of £255 is anticipated arising from the deficit of expenses over income utilised against tax deducted at source from Building Society investments.

YOUR COMMITTEE

The National Committee consists of nine nationally elected full members plus one locally elected full member from each A.P.C.P. approved region. The committee have the right to co-opt members as it deems necessary, the number not to exceed one-third of the National Committee

Nationally elected members serve for a term of four years and are eligible for a further term of four years only. Members are then only eligible for re-election after a period of two years has elapsed.

The officers of the Association are elected by the committee for a term of two years and are eligible for a further term of two years. They may not then hold any office within the Association for at least one year.

Nominations for committee vacancies must be proposed and seconded, in writing, before the Annual General Meeting. The date by which nominations must be received is published, in advance, in the Physiotherapy Journal and in the A.P.C.P. Newsletter. Committee members are elected at the A.G.M.

The above rules are taken from the constitution. Please contact the Secretary if you have any queries or if you would like to receive a copy of the constitution.

Committee Members

ELMA BELL — P.R.O. since 1985. Elma was Regional Representative for Scotland before her election to office.

JILL BROWNSON — newly elected at the A.G.M. in April. Jill is to serve as Treasurer.

MARY CLEGG — elected in 1983, eligible for re-election in 1987. Mary is currently Deputy Post-Registration Education spokesman and is a member of the Editorial Board.

MAGGIE DIFFEY — elected in 1983, eligible for re-election in 1987. Maggie has served as vice-chairman for the past three years and was elected as Chairman at a committee meeting following the A.G.M. in April. She is also a member of the Editorial Board.

PAMELA ECKERSLEY — Post-Registration Education spokesman. Pamela is a co-opted member of the committee.

MICHELE GANLEY — newly elected at the A.G.M. in April.

ANN GRIMLEY — elected in 1983, eligible for re-election in 1987. Ann served as Chairman for three years until her resignation from office at the A.G.M. in April.

NOREEN HARE — elected in 1983, eligible for re-election in 1987. Noreen was P.R.O. for two years from 1983, she is also a member of the Editorial Board.

SANDRA HOLT — elected in 1980, re-elected 1984, due to retire in 1988. Sandra was Treasurer from 1980 until 1984. She was elected as Secretary in 1985 and also acts as membership secretary.

JEANNE LAMOND — elected in 1983, eligible for re-election in 1987. Jeanne was appointed Editor of the new A.P.C.P. Newsletter which first appeared in February 1984.

PENELOPE ROBINSON — elected 1980, re-elected 1984, due to retire in 1988.

Two committee members retired at the A.G.M., LINDA HANRAADS who had served as Treasurer since 1984 and CELIA BALL who is to stay on the Editorial Board as a co-opted member. We thank them both for their hard work while serving on the committee and wish them well for the future.

Two Regional Representatives left the committee earlier this year, MINNIE TARRY from Midland Region and PATRICIA WHITE from East Anglia, who is to stay on the Post-Registration sub-committee as a co-opted member. They have been replaced by new regionally elected members. Our thanks to Minnie and Patricia for their hard work and dedication in helping to build up the Association in their respective regions.

We have seen the birth of a new Region this year. The former Midland Region is now split into Trent and West Midlands and we welcomed the representative for West Midlands to her first committee meeting in April.

Names of Regional Representatives can be found under Regional Reports.

HIP ORTHOSIS IN CEREBRAL PALSY

By Mrs. Elin Iverson, Greenwood Childrens Centre, City Hospital, Nottingham

I had known for some time that David required a hip splint of some sort, as his left hip particularly was showing early signs of subluxation, and habitually adopted a posture of adduction and internal rotation.

At the time David was 4 years old and suffering from a severe spastic quadriplegia as a result of an intercranial haemorrhage in the neonatal period (he was born by Caesarean Section at 31 weeks gestation). David had very limited functional abilities, but could be placed in and maintain sitting using the corner of the room, he could move around the kitchen on a Carter crawler, and he enjoyed standing in the flexistand to play at a table. David had also just started to make reciprocal steps in the Cheyne Walker. I was particularly concerned that any restrictions we put on David to correct his hips should not be so extensive as to further restrain his ability to move, yet it had to be effective in maintaining a good posture of the hips at all times. I had not in my experience seen any type of hip orthosis that was effective yet allowed a degree of functional mobility.

David had undergone hip surgery at the age of 18 months when he had bilateral adductor tendon transfers. Since then he had been reviewed annually by our orthopaedic surgeon, Mr. Colton FRCS, and immediately before we started the splintage he had expressed concern that David might need bilateral femoral osteotomies for the hips to remain in joint.

We did have a very frank discussion with David's parents about his eventual prognosis for independent walking and Mr. Colton was willing for us to try splintage and delay surgery as David was likely to be largely a "sitting" rather than a "walking" child.

In order for the splintage to be effective we decided the most important factor was to fix the pelvis well. Luckily David had not yet developed any fixed spinal asymmetries, although his pelvis tended to be elevated and retracted to the left.

I brought David in to see our orthotist, Mr. Biddulp, and together we decided to use a snug sacral band as used with a full set of calipers, connected to two thigh cuffs by outside irons with flexion/extension joints at the hip. We did not initially intend to connect the thigh cuffs with an abduction bar, but it soon became obvious that the added rigidity was necessary to maintain positional correction.

After the initial discussion and measurement we did a "rough fitting", mainly to check that the joints were correctly placed, the pelvis adequately fixed and the angle of hip abduction satisfactory and symmetrical.

The final fitting was satisfactory on all points and the splint was delivered four weeks after initial measurement.

With Mr. Colton's permission I quote the last 3 entries in David's orthopaedic notes.

September 1984 (aged 4 years)

X-ray reveals quite marked subluxation with both hips verging on dislocation. Parents are naturally opposed to further surgery unless it is 'necessary'.

We have finally decided that he should be fitted with his new abduction splint which should have an adjustable bar attached to achieve maximum abduction.

April 1985 (aged 4½ years)

AP pelvis with hips shows both femoral heads are contained within the acetabulum.

The x-ray has been taken with the splint, both legs are externally rotated.

The **acetabular roofs are developing well** with a good curve and I am sure we can hold off surgery for the time being, but abduction splintage must be continued.

August 1985 (4 years 10 months)

X-ray shows both femoral heads to be contained within the acetabulum, and the acetabular roofs remain well developed. Obviously the splintage must be continued.

To review in one year.

Whilst the actual position and x-ray appearance of David's hips improved, there was no regression in his other physical skills. He was still able to co-operate with all aspects of his treatment whilst wearing his splint, it was only removed for very specific activities with our supervision.

David was also able to crawl and walk with his aids, and could get good reciprocal leg activity. The splint was only removed for standing in the flexistand.

I believe that this type of splint is now more commonly used in Nottingham and I know other therapists have added components to suit their individual

children without altering the original pelvis/hip support.

As it is made today, the hip orthosis developed at the Green Wood Childrens Centre consists of the following:

1. Sacral Band

This is a shaped band with front fastening of velcro or strap and buckle. Laterally the band rests snugly on the iliac crest, so the level of the top of the band is level with the top of the iliac crest.

Posteriorly the band follows the outline of the sacrum.

Older children may need extra rigidity by adding a waistband, and those with already well established windswept posture would need a deep thoracic band to be effective in limiting further progression of the deformity.

2. Outside Irons

These are angled to achieve the optimum angle of abduction.

3. Joints

The outside irons have bilateral flexion/extension joints at the hips. These are manual locking joints and can be designed to lock in flexion or extension as required.

4. Thigh cuffs

Moulded block leather thigh cuffs with rolled tops which we line in chamois leather or sheepskin.

5. Abduction Bar

An optional component, depending on the amount of abductor spasms the child presents with. The abduction bar links the thigh cuffs posteriorly and has adjustments in order to vary the degree of abduction.

The splint is covered in calf leather and colour is optional!!

I have recently been shown some literature on the Scottish Rite Hospital Orthosis for Legg-Perthes disease. This appears a similar type of orthosis in design, but to my knowledge has not been adapted for use in cerebral palsy.

We have found that this particular hip orthosis is now frequently requested for cerebral palsied children with an asymmetrical posture and hips "at risk" and Mr. Colton has in a number of severe cases asked us to provide splintage following surgery to maintain hip alignment. We are also hoping to attempt use of our hip orthosis immediately after surgery to avoid the children being put in plaster casts with all its problems of cleanliness and hidden pressure points.

Although I realize many forms of splintage are being used with the same aims in mind, I feel this one could play an important role in the management of cerebral palsy as it is not functionally restrictive.

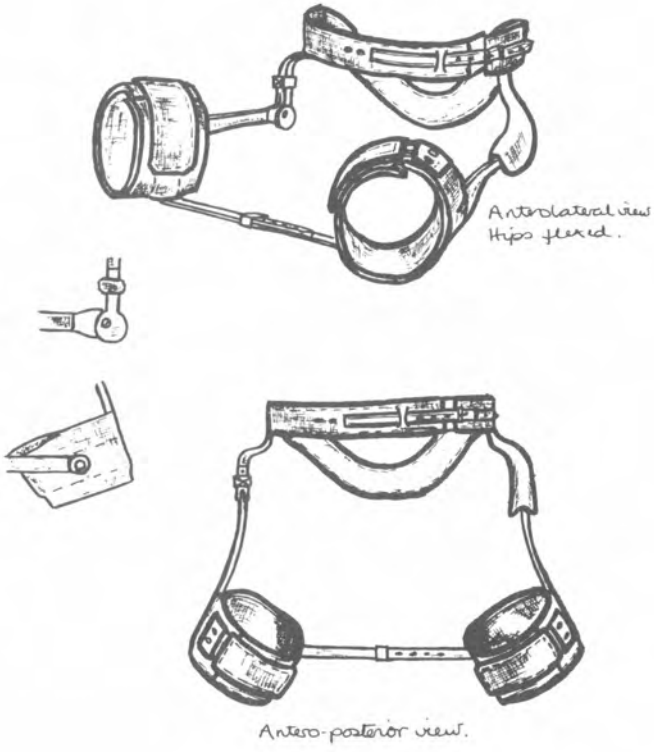
I believe three factors have been most important of the success in our hip orthosis so far.

Good co-operation between:

1. Orthopaedic surgeon and therapist in deciding optimum angle of abduction, as well as the surgeon's willingness to attempt conservative treatment.

2. Orthotist and therapist in the measuring and fitting of the orthosis.
3. Parents and therapist ensuring correct usage of the splint.

HIP ORTHOSIS DEVELOPED AT GREENWOOD CHILDRENS CENTRE



CAN REMAP HELP YOU?

By P. H. Hammond (representing the Royal Association for Disability and Rehabilitation)

Origin

The Rehabilitation Engineering Movement Advisory Panels (REMAP) began about 20 years ago within a Division of Imperial Chemical Industries in the North East of England and is now part of RADAR.

Organisation

A small secretariat, now based at the RADAR offices in central London, comprises the REMAP headquarters organisation. In addition, there are six regional organisers, covering, between them, England, Scotland and Wales. These are all engineers, employed on a part time basis, each responsible for about 15 panels. The job of a regional organiser is to maintain contact with panels, to arrange publicity and joint panel activity (e.g. conferences), to identify areas where new panels are needed and to set up new panels when necessary.

REMAP panels are the key to the organisation. They operate completely voluntarily and are made up of members of the engineering, medical, social work and teaching professions, including engineering technicians and paramedical staff. Problems can reach panels either through panel members or directly from disabled people themselves; the most common route being through occupational therapists in daily contact with disabled people.

Panel chairmen are drawn from all of the participating disciplines; panels formulate their own rules of procedure and are responsible for raising their own finance via donations, grants etc. All panel members are insured under an insurance policy held by REMAP, which provides idemnity against legal claims for damages from clients who may be injured by faults in the construction or design of aids. No claims have been made under this policy to date.

Problem solving

On being presented with a problem, a panel will typically hold a wide ranging discussion during which the problem is examined, sometimes in the presence of the disabled person, and solutions are considered. Clearly, there may be commercially available equipment capable of satisfying the requirement; alternatively, another REMAP panel may have already solved the problem. The panel will rely on it's own knowledge of the commercial field, particularly that of it's paramedical members. In relation to the work of other panels, the REMAP case-book, listing the work of all panels, may be referred to. At this time there is no national and comprehensive database for aids, though several initiatives are in progress. The benefits to REMAP panels of a comprehensive aids database might not be major. Given inevitable search delays and false leads a panel would often judge that the best solution for the client would be immediate construction of an aid to meet the need as presented. This being said, no panel would knowingly set out to reproduce an aid which was easily available commercially.

Once the appropriate solution to the client's problem has been agreed the panel can decide how to tackle the job. Normally, one member would agree to take on the project which might involve visiting the client, liasing with the responsible therapists and arranging for the design and construction of the aid. The latter activity might require workshop techniques not available in a D.I.Y. context and these would be sought from local firms sympathetic to REMAP objectives.

The manhours devoted to the design and construction of aids are given free of charge by the volunteer members of panels. The cost of materials is often charged to appropriate social services or hospital accounts. Only very rarely indeed do any of the costs of an aid fall on the disabled recipient of help.

Output

The 90 REMAP panels in the UK complete well over 1000 jobs per annum. Panels accept referrals relating to any disabled person and clients range from babies to geriatrics.

The following table indicates the distribution of REMAP cases, classified according to the categories used by the Disabled Living Foundation.

	No. of panels concerned		Percentage of total referrals	
CATEGORY	**1984**	**1984**	**1983**	**1982**
1) Beds	11	3	4	4
2) Chairs	29	9	5	7
3) Communication	30	7	8	8
4) Eating/drinking	12	2	3	3
5) Hoist/lifting	19	4	3	3
6) Leisure activity	30	12	6	9
7) Personal toilet	39	11	10	10
8) Transport	23	5	7	8
9) Walking aids	26	8	10	5
10) Wheelchairs	29	9	8	10
11) Household equip.	31	12	17	15
12) Incontinence aids	1	—	—	—
13) Adult clothing	5	1	—	1
14) Footware	—	—	—	—
15) Childrens aids	41	17	19	17

REMAP panels are also concerned with two categories which are not in the DLF list. Employment aids are the subject of the work of many panels; one panel, in particular, has a specialist interest in novel surgical equipment, inspired by a member who is a consultant orthopaedic surgeon.

Other benefits

As with any organisation concerned with disability, one of the hidden benefits is the personal contact which panel members develop with their clients. Many panels have examples of disabled people who have been "adopted" by the panel and who receive continual help and encouragement from this contact. An even less obvious factor is that many panels provide challenging and satisfying work to engineers and others who have retired from

the practice of their profession but who retain lively minds and engineering skills and wish to help others less fortunate than themselves.

Alternatives to REMAP

With the ever increasing variety of commercially produced aids, many inspired by REMAP designs, panel members who, for instance, visit the twice yearly NAIDEX exhibition, may feel that they are working themselves out of a job. However, to be commercially successful, an aid should be addressed to a large consumer population. This requirement can be at variance with the nature of disability, which is highly ideosynchratic and personal. Thus there will always be a need for one-off innovation to meet individual needs and also for one-off modification of commercial aids.

Of course, the work which REMAP does could, in principle, be taken over by design offices and workshops run by the local health authorities or social services. This has happened in at least one authority area where the local panel was disbanded as being no longer needed. Justification for the cost of setting up such dedicated facilities is clearly very difficult in the present economic climate and no significant erosion of the role of REMAP is anticipated from this direction in the foreseeable future.

The future

Much of the work of REMAP will continue to be in the area of ingenious but comparatively low technology aids and adaptations where rapid help can be provided using limited resources for a large range of disablement.

At the same time, there is no doubt that microelectronics can offer great benefits to disabled people, particularly in the categories of communication, leisure activities and childrens aids and equipment. REMAP needs more engineers and technicians prepared to volunteer their time to panel work in these areas. The subject of software for leisure and education is an almost untouched area in the REMAP case lists, only one panel has a software specialist member. In the future more emphasis will no doubt be given by panels to these subjects. To identify clients who can benefit requires panel members who are fully aware of the potential of microelectronics and related software developments in such areas as speech recognition and synthesis, character.

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This paper was originally presented to an IEE Discussion meeting held on November 14th 1985, and we are indebted to the Institute of Electrical Engineers for permission to reprint it.

The Down's Children's Association

The association produces many leaflets, including a quarterly newsletter and education review. There is a 24-hour telephone contact service on 01 - 580 0511 and the DCA arranges training courses for parents and professionals. It is currently embarking upon a massive education campaign in hospitals, schools and so on.

There is also a New Parents Pack for new families.

DCA will consider publishing relevant articles separately in information

SNIPPETS

New Library

A new library in central London is designed specifically to help handicapped children, their parents and the therapists who work with them.

The library does not simply stock books about handicapped children but contains material suitable for children with a reading handicap. There are over 5,000 selected titles.

Software - the library also has a small collection of equipment and software, including videos, cassettes and film strips, and a sample of Braille books for children.

The library is at Lynton House, Tavistock Square, London WC1H 9LT. (Tel. 01 387 7016)

Research on Informal Care

A new review of research on informal care examines the evidence about who in practice provides day-to-day care for elderly people, children with disabilities and chronically sick or handicapped adults, Gillian Parker of York University explores the financial, social, physical and emotional costs of such care, and looks at the evidence on service provision and support schemes.

"With due care and Attention: a review of research on informal care" is available from: Family Policy Studies Centre, 231 Baker Street, London, NW1 6XE, price £5.75.

The Kielder Adventure Centre

The Keilder Adventure Centre set on the shores of Kielder Water in Northumberland is purpose-built for disabled people and their families and equipped with everything from an indoor heated pool to a shop, library and adventure playground.

It offers the chance to canoe, sail, fish, birdwatch, cross country ski (when the fells are blanketed in snow), and a host of other activities. The Centre can cater for those disabled visitors who wish to be independent, or come with a family or in a group, as well as those who rely on the services of the experienced resident staff.

There is breathtaking scenery just waiting to be enjoyed and lots of history to discover.

If you'd like more details contact: Jim Wainwright, Kielder Adventure Centre, Low Cranecleugh, Kielder Water, Falstone, Hexham, Northumberland, NE48 1BS. Tel. 0660 50232.

packs and will respond to requests from professionals for new packs. Parents are always willing to talk to professional groups about their own experiences, and are always anxious for professionals to talk to them. Where to get in touch: 4 Oxford Street, London, W1N 9FL. Tel: 01 - 580 0511/2.

Cold laser study

Searching for methods to achieve fast recovery in chronic cases a team at the sports injuries department, Athens University, resorted to the use of cold lasers.

The physical therapy team supervised the treatments and recovery of 70 chronic cases of pain and injuries in athletes. Every athlete was treated daily for a maximum of 15 sessions of 15 minutes each.

The chosen apparatus was Biotherapy 3, which incorporates a visible super Luminous diode (660 nm 10mW max) and an infra-red laser diode (830nm 15mW). The first 35 patients were treated with the SLD only at pulsed mode with an average power of 1mW only.

Average results for the first group - tennis elbow, chronic myalgies, impingement syndrome, achilles tendons and fractures of muscle fibres; total recovery at eight session 62.6 per cent; total recovery at 15th session 30.9 per cent; poor results 6.5 per cent.

In the second group of 35 athletes with identical diagnoses maximum power was used in combination (660nm and 830nm) with the following success rate: total recovery at sixth session 72.5 per cent at 12th session 25.12 per cent, poor results 2.38 per cent.

Thus a combination of both diodes speeds recovery and increases the success rate, when higher powers are used.

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Book Review

Young People with Spina Bifida and/or Hydrocephalus - Leonie Holgate MCSP SRP.

In the present climate of independent living for the Handicapped, there are many basic skills which need to be learned and which present great difficulties. This small - 5 chapters - book sets out clearly some of those difficulties and how to cope with them, realistically pointing out the snags, and the successes which are usually in the majority. It also gives brief details of aids to learning and problems with eyesight. A very useful addition to any bookshelf.

Available from ASBAH 22, Upper Woburn Place, London WC1H 0EP.

EQUIPMENT

Drinking Aid

This gadget was developed for the use of a severely handicapped lady who previously was unable to drink unaided, it has now been in use for several months very successfully.

Operated by battery or mains, it consists of a drink container with lid, through which a plastic tube with mouthpiece is inserted and, a box containing a microswitch, a small electric pump and an arm holding the tubing which activates function.

When the mouthpiece is gripped by teeth/gums/lips and pressure exerted, the microswitch operates the pump, and fluid is delivered. Release of pressure stops the pump. For further details contact:— W. H. N. Sharples, The Mill House, Bonds Lane, Garstang, Lancs.

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Water Bed

Seven feet square, with solid foam sides wide enough to sit on, covered in heavy duty bright blue plastic and with a thermostatically controlled heater, this attractive piece of equipment is proving to be not only a very useful piece of equipment for treating the handicapped youngster, but also for use for play purposes. It is very tough and will accommodate three or four according to size. Price £685 + V.A.T. Available from:— Rupert Oliver Designs, Nant Yr Hafod, Hafod Bilston, Llandegla, Nr. Wrexham, Clwyd, North Wales.

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Fundens

Strongly constructed Play cabins for children which can be easily dismantled for storage. Mainly for the under-5's there are a variety of extras including a shop and slide attachment. Henry's Toy Co. 86 Monkton Farleigh, Bradford-on-Avon, Wiltd. BA15 2QJ.

Jumbo Button Telephone

A telephone which has large buttons with raised figures - available from:— Webcar Telecoms Ltd., Dolphin House, Rockingham Rd., Uxbridge, Middlesex UB8 2UE.

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Reciprocating Gait Orthosis

This model is marketed as being particularly suited for children with muscular dystrophy and Spina Bifida. Camp Therapy (Northern Division) 15, Moss Street, Liverpool.

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Holidays for the Visually Impaired

Outdoor activities and adventure weeks under the care of skilled teachers. Further information:— Sue Clamp, Hon. Sec. Association for the Education and Welfare of the Visually Handicapped, St. Johns Schoolhouse, Hadzor, Nr. Droitwich, Worcs. WR9 7DR.

The 180° Travel Seat

Now you can enjoy complete travel flexibility with new 'Travel Seat' from Market Ability.

No more struggling to get into or out of a car. The 'Travel Seat' swivels through 180° to lock into place completely outside your car. And the 'Travel Seat' fits most cars at a price you can afford.

For more information send to Market Ability, Mobility Information Centre, Copthorne Community Hall, Shelton Road, Shrewsbury, SY3 8TD.

Therapeutic 'Wellies'

Successful treatment of children with Duchenne muscular dystrophy has been achieved using Huntleigh intermittent compression systems, say the manufacturers. A range of garments to fit children between the ages of two and eight is available.

The use of Huntleigh 'yellow wellies' is detailed in a booklet by Pat Bennett of Hebden Green School, available free of charge from Huntleigh.

FORTHCOMING COURSES

6 - 8 June
Young people and their families with special needs in the Asian Communities.
Castle Priory College, Wallingford, Oxford.

9 - 11 June
Child Abuse and Neglect.
Caslte Priory College, Wallingford, Oxford.
Fee: £120.

11 - 12 June
The Perceptual Problems of Handicapped Children.
Mrs. B. Hindley, Rehab. Unit, Withington Hospital, Nell Lane, Manchester.
Price on application.

13 - 15 June
Portage Teaching Materials.
Castle Priory College, Wallingford, Oxford.

22 - 24 June
Feet, Legs and Balance.
Course led by Hans de Rijke, concerned with cerebral palsied children.
Castle Priory College, Wallingford, Oxford.

22 - 24 June
A.S.A. Preliminary award course for teachers of swimming for the disabled.
Castle Priory College, Wallingford, Oxford.

30 June - 2nd July
Derbyshire Language Scheme.
Castle Priory College, Wallingford, Oxford.
Fee: £115.

12 July
Activity Day. A shared learning experience for children and adults with disabilities, their families and friends.
Castle Priory College, Wallingford, Oxford.

17 July
Alternative Therapies. To include — Hypnotherapy, acupuncture, dance therapy, chiropractice and faith healing.
(Details: The Secretary, Nat. Demonstration Centre, Pinderfields General Hospital, Wakefield).

18 July
Bliss Symbolics Communication Day. Introductory Course.
(Details: Castle Priory College, Wallingford, Oxford.)

July 23 - 25
The Child with Cerebral Palsy at School
(Details: Castle Priory College, Wallingford, Oxford).

28 - 31 July
Care and Early Education of Young Children with very Severe Learning Problems.
(Details: Castle Priory College, Wallingford, Oxford.)

22 - 24 September
Artability — a Conference to review developments since the Attenborough Report.
Venue: Owens Park Hall of Residence, Univ. of Manchester. Information from Carnegie Council.
(Apply: Carnegie Council, Nuffield Lodge, Regents Park, London. Tel: 01 586 0383.)

25 or 26 September
Electric Wheelchairs.
Fee: £22 inclusive of refreshments.
(Enquiries to: Aids & Equipment Centre, Disabled Living Foundation, 380 Harrow Road, London. Telephone: 01 289 6111.)

10 - 14 November
The Education of People with Profound Multiple Handicaps.
(Details: B.I.M.H., Pendrell Hall College, Codsall Wood, Nr. Wolverhampton, Staffs.)

13 November
Cerebral Palsy in Children.
(Details: The Secretary, Nat. Dem. Centre, Pinderfields Hospital, Wakefield.)

13/14 November
Exhibition of Toys for Handicapped Children.
(Details: The Secretary, Nat. Dem. Centre, Pinderfields Hospital, Wakefield.)

1987

12 February
Electronics and Disability
(Details: The Secretary, Nat. Dem. Centre, Pinderfields Hospital, Wakefield.)

12/13 March
Neuroscience Course for Therapists
(Details: The Secretary, Nat. Dem. Centre, Pinderfields Hospital, Wakefield.)

9 April
Behaviour Modification in Mental Handicap
(Details: The Secretary, Nat. Dem. Centre, Pinderfields Hospital, Wakefield.)

FURTHER COURSE NEWS

14 June
Temple Fay and Vibration Therapy.
Organised by the Scottish Branch of APCP, this is a Study Day for physiotherapists working with children, on the theory and techniques of Vibration Therapy and Temple Fay. Speakers to include: Dr. E. G. Walsh from the Dept. of Physiology, Edinburgh; Mr. C. S. O. Black, Proprietor, Vibro Medico and Miss E. Bell, Supt. Physiotherapist, Scottish Council for Spastics.

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22/23 October
Paediatric Seminar on Profound Mental Handicap.
Presented by: Andreas Fröhlich who directs the Rheabilitationszentrum Westpsalz. in West Germany. To be held at the Preston District Health Authority Headquarters, Watling Street Road, Preston.
Fee: £25 including lunch and refreshments.
(Further information: Mrs. Gay Hall, Senior O.T., The Willows, C.D.C. Peddars Lane, Ashton, Preston.)

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12 November
Portsmouth 1 District Disability Information and Advice Line ar holding a one-day conference on information for disabled people. The seminar will examine current methods of getting information to disabled people, the nature and dimension of that information and the methods of acquisition, storage and retrieval. There will also be a small exhibition by manufacturers.
Venue: The Medical Centre, St. Mary's Hospital, Portsmouth.
Fees: £12.50 professionals — £7.50 voluntary workers — £5.00 disabled people.
Details and application forms from: Mrs. M. Fuller, Deputy Director Portsmouth DIAL, Disabled Living Centre, Prince Albert Road, Southsea, Hants. PO4 9HQR.

18 November

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18 November
MENCAP are holding a study day for teachers working with special needs, children under eight. There will be group sessions dealing with behaviour working with the very young profoundly handicapped, language stimulation, secondary handicaps, assessment for special care, etc.
Venue: MENCAP National Centre, 123 Golden Lane, London, EC1Y ORT.
Fee: £16.50.
(Details: Education and Training Department at MENCAP. Tel: 01 253 9433.)

Between April 9 and November 14 ASBAH are running a total of 16 Activity Courses of various sorts, i.e. driving, fishing, walking, dance, drama, etc. For further information: contact Paul Cooper, Development Officer, ASBAH's Ability and Care Centre, Five Oaks, Ilkley, West Yorkshire.

BOOKS

* **Let's Make Friends,** by Jodie Walsh.
  £6.95 Hardback, £4.95 Paperback. Souvenir Press
* **Young People with Spina Bifida and/or Hydrocephalus,** by Leonie Holgate.
  Spina Bifida & You by Collette Walsh.
  Both from the Association for Spina Bifida & Hydrocephalus, Tavistock House North, Tavistock Square, London, WC1H 9HJ.
* **They Keep Going Away,** by Maureen Oswin.
  Oxford University Press. £15 Hardback.
* **Therapy in Music for Handicapped Children,** by Paul Nordoff & Clive Robbins.
  £4.95 Paperback. Gollancz.
* **Politics of Child Abuse,** by Nigel Parton.
  £6.95 Paperback. Macmillan 1985.
* **Conductive Education: a system for overcoming motor disorder.** P. J. Cottam, A. Sutton.
  Beckenham : Crook Helm £9.95.
* **The ABC of Child Abuse Work,** by Jean Moore.
  A Community Care Practice Handbook.
  Gower : £3.95.
* **Getting Going.** A guide to setting up and running a Toy Library.
  £4.50. Play Matters/National Toy Libraries Association, 68 Churchway, London NW1 1LT.

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AUDIO-VISUAL

* **Given the Best.** 30 min. video on disabled parents.
  Aphra Videos, Concord Films Council Ltd., 201 Felixstowe Road, Ipswich IP3 9BJ.
* British Telecom have launched a free cassette tape to help sight impaired people to use the new public telephones now being installed. Free of charge to any blind person. Information from:— Action for Disabled Customers, British Telecom Centre, 81 Newgate Street, London EC1A 7AJ.
* **Switches, Toys and Computers.**
  A resource catalogue on videotape for use in the education of children and adults with severe or multiple learning difficulties.
  Duration : 1 Hour. Produced jointly by BIMH and Manchester SEMERC.
  Available in VHS, U-Matic and Betamax formats.
  £20 including p. & p.

REGIONAL REPORTS

North East — Reg. Rep. Mrs. E. Barron, 5 Sandy Lane, Ripon, North Yorks.

Our thanks to Mrs. Orritt for organising an instructive and enjoyable Day Course at Springwell School, Hartlepool on March 8th. During the morning Mr Anderson, the headmaster talked about the use of the trampoline for children with various spatial problems and some mothers spoke of their lives and the difficulties they have faced with their handicapped children. After lunch we were able to try the facilities available in the school which is for children with severe learning difficulties. These included Soft Play Area, Ball Pools and Jacuzzi.

We are hoping to have an evening meeting in June on the role of the Educational Psychologist in the assessment of the Handicapped Child.

North West — **Reg. Rep. Mrs. Katherine Jones, 66 Mellor Brow, Mellor, Blackburn.**

The North West Region's AGM was held in February at the Dorrin Park School in Cheshire. The AGM was included in a very successful Study Day on Spina Bifida which took us from Genetics through to problems of perception and Community Care. The day was very well attended and enjoyed and at the AGM we successfully recruited new Committee Members. The Committee's thanks to Marie Whalley who has served us so well as Treasurer and who is now retiring.

New programme to be announced soon.

South West — **Reg. Rep. Miss G. Riley, Meadows, Bowerchalke, Nr. Salisbury, Wilts.**

A day course on "Neonates and their follow up" is being organised at Plymouth on May 17th — the AGM is being held on that day at which future plans will be discussed.

A day course is planned titled "Advances in Orthopaedic Management in Paediatric Cerebral Palsy" on June 21st in Bristol. Details of these are in Physiotherapy.

A number of evening lectures have been organised over the winter period in Bristol. These were well attended.

A CPSIN invited APCP members to their study day run in Southampton on "Normal and Abnormal Child Development" and this was very well attended.

Stories are beginning to come in about the effects of "Griffiths type managerial systems. There seems to be quite some confusion especially concerning budgets.

West Midlands — **Reg. Rep. Mrs. J. Reynolds, 35 Bodmin Rise, Walsall, West Midlands.**

A successful day course on Paediatric Cardiothoracic Surgery was held at B.C.H. on 15th February, followed on 13th March

by the A.G.M. also at B.C.H. Our new Patron: Dr. John Cash, Senior Lecturer in Community Paediatrics at the Institute of Child Health, spoke to us about his work on the new Sheridan Screening for the Under 5's. This event was well attended and we all enjoyed wine and a buffet provided by Kirton Chairs who also had an exhibition of their equipment.

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The Inaugural Meeting of the East Anglia Region Steering Committee was held at Harper House Harperbury Hospital, Radlett, Herts. on Thursday March 13th 1986. The following people were appointed:—

Chairman: Lynn Weekes, 37 The Cedars, Milton Road, Harpenden, Herts.
Secretary: Angela Glyn Davies, 52 Southdown Road, Harpenden, Herts.
Minutes Secretary: Trish White, 24 Maltings Drive, Wheathampstead, Herts.
Treasurer: Penny Large, 24 Necton Road, Wheathampstead.
Committee:
Alice Hardy, 4 Kelvedon Green, Kelvedon Common, Brentwood, Essex.
Christine Burnett, The Hollies, High Street, Maidenhead, Bucks.
MaryGoy, 39 Tithe Barn Drive, Maidenhead, Berks.
Pat Messam, 62 Lynn Road, Grinstone, Kings Lynn.
Liz Waugh, 20 Marriotts Close, Felmersham, Beds.
Sue Chillingworth, 15 Waltham Road, Ravleigh, Essex.

There was a lively discussion about the future programme and it is hoped to hold workshops and study days throughout the region.

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London **Reg. Rep. Miss Vivian Reed.**

Our A.G.M. was held on March 1st at Great Ormond Street, We held a seminar entitled 'The Care of the Handicapped Child and Family' on the same day. A summary of the lectures will be printed in our Newsletter. We are running two evening lectures at Great Ormond Street this summer and hope that they will be well attended. The first is to be on May 8th and entitled: Cystic Fibrosis — the Current Practice in Physiotherapy, — Speaker: Anita Davis MCSP SRP from the Brompton Hospital.

The second evening lecture will be on June 17th at the same venue, and will be called 'Muscular Dystrophy — The Management of the Older Child'. Speaker is Clare Walker, a family case worker for the Muscular Dystrophy Society. On both occasions coffee will be at 6.30 p.m. prior to the lectures 7-8 p.m. Miss Vivian Reed from the Paul Sandiford Centre, will be taking over from Fiona Graham as Regional Representative as from May 1st.

ARTICLES OF INTEREST

Copies of the following articles can be ordered from:— Mr. Martin Saunders, Ast. Librarian, National Demonstration Centre, Pinderfields General Hospital, Wakefield, West Yorkshire WF1 4DG. Please quote the bulletin date, the number of the article and full details of the citation. You will be invoiced at 9p per sheet, send no money with order.

January 1986

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Wiener MM
Brief or new: feeding device for finger foods.
Am J Occup Ther 1985 Nov; 39(11):746-7.

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Allsop KG
ISMA and DMD: a comparison of two childhood neuromuscular disorders and their implications for the therapist.
Clin Manage Phys Ther 1985 May-Jun; 5(3):46-8, 50

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Falk M et al
Improving the ketchup bottle method with positive expiratory pressure, PEP, in cystic fibrosis.
Eur J Respir Dis 1984 Aug; 65(6):423-32.

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Tonnesen P Stovring S
Positive expiratory pressure (PEP) as lung physiotherapy in cystic fibrosis: a pilot study.
Eur J Respir Dis 1984 Aug; 65(6):419-22

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Scott CJ
The first year of a new young disabled unit
Health Bull (Edinb) 1985 May, 43(3):102-8

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Kelley ML et al
Decreasing burned children's pain behavior: impacting the trauma of hydrotherapy.
J Appl Behav Anal 1985 Summer; 17(2):147-58

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Herring JA Goldberg MJ
Amelia and scoliosis
J Pediatr Orthop 1985 Sep-Oct; 5(5):605-9

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Wu Y Voda JA
User-friendly communication board for nonverbal, severely physically disabled individuals.
Arch Phys Med Rehabil 1985 Dec; 66(12):827-8

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Gardiner BP et al
Computers for the disabled
Br J. Healthc Comput 1986 Jan; 3(1):17-9

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Singh S
Equipment review: drinking aid
Br J Occup Ther 1986 Jan; 49(1):9

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Marion C et al
Effects of arm ergometry training in an adolescent with myelodysplasia: a case report.
Phys Ther 1986 Jan; 66(1):59-63

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Lewis S et al
Development of an exercise program to improve the static and dynamic balance of profoundly hearing-impaired children.
Am Ann Deaf 1985 Oct; 130(4):278-84

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Milavic G
Do chronically ill and handicapped children become depressed?
Dev Med Child Neurol 1985 Oct; 27(5):677-82

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Kaye JC etal
A mobility aid for paraplegic children
J. Pediatr Orthop 1985 Nov-Dec; 5(6):711-2

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Desch LW
High technology for handicapped children: a pediatrician's viewpoint.
Pediatrics 1986 Jan; 77(1):71-87

52
Schilling RF et al
Coping with a handicapped child: differences between mothers and fathers
Soc Sci Med 1985; 21(8):857-63

CAN YOU HELP?

I am undertaking an aids assessment programme, (financed by the DHSS) to evaluate bathing aids (both seats and inserts) for handicapped children aged between four and 12 years.

I would like to receive comments from your readers regarding the aids available, difficulties they may have encountered, or any useful advice on this subject.

Mrs. J. Milne, Research Occupational Therapist,
Addenbrooke's Hospital, Hills Road, Cambridge CB2 2QQ.

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Early Diagnosis of C. D. H.
It has been brought to the attention of one of our Paediatricians that in some maternity units/baby clinics, the physiotherapist carries out the examination for C. D. H. We would like to run a survey to see whether more babies with C. D. H. are diagnosed when examined by a physiotherapist rather than a junior doctor.

I will be grateful to hear from any physiotherapist doing such examinations routinely, or from anyone with opinions on the matter. Thank you.
Mrs. Jane Williams MCSP
Senior Paediatric Physiotherapist
Wythenshawe Hospital
Southmoor Road, MANCHESTER 23

NEWHAM HEALTH AUTHORITY

A Senior 1/11 physiotherapist with some general paediatric experience is required to join our small, friendly Department based at the Child Development Centre. The successful applicant will be part of a multidisciplinary team working with children in their homes, school and nurseries. Opportunities will be given for staff development and attendance at suitable courses.
For further details contact Mrs Sandra Holt, Superintendent Physiotherapist (Tel. 01 - 519 - 1150).

Senior 1/11 Physiotherapist required for community paediatric service in the Newham District of East London. For further details Contact Mrs Sandra Holt (Tel. 01 - 519 - 1150).

STANDING UP FOR JOE

(A.P.C.P. letter to the B.B.C.)

At the annual conference of our Association, attended by over 200 members, concern was expressed at the portrayal by the above programme of the facilities available in this country for the management of children with Cerebral Palsy.

The programme gave the impression that the methods of treatment practised in the Peto Institute in Budapest are not available in this country. Miss Esther Cotton, a Chartered Physiotherapist, first introduced Conductive Education to this country in 1965. In a recent publication, Conductive Education by Cottam and Sutton, it was reported that Conductive Education is being practised in more than twenty-five units or classes in Great Britain. A Conductive Education Interest Group, founded in 1982 and with 150 members in 1985, aims to promote the knowledge, practice and quality of Conductive Education; they run basic and advanced courses in this subject.

Conductive Education as practised at the Peto Institute demands residential facilities, very high staffing levels and a twenty-four hour approach to treatment. Current policies of integration and normalisation practised in the UK are directly opposed to institutional care whilst such high staffing levels are unattainable with current resources and financial restraints.

Your programme gave the impression, correctly, that the Peto Institute takes selected children only but you failed to answer the question of what level of help, education and therapy is available to those who are too multiply handicapped or intellectually impaired to benefit from Peto regimes. Perhaps this will be included in a follow up programme.

It is to be regretted that, whilst the BBC programme was most interesting and demonstrative of immense love and dedication by the parents, the presentation gave the general public and parents of handicapped children the false impression of hopes of a cure by showing unrepresentative cases and extrapollating these to all handicapped children. You also broadcast the erroneous idea that medical and allied professionals in health and education in this country could offer little or no help, and were unsympathetic towards the needs of children with motor disorders.

It is the opinion of this Association that this programme put forward ideas which were unhelpful to the vast majority of parents with handicapped children and that the balance should be redressed by demonstrations of alternative approaches and other internationally recognised neurodevelopmental practices employed successfully in this country.

We look forward to hearing from you.