

**ASSOCIATION OF  
PAEDIATRIC  
CHARTERED  
PHYSIOTHERAPISTS**

**JOURNAL**



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CONFERENCE 1996 - HEAD, SHOULDERS, KNEES & TOES

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The Editorial Board does not necessarily agree with opinions expressed in articles and correspondence,  
and does not necessarily endorse courses advertised.

## EDITORIAL

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**LYN CAMPBELL**  
Chairman

When I was asked to write, (or it could have been told!) by Lin to write the editorial for this, the conference issue of our journal, I was immediately reminded of the previous year when the conference had been held in Edinburgh. I was chairman of the organising committee and until you have been actively involved in such an undertaking you have no idea of the total commitment given by all those involved. It was certainly a very sharp learning curve and you gain a new range of skills! When attending next year's conference in Wakefield we should all remember the months of planning and preparation these people have given, and should not forget the support and understanding that has been asked of their families and friends. It can become all absorbing! Each year's conference is hopefully a time to renew old acquaintances and make new friends in an atmosphere of exploration and learning.

Jill Brownson asked you last year if you wished conference to continue in its present format as only a small percentage of the membership attend - we would still like to hear your views. Do you want an annual or maybe a biannual conference? Should it be held in different venues? Please let us know your views.

Conference has always been an arena for us to explore our ideas but more increasingly to look at new approaches to paediatric physiotherapy. In recent journals there have been reports on D.A.F.Os, Lycra 'Up' suits and electrical stimulation and some of you may have seen a report on TV on the advantages of swimming with dolphins! We are constantly hearing of new developments in the field of paediatrics and it is easy for us to discount them as it is unknown territory - but is this how we should react? Many innovations in diverse areas, have been met with such suspicion but decades later have been proven not only to be correct, but indispensable. We should remember this when being exposed to new thoughts and ideas and to remember that until a method or regime is proven we should not disregard its potential benefits but maintain an open and inquiring mind.

**COPY FOR THE MARCH 1997 JOURNAL  
MUST BE WITH THE EDITOR  
BY 1ST FEBRUARY 1997**

The board reserves the right to edit material submitted

## LETTERS TO THE EDITOR

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Dear Editor,

Some Physiotherapists working in East Anglia have been invited to participate with Paediatricians in this region in an audit of medical management of children with JCA and we are developing some standards for physiotherapy in the community for JCA.

We have contacted other centres in East Anglia but would be pleased to hear from any other physio's in East Anglia - or elsewhere! who would be interested in participating or who have already produced their own standards.

Please contact :  
Laura Staines  
The Child Development Unit,  
Peterborough District Hospital,  
Thorpe Road,  
PETERBOROUGH  
PE3 6DA

or

Jackie Reynolds  
Newberry Clinic/Children's Centre  
Lowestoft Road,  
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NR31 6SQ.

### NOTICE

In 1997 the publication dates of the Journal are changing.  
In future you will receive your Journal in  
March, June, September and December.

This will enable us to bring you an up to date report of the National Committee meetings. It also will remove the compiling and editing of the Journal away from the major holidays especially Christmas and Easter.

## LETTERS TO THE EDITOR

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Lois Dyer OBE, FCSP  
The Garden Flat  
6, Belsize Grove  
London  
NW3 4UN  
Tel: 0171 - 722 - 1794

Dear Miss Wakley

I have just received the August copy of the APCP Journal and felt prompted to write to you!

As an Honorary Life Member of APCP I continue to be interested in the development and work of the Association and must congratulate you on the excellent way the Journal is produced and the informative and generally well written articles.

I hope the Journal has an increasing international readership as I am sure it would be of great value to many who are struggling to develop services in very difficult circumstances.

Congratulations to all concerned and please pass on my good wishes to the Officers and members of APCP.

Yours sincerely  
Lois Dyer

Sue Whitby  
Community Paediatric  
Physiotherapist  
Hinchbrook Healthcare  
Primrose Lane  
Huntingdon  
Cambridgeshire  
PE18 6SE

Dear Lin

I thought your readers may be interested in this.

Dear Jennifer and Wendy

With reference to your letter in 5th June 1996 edition of 'Frontline', I thought you might be interested in my experience with teenagers with muscular dystrophy.

I work in main stream education. The local comprehensive school is a single storey building and has evolved, over the last few years, into the LEA's school of choice for pupils with physical disabilities.

I use a Flexistand Major with electric lifters to stand three boys who have muscular dystrophy. Also, I am trying it with a girl who has cerebral palsy.

The lifters enable the boys to be in control of the standing and mean no lifting or handling apart from some positioning. The standing frame can go home for weekends and holidays.

## LETTERS TO THE EDITOR

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I would be happy to talk to you about this equipment.

Kay Sargeant from CAMP has developed the system with Kate Fox at Hebden Green Neuro Muscle Centre in Cheshire.

Yours sincerely  
Mrs. Sue Whitby

Judith Peters  
Physiotherapy Adviser  
Sense Family Centre  
Ealing  
Sen. Paed. Physiotherapist  
West London Health Care  
NHS Trust

Dear Lyn

I recently taught on our termly course on Multi-Sensory Impairment at SENSE Ealing. One of the delegates asked a very pertinent question which raised some lengthy discussion. I suggested that it could be useful to put it into letter form for more general reading and that I would forward it to a physiotherapy journal. I enclose her letter which you may think suitable to go into our APCP journal.

Yours sincerely,  
Judith M. Peters, BA, MSc, MCSP

Name and Address Supplied

Dear Editor

At a recent course at the SENSE Family Centre in Ealing I expressed my concern about the delivery of physiotherapy to the pupils of the school where I teach. It was suggested that the concerns I had were quite widespread and it could be valuable for a discussion to be held through your journal.

My school is for pupils with profound and multiple learning disabilities and I have worked there for two years. I had no previous experience of working with children with severe physical impairments and assumed that I would need training and advice in such areas as lifting and devising curriculum activities which would enable the children to develop practical motor skills most effectively. However, the practice at the school is that class-room staff are responsible for delivering gross motor programmes which, in many cases, are quite complex. Staff are advised by a physiotherapist who is responsible for devising the programme. I am concerned because I am not sure that most class-room staff have the expertise and knowledge to carry out these programmes to the greatest benefit of the child. On several occasions some-one has said... "I've done X's gross motor, I'll show you" and the second person will happily pass on their information to a third.

## LETTERS TO THE EDITOR

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I have asked colleagues why a certain stretch is done with a child and they have not been able to say. Parents do not seem to be involved in doing exercises with their children and I have heard colleagues say that, after a holiday, gross motor programmes should be delivered with extra vigour because of the break. I am woefully ignorant and would be happy to have my instinctive concerns settled. These are:

- a) Is it likely that some-one who is not a physiotherapist will know how much pressure to exert in giving a passive stretch?
- b) After a break should not exercise and manipulation be built up gradually?
- c) Great emphasis is placed on the childrens' need for physiotherapy - would it not be appropriate for parents to be trained in the necessary skills for their own child so delivery would be consistent and regular all the year round?

It seems to me that untrained people can unwittingly do damage. More children are coming into schools with complex physical needs. Is there not a case for much more physiotherapy support to be provided to enable them to get the maximum benefit from their education?

Yours faithfully

Gillian Ferguson  
Senior Physiotherapist  
Community Child Health  
Services  
Balvicar Centre  
46 Balvicar Street  
Glasgow G42 8QU  
Tel: 0141-201 0901/0912/0922

Dear Lin

We are currently in the process of devising a new information leaflet on the Glasgow Paediatric Service to give to our new parents prior to their first visit.

We have the excellent APCP leaflet but I wondered if anyone out there would be willing to send us a copy of their own leaflets. We need more ideas on type of information to include, layout and design before we go ahead and print our own.

All responses would be much appreciated.

Yours sincerely  
Gillian Ferguson

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head  
shoulders  
knees  
& toes

28th – 30th MARCH 1996

**APCP CONFERENCE**

**UNIVERSITY OF KENT  
at  
CANTERBURY**

ASSOCIATION OF PAEDIATRIC CHARTERED PHYSIOTHERAPISTS SOUTH EAST REGION



## CONFERENCE 1996

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*Delegates assemble for Conference Opening and Welcome*



*The National Committee*

## MANAGEMENT OF HEAD INJURY IN THE ACUTE STAGE

**MAUREEN FORWARD**  
MCSP  
Atkinson Morley's Hospital  
(AMH)

From the moment the therapist meets the head injured child, often in ITU, it is important to realize that it is the start of a rehabilitation process that may well last months, usually years. It will involve many different health care professionals and perhaps most importantly revolve around the needs of the child and their family.

At all stages in this process as therapists we will be aiming to maximise potential for recovery of normal function in its fullest sense. To do this we must adopt an holistic approach, treating the whole child and involving their family.

A severe head injury is a major life threatening event and is devastating for all concerned. The child will be critically ill. The family will be severely traumatised and will need support, understanding and assistance as they come to terms with what is happening. The child or teenager will also have to come to terms with an event that will have changed their life. It is in this scenario that we as therapists have to work right from Day 1 as we assist the first few steps on the long road to rehabilitation.

The primary aim of physiotherapy in the acute phase is to achieve maximal potential for recovery. To achieve this we will need to consider two main types of intervention, prevention of secondary complications and facilitation of the normal.

### **Prevention of secondary complications**

It has already been stated that the initial brain damage is irreversible. The primary aims of admission to a neurosurgery unit is to minimise secondary brain damage occurring through raised intra-cranial pressure. (ICP) The standard treatment at this time is to paralyse and sedate the child, necessitating ventilation.

This will immediately put the child at an increased risk of developing secondary respiratory complications.

A number of factors predispose secondary respiratory complications

### **Secondary Respiratory Complications**

- Aspiration/other trauma
- Intubation. Increased mucous production/inadequate humidification
- Paralysed. Decreased effect of lung cilia. No cough
- Colonisation of lower respiratory tract with upper respiratory tract organisms
- Positioning for ICP

- Unstable ICP leading to problems with turning and positioning
- Fluid restriction. Sputum often thick and sticky
- Ventilation/Perfusion mismatch. Dependent lung well perfused but non dependent lung better ventilated.
- Small airways which plug off easily causing collapse.

A child with a severe head injury is very much at risk of developing respiratory complications. If a chest infection develops the child will deteriorate and become more difficult to manage.

Their infection will increase metabolic needs adding to the difficulty in temperature control, and further compromising oxygenation of the brain. A chest infection will make it harder to achieve good ventilation of the child, the ICP will rise and compromise cerebral perfusion further. As the child frequently develops the chest infection after a few days, the common scenario is just as ICPs settle and weaning starts to be a possibility the child by then no longer paralysed, starts coughing and increasing their ICP making the decision as to weaning and extubation more difficult. A chest infection will generally prolong extubation and lengthen the time the child has to spend in ITU.

### **Respiratory Management**

For this reason the physiotherapist needs to be involved right from the beginning in respiratory management. Accurate assessment of respiratory function is needed at every contact with the patient. A team approach involving the nurse, anaesthetist and neurosurgeon is often needed so that priorities can be decided and guidelines given on acceptable levels for ICP and BP during treatment. Often a bolus of sedation may be needed and the nurse who is there all the time often is the most knowledgeable person to provide information as to how the child is reacting that day to movement and intervention. Physiotherapy treatments need to be combined with nursing interventions to ensure minimal disturbance in the initial days for example combining turning for chest treatment with changing a sheet.

Treatment sessions should be kept as short as possible whilst still allowing for effective treatment. CPP should be monitored both during and after treatment. The practise of hand bagging whilst being effective in opening up lung fields and releasing sputum will increase the child's ICP. It is useful to keep big breaths to 4 or 5 and alternate with fast shallow bags to blow off carbon dioxide and bring the ICP down. Priorities need to be decided at each treatment for instance if the child had a very unstable ICP, a low BP and a chest clinically clear with satisfactory blood gases the right decision may be not to treat the chest. However if the same child had a noisy chest and poor gases it may be deemed necessary to

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actively treat knowing that ICP will raise, as often a short efficient treatment, clearing the chest of sputum, will produce better ventilation, better blood gases and improved pressures.

The use of humidification is also extremely important to replace the normal moist conditions in the lungs and to prevent any secretions from getting sticky and plugging off small airways. The use of saline during treatment can be helpful as is the range of nebulisers although I'm sure many respiratory therapists will agree that there is a need for more research over their use.

The physiotherapist must be aware that all interventions will have an effect on ICP and so it is important that their role is seen as part of the team approach in the management of ICP.

### Soft Tissue and Joint Complications

The other large preventative role of the physiotherapist in the acute stage is to prevent secondary soft tissue shortening and joint contractures. They usually have a leading role in this task but need to encourage contributions from other team members especially nurses and the child's family. As physiotherapists we are at a major advantage when dealing with a child with a head injury as we can predict what we may be up against. For example we know that likely events following head injury will include changes in tone and that this will threaten soft tissue and joint range. We also know that reflex posturing may occur and that this often involve mass extension patterning of the trunk and lower limbs. Commonly we see flexion of the upper limbs. This coupled with loss of selective movement, prolonged immobilisation (either through head injury or with other injuries) will lead to shortening. From experience (either our own or our colleagues) we know the trouble spots, usually TAs and elbows but contracture can occur anywhere and often the most neglected is trunk and neck.

The effect of contracture on later rehabilitation is great. Not only will it impinge on the child relearning normal functional movement but will also add weeks and months on to the rehab process and later on serial splinting or even surgery may be required.

Ranges must be monitored daily. Usually in the first few days there are little problems as the child is paralysed or low toned. Even so gentle passive movements are important and the benefit of the tactile contact can only help to reinforce normal sensory input. This has been backed up by a study by Bach Y Rita's study which showed changes in EEG readings on a comatose child during passive movements. Once paralysis is reversed, again careful assessment of the child's condition is essential and ranges must be accurately monitored. Active intervention must begin as soon as a range is at risk.

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At AMH it is standard policy to plaster any foot as soon as it begins to be difficult to gain plantargrade. Other units plaster all patients prophylactically, some don't plaster at all. All I can say from personal experience is that I know there are patients where I have lost TA range from not plastering quickly enough and certainly my experience at the Wolfson Rehab Centre leads me to conclude this is a common problem elsewhere.

We also plaster elbows when it is beginning to be difficult to gain extension again as it is relatively easy to do and often prevents or minimises elbow contracture.

It is important to understand that plastering or splinting will lead to abnormal sensory input but so too will abnormal posturing and contracture and so it is necessary for the balance between the two to be weighed up before making a decision to plaster or not. Obviously other factors also need to be taken into consideration before plastering and again a team approach is needed especially as it will be the nurses who have to nurse the child with plasters on. Also parents need to be consulted and helped to understand the reasons for plastering.

Positioning is also a potent weapon in our fight against contractures and this again needs to be assessed and reassessed as what helps one day may not help so much the next. Positioning may help to alter the abnormal tone which is causing the shortening or the actual position may stretch soft tissue and minimize likely shortening.

Early mobilisation is a third weapon we will use bearing in mind that this will also help respiratory function. It is our practise to mobilise our patients as soon as their ICP and general medical condition allows. This often means before they are extubated we will be standing and sitting out the head injured child even if we are getting very little active response.

I would like to conclude this section by pointing out the importance of assessment and of daily prioritisation of the needs of the patient, as in the acute stages they will be changing rapidly. As physiotherapists we should be anticipating change and making effective intervention to reduce the risk of secondary complications.

### **Facilitation of the normal**

Our main interest, as physiotherapist, is in normal movement but to get normal movement we need to experience normality of sensory input. A phrase commonly quoted about computers is: "Rubbish in - Rubbish out"

In other words what you feed into a computer is what you get back. The input affects the output and this is what I would like to consider as we begin to think about how to facilitate the normal.

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So we start by considering the abnormal sensory input that the child is receiving.

### **Internal**

- Abnormal tactile and perceptual input
- Inability to move selectively or to grade movement
- Abnormal tone and/or posturing
- Altered cognition
- Altered balance and postural mechanism

### **Environmental**

- Pain/discomfort/fear
- Noise
- Strangers
- Loss of day/night
- Sleep disturbance
- Loss of dignity
- Hospital sights and sounds

Our approach, as well as that of all other staff and family, who come into contact with the child should be to help normalise the environment and to provide normal sensory input wherever possible.

I would like before going on to think of **how** to do this, to consider **why** we need to.

One of the exciting developments in physiology over the last years has been the concept of neuroplasticity. Recent theories in neuroplasticity have backed up what many therapists in rehab have intuitively based their treatment on for many years. Research is showing that the brain is capable of re-learning by the opening up of new pathways. The ability of the Central Nervous System to be manipulated and restructured is the key to successful therapy. If normal input and facilitation of normal output is given it appears that new pathways will open up and relearning of function will occur in the brain. This is far removed from rehabilitation in the past where patients were encouraged to compensate with unaffected areas of their brain not expecting any functional recovery in affected limbs.

It is important to realise the vast difference in the organisation of the brain in different ages of childhood/adolescence. During the normal maturation of the Central Nervous System plasticity and potential are most diverse and extensive remodelling will occur in the developing child thereby increasing their ability to learn. This has led many to expect a greater degree of recovery in younger children. However this needs to be balanced by the knowledge that in the baby or young child there will

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be very few matured functional pathways to tap into and this may well put the child at a disadvantage when compared to an older child who will have existing pathways for functional movement. The view that very young children always do better is not always the case and in my own experience I have found this to be often the case with older children and teenagers able to relearn functional activity more quickly.

It is worthwhile to note that the physiologist, Bishop, Craink and Kidd have all identified the same 3 neuroplastic phenomena following Central Nervous System lesions.

Denervation supersensitivity

Sprouting

Unmasking of latent synapses

### **Denervation supersensitivity**

Denervation supersensitivity is a heightened response to stimulation. A lowering of threshold of motor end plate occurs and in rats this has been shown to increase reflex activity and produce resistance to passive movement. This research is currently aiding understanding of increased tone and reflex activity after brain damage.

### **Sprouting**

Collateral dendrites grow in cells around the lesion and make connections with the synapses lost by cell necrosis. It is thought that these connections can by-pass the influence of the lesion. The potential for restoration of function by use of new pathways is a high possibility.

### **Unmasking of latent synapses**

Kidd stated in 1992 that the brain contains 1,000 trillion apparently unused synapses. Physiologists are postulating that these can be used to generate new pathways. Research has largely been limited to animals with experiments like the one on chickens which showed that following destruction of the visual cortex, new visual areas can be established in the brain. Held offered clinical evidence in 1993 to suggest that post CVA a new speech area can establish in the opposite hemisphere.

Research is still in the early days but an article by Stephenson, published in *Physiotherapy* in Oct 93 entitled "A review of neuroplasticity" states in conclusion.

"The role of physiotherapists is, as Kidd et al 1992, suggested, to utilise techniques that might strengthen synaptic chains, guide axonal sprouting and facilitate function by the unmasking of latent synapses.

If this is so -

What techniques should we use?

### **Techniques**

Pat Davies in 1990 suggests that recovery should be based around the

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stimulation of postural mechanisms as a background to motor function and certainly most of the work done by the Bobaths reinforce the need to normalise posture, tone and control of the trunk to give the right background of stability and support from which we can move our limbs freely and functionally

In her third book *Starting Again*, Pat Davies also writes much about the importance of correct sensory input and the link between that and achieving normal balance and posture.

We should aim with our interventions, be they treatment sessions or management, to therefore incorporate these ideas of facilitating normal tone, posture and movement by providing normal sensory input and re-training normal motor output.

From day 1 we can help to give appropriate sensory stimulation and the experience of normal movement. As physiotherapists we are the experts in understanding and breaking down normal movements into their component parts and we are also the ones who can handle and facilitate allowing the patient to experience the feel of normal movement and this is vital especially when the child is unable to move for themselves. Through our use of positioning, we can help the child to feel normal postures, by our handling skills we can inhibit abnormal tone and then help the child to experience the feel of normal movement either passively or actively. We can stimulate the use of normal postural mechanisms by stressing the Central Nervous System through early mobilisation into sitting or standing always ensuring, that we are facilitating normal postures and positions.

It is important when beginning to get the child out of bed to provide maximum sensory input, support and security. Usually we will need two physiotherapists working together in the initial stages to fully support the child as we sit them up over the edge of the bed and help them into a chair. At AMH we use a variety of seating for the acute Head Injured Patient. The Putney chair is most commonly used for adults as it provides flexibility of recline, adjustable head and foot support. We also use it for some of the larger children/teenagers we see. Smaller children require more ingenuity and we have a variety of chairs, including a James Lecky chair and small reclined armchairs. Even so we usually need to use assorted foam blocks, beans bags, pillows etc to provide good support and maintain symmetry in the early stages.

We can also play an important part as members of the MDT, in encouraging normal tactile stimuli, eg cuddles from family, and in minimising the abnormality of all that is involved with being in hospital. We can help to re-establish as soon as possible, the normality of a daily

routine. We can expect and encourage learning. We can use our communication skills to help others to become involved and become facilitators of the normal. This will all help to maximise our input as I'm sure most of us will agree that we never spend as much time with our patients as we would like.

It is vitally important to know the key areas at each stage of a child's development so as to demand the right response.

I have found as a non-paediatric physiotherapist that I need to look at either my own children or other children to remember the normal things that a child of a similar age will be doing and experiencing.

### **Key Stages in the Learning Process**

It is also important to understand the key stages in the learning process and use concepts such as clear explanations, repetition, praise and reinforcement of success. We must be fully aware that a young child learns through exploration and play and if there are movement problems these opportunities will be hampered. Careful thought must be given as to how to replace them and how to help the child to explore their environment even if it is only a hospital bed. The child in hospital will attract multiple presents of new toys, books, cassettes, soft toys etc as people are desperate to help and want to do something. But I have found that what helps the child most is to bring in some well loved toys and well worn teddies as the memory of them is there somewhere and can be awoken with the feel of familiar objects.

Similarly as soon as possible I like to see the child dressed in their own familiar clothes. This often helps to take the fear and strangeness out of being hospital and restores their dignity which is important even to young children.

### **Facilitating normal movement**

Our role in facilitating normal movement involves helping the child to experience normal sensory input. However the cycle of poor sensory feedback leading to fear, increased tone and lack of movement is often seen with a child becoming distressed on attempted movement. Care needs to be given to help the child accept their base of support in all positions using as many pillows, foam blocks etc to give the child adequate support so they feel secure. Positions should be changed slowly allowing the child to appreciate and relearn normal sensory inputs during movement. Initially for a normal functional movement to be successful we may be performing it passively for the child but we aim to gradually withdraw support and allow the movement to be active and our hands guiding only.

It is at this stage that we should be clear communicators with other disciplines, family and friends so that they too can become facilitators of

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the normal in the same way. Repetition and reinforcement are key stages in learning and within reason the more times a child can experience an activity the better.

## **Goal Setting**

Multi disciplinary short term goal setting is a useful medium in which we can communicate and share with others what we are working for. It can be a great boost for the child and parents as small goals are achieved. It is vitally important that the child experiences normal movement having a successful functional outcome eg facilitating of normal rolling so the child can reach a favourite toy.

## **Daily Programme**

It is helpful to meet with nursing staff and other team members and draw up a structured daily programme allowing periods of rest as well as activity. It is quite common for children especially to be over stimulated as anxious parents get them to repeat a new achievement for other family members, friends, new nursing staff without considering quality or appropriateness. Often inappropriate responses eg rude noises are encouraged, as the parents are so pleased to see responses but these can well lead to behaviour problems later and are best ignored and certainly not rewarded by praise and encouragement. Trying to gauge our responses to the awakening child and getting them appropriate for their age is also difficult and many staff as well as parents often use language and actions that are inappropriate.

## **Behavioural Problems**

Behaviour problems are very difficult to deal with and very distressing for relatives. A study has shown that initially families of head injured children are most concerned as to whether their child will walk again but five years later are finding the personality or behavioural changes the hardest things to cope with.

A structured programme can help to minimise problems by ensuring clear expectations and guidelines for all to follow. Inappropriate behaviour is probably best ignored and certainly not laughed at or encouraged. It is important to understand the needs of the whole family and to use other professionals such as trained counsellors or psychologists to help the family adjust, especially as they slowly come to terms with the impact of the length of time involved in the rehabilitation process.

To conclude, I would like to re-emphasise the importance of our role as physiotherapists in getting the child to experience normal movement and functional activity right from the beginning as with our knowledge of normal movement and our ability to facilitate it in others we will be giving the brain damaged child the best foundation on which they base their future recovery.

## REHABILITATION AFTER A HEAD INJURY

**PAT WILCOX MCSP**  
Chailey Heritage

Although the number of children and young people who suffer a severe head injury may be fairly small, for those to whom it happens it is devastating not only to the young person but of course also to their families. As physios we are in the front line, we are the therapy that is there at the beginning in the acute stage and we are often the last discipline to withdraw from the situation.

I am not saying that therefore we are the most important therapy, but we are often the most consistent. We are also the most visual discipline and possibly the most understandable by child and parents. The ability to sit, stand, walk etc is obvious to everyone and therefore we are also in the front line in that respect.

I have divided my talk into two sections:-

- (1) The what, why, where, etc of rehabilitation and how it works at Chailey Heritage.
- (2) The problems that we need to address in the different stages of rehabilitation from admission to a rehabilitation unit to reintegration.

### THE WHAT, WHY, WHERE ETC OF REHABILITATION

#### What?

There are many different definitions and our aims at Chailey Heritage are evolved from these definitions. They are:

- a) To enable reintegration into the community by providing intensive therapy and management for children and young people with acquired disabilities discharged from acute care.
- b) To restore, as far as possible, the young person's original quality of life or to establish an acceptable alternative life plan.
- c) To provide assessment and intervention in order to maintain young people with disabilities within the community, either by direct support or in conjunction with their local services.

If we look at b) to restore as far as possible the young person's original quality of life - of course you first need to know what that was - a surprising number of young people who suffer a severe head injury have had problems prior to the trauma, physical, cognitive or social problems.

If complete restoration is not possible, and in the vast majority when someone has had a severe head injury it isn't possible, there is a need to

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## Why?

establish an alternative life plan that is acceptable to the young person and their family. This can be a lengthy process which involves an acceptance of the loss of the previous life plan.

Most of the young people who have suffered a head injury have been reasonably physically independent, they were in mainstream schools getting themselves there and back, making their own decisions about what to wear, eat, etc. If someone has had a head injury that is so severe that it is obvious that they cannot go straight back home and into full time education, it is also obvious that something after an acute care bed in hospital is necessary and therefore rehabilitation is a good option, but I expect a lot of us can think of young people who have returned to school with insufficient preparation and failed.

Once a situation has broken down it is much harder to turn it into a successful reintegration than if problems were identified and dealt with prior to reintegration. Physio is the most widely available therapy in the acute setting and therefore it may be down to the physio to push for rehabilitation and whilst our main role is to look at the gross motor aspect of the young person, we also need to be aware of any behavioural or cognitive problems and how those can affect successful reintegration. It is often down to the physio to be aware that the approach of "if they can walk and talk they don't need rehabilitation" isn't necessarily true.

## Who?

The service at Chailey Heritage is designed for children and young people who have experienced an acute neurological trauma who are medically stable and would benefit from an integrated rehabilitation service. They need to be off a central venous line and life support monitoring system. They can have a tracheostomy, nasogastric or gastrostomy feeding tube, be on long term ventilation, be apparently deaf or blind and be unable to speak or indicate their needs.

The age group we will admit is from zero to the end of secondary education, but those are the extremes. We would be concerned about a very young child becoming a resident unless a parent or guardian moved in with them, or there was no alternative, or in the case of the top end of the age range we have more expertise in reintegrating a young person to an educational system than to employment.

It is a case of deciding with all concerned what is in the best interest of the young person.

## Where?

The simple answer is at an appropriate rehabilitation centre which can meet their needs. So what are their needs? As near home as possible to keep links with school, friends and of course family. This is the area, the situation to which they are hopefully going to be reintegrated.

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Unfortunately there are very few rehabilitation centres for young people so we take children from further away than we would like, but mostly they are within travelling distance of home and so can be weekly boarders when this is appropriate.

At the present time the service is based within Chailey Heritage buildings which tend to have the feeling of an institution and, whilst any service that is run by paid staff tends to be an institution, if we can get as far away from this as possible it may make reintegration easier.

Hopefully, in the near future, we will be moving into separate accommodation which will be more like an ordinary house and will be more community based whilst keeping close to Chailey and its facilities and expertise.

### When?

As soon as possible once they are medically stable. Unfortunately funding issues and the bed situation seem to more and more control when an admission is made. We do have children and young people coming to us many years post trauma for assessment or a short period of rehabilitation to hopefully improve their abilities or to move them on in some way to another stage. Whilst rehabilitation may be most effective when it is started early on, and it may avoid reintegration problems or inappropriate reintegration, it still has a place many years post trauma to solve specific problems or to help a child maximise their potential.

The concept that an improvement in ability can only be achieved 1, 2, 3 etc. years post trauma is now outdated and it is acknowledged that improvements can occur many years post injury.

### By Whom?

This needs to be a multidisciplinary team but this team has to work in an interdisciplinary way, as in a situation like this when rehabilitation needs to be all the waking hours and as far as posture is concerned also the sleeping hours a true interdisciplinary approach is the only viable one. This doesn't mean that our jobs are interchangeable because it is important that we all keep our own expertise but that expertise needs to be shared in the way of aims and goals and how these can be achieved. There has to be a carryover.

An interdisciplinary approach ensures a global approach and avoids a fragmented service. It enables therapy to take place on a little and often basis which is important especially in the early stages when stamina and fatigue may be a factor.

### How?

The service aims to meet the child's particular needs whilst being aware of their ordinary needs and responding flexibly to the needs of each

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young person and their family. We have a group rollover session from 10-12 every morning which is run by a different discipline each day, the term rollover originates from a young lady whose primary goal at the time was to be able to roll over from supine to prone and because the programme rolls over from day to day

Each discipline brings its own emphasis to the morning but it is still structured to each individuals goals. Each morning starts with orientation and planning the day. The afternoons are devoted to individual work, swimming, riding, play and music therapy etc. Evenings and weekends are used for activities which promote the young people's ordinary needs whilst being aware of their therapeutic goals.

When a young person arrives at Chailey Heritage there is an assessment period so each discipline can, with the child and their parents, establish goals, both short and long term. These goals need to be appropriate and achievable which can be a problem because all young people and their parents are not necessarily realistic and it may be necessary to encourage them to look only at the short term initially. There is also a need to prioritise goals as it is often impossible to work on everything at once and this needs to be done by all disciplines, the young person and their parents.

Fridays are meeting days. In the morning there is a short meeting to plan the theme and the timetable for the following week. In the afternoon there is a multidisciplinary meeting when each individuals progress and goals are discussed, parents are encouraged to join in when possible. Three or four times a year a more formal review takes place when the team, parents, local services, teachers etc are able to meet to discuss progress and plan for the future. This results in a fairly formal report which charts progress and can be used in the statementing process.

### STAGES OF REHABILITATION

Rehabilitation can be divided into three stages. The active rehabilitation stage, an adjustment stage and a reintegration stage.

#### Active Rehabilitation Stage

Our aim at this time is to restore maximum physical ability and function, taking into account that each individuals needs and goals may be different. This is a stage when hopefully things are changing rapidly. We need to keep up with these changes and whilst our main concern is the young person's gross motor problems we also need to be aware of any cognitive, psychological and social problems, as these can affect the way in which we work with the young person and therefore the effectiveness of our treatment. But lets look at some of gross motor problems.

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### **Joint Ranges**

You cannot stand unless you have two flat feet, and you cannot expect hand function if your hands are fisted. Therefore my primary concern when someone is admitted is to obtain full passive range of movement and to ensure that it is maintained. I believe that if serial plastering is necessary the sooner it is done the better. It is much less disruptive and much more effective if undertaken early on.

If the reduction in joint range is fairly recent serial plasters can often be changed twice weekly and an improved position achieved and this gets the process over with quickly.

If however it is a more long-standing problem then it needs to be taken more slowly. I will always try a twice a week change initially and then revert to leaving the plasters on longer if I don't gain any improvement. If muscle tone remains high for a long period and a contracture is established surgery may be the only answer, and this can become a lengthy process as no orthopaedic surgeon is, understandably, anxious to operate on a young person until the situation has definitely stabilised.

### **Posture and Positioning**

We need to avoid abnormal postures in all positions lest they become accepted as normal. We need to use as much equipment to support as is necessary to achieve a reasonably symmetrical and normal posture. If we cannot achieve a 'good' sitting position are we trying sitting at too early a stage. Some compromises may be necessary, we cannot expect perfection but we do need to use our professional judgements as to what is acceptable. We do however need to use different positions but we always need to look carefully at the therapeutic value of what we are doing and be prepared to adapt our short term goals. There is a need to challenge the young person's ability but this can be done for short periods and in a controlled situation with hands on used to give good feedback.

I always use a mirror to give visual feedback for sitting and standing posture and often have to argue the point and have on occasions been reduced to drawing a straight line down the mirror as a reference point.

### **Movement**

These are young people who have experienced normal movement so they are relearning or rediscovering it. In some ways this is a positive thing but the fact that they know what they have lost can be difficult.

The two main gross motor problems that affect function are spasticity and ataxia.

Most young people who suffer a head injury have diffuse damage which results in a mixed pattern of gross motor problems. It is worth remembering that the cerebral hemispheres control the opposite side of the body and the cerebellum controls the same side so if there is spasticity

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it is worth looking for ataxia on the other side.

### **Spasticity**

Spasticity is usually apparent from a very early stage and hopefully will stabilise and then diminish after the acute stage. It tends to be in the classic pattern of flexion of the upper limbs and extension of the lower limbs but we need to assess each individual and use inhibitory techniques and positions to counteract it and allow more normal movement.

### **Ataxia**

Ataxia however isn't apparent until there is active movement. If a limb is hypotonic and without movement it may be that as movement returns it is going to be ataxic and this appears to increase as the ability to move increases. This can be very difficult to accept and very hard to do anything about. You can use weighted shoes and bracelets but their effect is only temporary and vanishes once they are removed. There are some treatment techniques that can help by encouraging proximal fixation and postural control and there are some coping strategies that can be used but severe ataxia is a major problem and seriously affects function.

### **Normal Movement v. Functional Ability**

There is considerable debate about the pursuance of normal movement opposed to the need for functional ability. We need to be aware that functional ability can continue to improve many years post injury and we need to be careful not to compromise that functional ability at too earlier stage by allowing abnormal movement patterns. However we do need to work towards functional goals and we need to make our treatments task specific. We need to use our professional judgement as to what movements are acceptable to achieve function at the different stages during the young person's rehabilitation and we also need to be guided by their and their families needs.

We need to analyse what is stopping normal movement. Is it increased tone, loss of muscle power, ataxia, poor motor organisation, cognitive problems etc? We need to use any technique that works depending on what is adversely affecting movement.

### **Communications**

It is no good giving complicated instructions if a child can only understand a simple sentence with two or three components. We need to use other team members expertise to find the most effective way to communicate. We need to check body part names, it may be that the young person can appear to carry on a normal conversation and it is easy to forget that they don't know their hand from their foot and this can lead to some bizarre physio sessions.

There may be problems of slow information processing - be patient - wait until you are sure you are getting no response then try demonstrating, hand signals, touch, anything until you get the response you need. It may

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be that they have sequencing problems. At the highest level of our physical abilities we all need verbal or mental cues and we need to be trained in what those cues are.

### Mobility

I always start with mobility on the floor. It is a safe, secure and hopefully non frightening environment. We need to go through the developmental stages, rolling, lying to sitting, crawling etc. We need to avoid abnormal patterns but we also need to accept the different ways in which we move and achieve function. We need to encourage function as long as it is not reinforcing an abnormal pattern.

The main mobility aim is walking - in fact the main overall aim is often walking so there are a lot of pressures to declare whether this is going to be possible. It is probably best to resist the urge to speculate even to ourselves as it might lead us to treat in a specific way. This is easier said than done. I always speculate to myself, I sometimes speculate to other members of the team but I never speculate to the young person or their family.

I tend to use the Kaye posture walker because it induces an upright posture rather than the forward lean posture of most walkers. It does however have the disadvantage that it is possible to take considerable weight through your arms and so does not demand much trunk or pelvic control.

However if walking yourself to the loo or running away to your bedroom is sufficiently important it does often allow a degree of independence at an early stage. We need to be constantly reassessing the effect of the equipment we are using and need to push on to the next stage as soon as possible. We also need to preserve the young person's motivation or they will not achieve their potential.

### Fatigue

In the early rehabilitation stages fatigue can be a major problem. Rehabilitation needs to be on a little and often basis and rest periods need to be built into the day.

Therefore programmes need to be flexible. Posture and movement deteriorate with fatigue and we need to stop at this point. This is especially noticeable with ataxia although the young person is often unaware or will deny that they are tired.

### Psychological Problems

There are a lot of possible psychological problems that can affect our physio sessions. In the early stages this can be fear and confusion.

These young people often need to go through all the stages of bereavement, rejection, anger, depression and this can affect the way we work with them. Hopefully they reach some sort of acceptance of the

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situation and can then work constructively towards realistic goals.

## ADJUSTMENT STAGE

It is difficult to say when this stage has been reached. There is a big overlap with the rehabilitation stage, but I suppose that when the rapidly changing stage has passed and we realise that although further gains are possible these are going to be long term rather than short term. Perhaps it is best looked at as a stabilising period.

### Adapting to Disability

This is not only a mental adaptation but also a physical one.

In the case of ataxia there may be the need to consciously retain a wide base when walking and to train the young person to keep close to furniture and walls and away from danger. They need to recognise their own particular safety limits and this can be difficult for a young person who has been very active. They need to accept that some things are now impossible or out of bounds for them.

It is also a time when we need to consider compromises. If walking is not an option should we be looking at powered mobility, if writing is not an option should we be looking at long term use of a computer. It is also the stage at which I would look at long term orthotic provision - would a long leg splint at least allow them to stand?

### Environmental Adaptations

It is also a time when the home situation needs to be assessed. People can live with a bed in the lounge or the dining room, a commode, bed baths etc in the short term but at this point we need to start looking to the future. Are they ever going to be able to go upstairs to their previous bedroom - or does the house need a ground floor extension. This is more the province of the OT but we need to give our input as to what we think is realistically possible.

### Ongoing Assessment

Adjustment stage may sound like an ending but it isn't or shouldn't be. We used to say there would be no improvement after a year then it was two years and now who knows?

We recently had a young man in for rehabilitation and assessment several years post trauma and he had improved physically in ways that had not been transferred into functional gains and we were able to help him improve his postural ability and also increase his independence. So even though the rapid change stage has passed there is a need for ongoing assessment so that any physical gains, however subtle they may be, are used to the full.

## REINTEGRATION INTO EDUCATION

This can take some time to set up and implement so we need to start planning and discussing it as soon as the likely outcome is reasonably clear. We do try wherever possible to reintegrate the young person into their previous school. This is everyone's first choice.

Some schools are more willing to be flexible than others and some staff are more able to cope than others. We have always found it helpful during the consultation period to find one key person, the head of year, class teacher etc who is keen for the young person to return as they can make the difference between successful reintegration and failure.

Our educational psychologist will look at the access to the curriculum side and either physio or OT or sometimes both need to look at the physical side which includes the following:-

### Access

Are there any areas that are inaccessible to them? If so is this a situation that can be altered or can this area be avoided. We need to look at door widths, can they open doors especially when carrying books etc?

Are there stairs and have they got handrails? Are ramps or a lift going to be necessary? Can they get in and out of the loos with a helper if needed? Is there privacy if intimate care support is needed? Is there space for a plinth?

At lunchtime can they cope with paying for their food and carrying a tray? Within the class rooms is there space for them to move around? Are the chairs and worktop heights suitable? Science labs with high benches and stools can be a problem.

All these really apply to anyone with a physical disability going into mainstream school but there are other factor that relate more specifically to young people who have had a head injury.

### Safety

We need to remember that they are used to accessing the whole of the curriculum without any assistance. Some specific classes CDT, PE, Science and Home Economics may present a safety problem, especially if the young person has ataxia and, even more so, if they are having difficulty accepting or recognising their limitations. The risk needs to be assessed with all concerned and a decision taken about what is acceptable. It may be that a one to one in specific classes will solve the problem.

Safety moving around the school needs assessing, they may seem very safe in their present setting but a busy secondary school is very different - lots of people pushing, noise, swing doors and distractions. Are they

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safe to move at the busiest times or do they need to move between class rooms before or after the rush or do they need an escort?

### **Speed and Distances**

How long is the time gap between classes? What distance at worst needs to be covered in this time? Has the young person got the stamina to cope with these distances for a full day? We need to remember that they will get tired initially. It is quite often a good idea to do a staged handover. If the school is local, perhaps they can go in for a small part of the curriculum. This enables them to get back into the system, build up their stamina and any problems that become apparent can be dealt with during the handover period. More subjects can then be added until they are back full time. If the school is at a distance often the young person goes home for the weekend goes to school on Monday, back to Chailey on Tuesday and then the build up can be done by adding extra days. Reintegration needs to be tailored to the situation and each individual's needs.

### **Conclusion**

These young people have multiple needs and therefore they need the services of a multidisciplinary team.

As physios our primary responsibility may be their gross motor function and we need to help them fulfil their potential in that area but we can't do that successfully unless we have some understanding of their other problems and take them into account. We need to work with the whole person towards their aims as well as our own.

### SPORTS INJURIES IN CHILDREN

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Regular training of children is becoming more common at an early age, especially in individual sports such as gymnastics, figure skating, swimming, diving, tennis, cricket, rowing, ballet etc. It is debatable whether competition at a young age is advisable or to be encouraged, as many are training for two to four hour sessions, five or six days per week, which is excessive. Injuries due to overtraining are becoming more recognised. They are not simply due to overuse, but to improper training techniques and anatomical malalignment. It has been suggested that the strength and flexibility of the musculotendinous unit are also factors in such injuries.

It is essential that the coach has a good basic knowledge of the stages of growth and development, before he starts training the young. Growth occurs both gradually and in spurts during puberty. When children reach their growth spurt there is a sudden increase in weight and size. At this time they are prone to muscle tightness and are more susceptible to injuries. During the growth spurt training should ease off, be less intense, and more time should be devoted to stretching the tight musculature.

The coach should be aware of the causative factors of these injuries and must use methods to reduce the severity of high impact loading by training on sprung floors, using foam pits in gymnastics, shock absorbing material in shoes, and cutting down the training loads on the young skeletally immature young bodies. It is well known that quality training is better than quantity.

Most injuries in children can be prevented. Knowledge of the special characteristics of the musculoskeletal system is important for the coach, whether he be teacher or parent. Everybody loves to win, the child for satisfaction and praise, the coach for prestige, and the parent for living their own successes through their children. Parents and coaches must be aware of the risks involved in sport for the young enthusiast and take the necessary precautions to avoid injuring the child.

#### **Traumatic injuries**

Children may suffer epiphyseal damage or avulsion fractures of the young bone due to trauma. In adolescents the strength of tendons and ligaments is greater than bones, thus injuries to the growth centres or cartilage is serious, and may result in permanent deformity.

#### **Overuse injuries**

Training errors, unyielding running or dance surfaces, poor shoes with no shock absorbing properties, or, cheap shoes with hard rigid heel tabs, together with strength and flexibility imbalances, lead to overuse injuries.

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### Common childhood injuries.

- 1 **Osgood Schlatter** disease is more common in boys 10 - 12 years of age. The attachment of the patella tendon to the tibia tubercle begins to pull off fragments of the young bone.
- 2 **Severs disease**, at the attachment of the tendo achilles, tends to occur during the rapid growth phase and is due to overtraining or repetitive overload.
- 3 **Tendonitis of the tendo achilles** tends to occur during the slow growth phase.
- 4 **Osteochondritis dessicans** (knee and elbow joint) is due to repetitive training, a piece of cartilage breaks away and becomes a loose body within the joint.
- 5 **Patellofemoral pain** may be due to mal-tracking of the patella and pain is felt in up hill running or climbing stairs.
- 6 **Stress fractures** are due to repetitive loading, eg. long distance running, and weight lifting with high load and high frequency.
- 7 **Spinal injuries**, may occur at the joint surfaces of the lumbar spine (Pars Interarticularis Defects) and may develop into spondylolysis or spondylolisthesis, and a slippage of one vertebra upon another. This is caused by a combination of lumbar hyperextension, rotation and load bearing, such as we see in gymnastics, cricket bowling (using mixed side on/front on action), weightlifting, diving, and butterfly swimming.

### GOALS OF TREATMENT AND REHABILITATION

#### Phase 1

Protect the injured tissues during the early inflammatory phase to allow healing, by correct sequence and use of therapeutic techniques.

#### Phase 2

Rehabilitate flexibility, strength, muscle control, proprioception, functional biomechanics and control physical activities with the aid of taping or splinting.

#### Phase 3

This is the final phase of rehabilitation which must concentrate on rehabilitating sport specific activities which must be tested to ensure a safe return to sport.

The young must be progressed from one phase to the next and the criteria for progression are based on function not time. Sport specific functional testing is an essential part of moving from one phase of rehabilitation to the next, and finally to full participation. Overtraining must be very carefully avoided in all of these phases. Training must be monitored so that full activity does not occur before full recovery.

## HIP DYSPLASIA & LOCOMOTOR DEVELOPMENT

### Information from a cohort study of children with bilateral cerebral palsy

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#### The Primary Study Objective:

To establish guidelines for those managing children with bilateral cerebral palsy to allow early and reliable referral of hips at risk of dysplasia.

#### Design:

A prospective cohort study of all children with bilateral cerebral palsy born 1989/1992 to mothers residing at the time of the birth within a geographically defined area (population of 3.6 million).

#### Setting:

The children were notified to the study by any appropriate source and then referred by their paediatricians.

#### Participants:

For the 1989 and 1990 cohorts 178 children (M=104, F=74) matched the study criteria; 171 gave informed consent for the xrays. The prevalence of bilateral cerebral palsy was 1.72/1000 live births; their diagnoses are being confirmed with their paediatrician at age 5 years.

#### Methods:

This report relates to data from over 1000 xrays taken in a standardised position, at 18, 24, 30 and 48 months gestationally corrected and measured by the researcher, blinded to previous measurements, using a light box mounted parallel arm draughting machine. Radiographic parameters were set for pelvic position and hip ad/abduction and data from xrays outside these limits were omitted from the statistics relating to natural history, as were all post-surgery data.

During the period 18 months to 5 years questionnaires were sent to the children's physiotherapists who, together with the child's carer, reported (inter alia) the age of achieving twelve locomotor developmental milestones.

#### Measurements and Main Results:

1. This presentation reports on the Migration Percentages and Acetabular Indices and correlates the figures at 18 to 30 months with hip state at 4 years. Correlation with hip migration at 4 years is significantly higher at 30 months than at the earlier ages. By 4 years 21% of hips had needed orthopaedic intervention or were subluxed. Right and left hips are similar, but male and female differ significantly. The relationship between the migration % and acetabular index varies with side.
2. The age of achieving certain gross locomotor skills and the relationship to later development will also be shown and discussed.

**Conclusion:**

Prevention rather than repair requires early orthopaedic referral of children with at-risk hips. This study indicates that referral can be selective, saving time, costs and avoiding unnecessary parental concern. In the absence of overt hip instability, prognosis before the age of 30 months is much less reliable; at 30 months the risk of dysplasia by 4 years can be quantified; and that the high incidence of hip instability in this population requires a paediatric surveillance protocol rather than referral in response to clinical presentation.

The developmental data may be of some assistance in setting the likely prognosis and so treatment goals.

## STRIVING TO BE 'NORMAL': PRESSURES IN CHILDHOOD TO PLAY THE DISABLED ROLE

SALLY FRENCH

Role is a sociological concept not a medical concept. All our roles contain certain rights and obligations. The employee, for example, has the right to work in a safe environment but is obliged to be punctual and to provide the best possible service. Most people occupy multiple roles; for example parent, employee, neighbour and friend. Parson (1951) was the first sociologist to elaborate the concept of the 'sick role'. Disabled people themselves have analysed in detail the concept of the 'disabled role'.

### CHARACTERISTICS OF THE DISABLED ROLE

#### Independence

Physical independence, such as cooking, washing and dressing oneself, is generally considered to be something disabled people desire above all else. Health professionals usually regard physical independence as a central aim in the rehabilitation process. But is it always in the best interests of disabled people to strive for independence of this type? A person with a physical impairment may ask for assistance in cleaning, cooking and dressing, as so many non-disabled people do, in order to save time and energy to lead a full and satisfying life. Morris (1989) found that many of the women with spinal cord injuries she interviewed chose to rely on personal assistance so that they could concentrate on other things, such as employment, community work or political activity. Disabled people define independence, not in physical terms, but in terms of control. People who are almost totally dependent on others, in a physical sense, can still have independence of thought and action, enabling them to take full and active charge of their lives.

The pressures placed upon disabled people to achieve physical independence, is regarded by Sutherland (1981) and French (1994a) as a form of oppression. Sutherland quotes a disabled person as saying:

"I've known a few people who, as adults, have refused to walk even though they could because its just not worth the effort. And people have often got angry with them, often. They've been labelled lazy and all sorts of things. They're definitely considered odd if they choose to be in a wheelchair, in the same way as you're considered odd if you don't struggled to do something that you can actually do even though it takes you six hours." (1981:p69)

We are, of course, all dependent on each other to a large extent, and we all use aids, such as washing machines, motor cars, and computers, to save time and to overcome physical limitations such as our inability to

move fast or to fly. We are also dependent on other people to produce and repair these aids. As Oliver points out, the dependency of disabled people '... is not a feature that marks them out as different in kind from the rest of the population but as different in degree.' (1993:p51) Despite the interdependency of us all, the dependency of disabled people tends to be regarded as special, as qualitatively different.

The physical and psychological stress involved in gaining independence in basic tasks, as well as the wasted time and reduced social opportunities incurred, are rarely given much attention by anyone other than disabled people themselves. Yet we do not insist that people walk six miles or even one rather than using their motor cars, or that they dispense with labour saving devices in case they become lazy, or dependent on the people who produced them. Indeed, to attempt to enforce such a plan would be considered extremely patronising and a serious breach of human rights, even if it were motivated in terms of the person's 'own good'. Clearly disabled people, including children, are not enjoying the same freedom of choice as other citizens and are placed in an oppressive relationship with those who have control over their lives.

### Normality

Closely associated with the concept of independence is that of normality. The pressures placed upon disabled people to appear 'normal' can give rise to enormous inefficiency and stress, yet many disabled people are well into adulthood before they realise what is happening or before they find the courage to abandon such attempts. Sutherland talks at length of this believing that:

"We are subjected to continual pressure to conform to a 'normal' image, this is one of the major reasons for the manufacture of elaborate prosthetic limbs and hands, which are often poor substitutes for the purely functional devices ... which they replace." (1981:p75)

The pressure to be 'normal' is often at the expense of the disabled person's needs and rights. For example, if a person with a motor impairment who can walk short distances is denied a wheelchair, he or she may become isolated or unsuitable for certain types of education or employment. Many disabled adults look back on their childhoods as a time when the continual pressure to achieve 'normality' had very negative consequences for their self-esteem (French 1994b, French and Swain in press). Mason believes that, 'Almost every activity of daily living can take on the dimension of trying to make you less like yourself and more like the able-bodied.' (1992:p27)

The goal of 'normality' can also be physically dangerous, as when the

person with limited vision avoids using a white stick. In addition rendering an impairment less visible can create social problems which are equally or more difficult to manage than when the impairment is exposed. As a disabled woman in Sutherland's book explains, 'I'm happier with something that isn't a deception than with something that is.' (1981:p75) Sutherland, drawing heavily on the experiences of disabled people in encounters with health professionals, talks at length of this. He states:

"There's a tremendous emphasis on a child who's had polio or whatever to walk, to be as able-bodied as possible. It's like standing up is infinitely better than sitting down, even if you're standing up in a total frame - metal straps and God knows what - that weights a ton, that you can't move in, which hurts, takes hours to get on and off and looks ugly. It's assumed that that's what you want and that's what is best for you." (1981:p72)

Many disabled people are well into adulthood before they manage to abandon, or at least challenge, these expectations of 'normality'. For most this is a gradual (and often painful) process which comes with the experience and confidence of age.

Because of the negative attitudes towards disability which prevail in society, disabled people and those who live and work with them, may come to the conclusion that attempting to be 'normal' is the only way to succeed; the goal of normality is thus justified in terms of social acceptance. For example, it can be argued that one of the objectives of deaf people learning to talk, blind people learning to use facial expression appropriately, and people with Down's syndrome having plastic surgery, is that they will be more socially acceptable, less isolated, and better able to compete with non-disabled people. Sign language was very nearly obliterated by non-disabled 'experts' attempting to 'normalise' deaf people (Ladd 1988).

Morris (1991) believes that the assumption that disabled people want to be normal, rather than just as they are, is one of the most oppressive experiences to which they are subjected. She rejects the view that it is progressive and liberating to ignore difference believing that disabled people have a right to be both equal and different. She states, '... I do not want to have to try to emulate what a non-disabled woman looks like in order to assert positive things about myself. I want to be able to celebrate my difference, not hide from it.' (Morris 1991:p184)

### Acceptance and adjustment

Physiotherapists, nurses and others have viewed their role as one of helping disabled people accept their disabilities and adjust to them. Disabled people have been urged to overcome what are viewed as their

problems, to learn to live with them and never to complain. Any anger or depression concerning lack of access, negative attitudes, inappropriate rehabilitation, poor housing, or nonexistent educational or job prospects, have been viewed as evidence of maladjustment, denial, and 'chips on their shoulders'.

The notion that disabled people should accept their situation and adjust to it arises from individualistic models of disability where it is conceptualized as a relatively unchangeable, internal state of the individual, rather than the result of physical and social barriers which could be removed if the political will to do so was there. Individualistic conceptions of disability have been severely criticised by disabled people who have concluded that they serve the interests, not of themselves, but of the non-disabled majority. It is very convenient for society that disabled people should accept what are viewed as their problems and adjust to them, for in that way the status quo is maintained.

Disabled children have been socialised from an early age into believing that the rights of non-disabled people do not apply to them: it is often those who become disabled later in life who see most clearly that by accepting disability and adjusting to it, they are, in effect, relinquishing their citizenship rights.

### Denial

If disabled people dare to challenge the stereotypes people have of them, or refuse to play the disabled role, they are likely to be confronted with unpleasant reactions. To protect themselves from this, disabled people learn from their earliest childhood to deny or minimise their disabilities. This process has been analysed in detail by French (1993) who concludes that disabled people deny their experience of disability for the following reasons:

- \* To avoid other people's anxiety and distress.
- \* To avoid other people's disappointment and frustration.
- \* To avoid other people's disbelief.
- \* To avoid other people's rejection.
- \* To avoid other people's disapproval.
- \* To live up to other people's ideas of 'normality'.
- \* To avoid spoiling other people's fun.
- \* To collude with other people's pretences.

French believes that disabled people, including children, deny their reality of disability, not because of flaws in their individual psyches, but for social, economic and emotional survival, and that they do so at considerable cost to their sense of self and their identities. She contends, 'When people deny our disabilities they deny who we really are.' (1993:p74)

Disabled people are conditioned from their earliest childhood to manage and overcome disability, to be independent, to be normal, and to play the disabled role. This has led to a dearth of information on the real experience of disability, as well as a lack of debate on the best ways of improving the lives of disabled people.

### Conclusion

Physiotherapists have considerable power over disabled people and have played their part, often unwittingly, in imposing the disabled role upon them. Disabled people have now organised themselves into an international civil rights movement to fight the oppression they face (French 1994c). If physiotherapists are to maintain the respect of disabled people they must widen and deepen their knowledge of disability and join disabled people in their struggle for equality and full citizenship. This is not to imply that helping a disabled person to gain physical independence, or psychological acceptance, is inappropriate, but to stress the importance of physiotherapists understanding the social construction of disability and the processes by which disabled people are compelled to play a role which, not only fails to meet their needs, but renders them second-class beings.

### References

- French S. (1993) 'Can you See the Rainbow?' The Roots of Denial. In Swain J., Finkelstein V., French S. and Oliver M. (eds.) *'Disabling Barriers - Enabling Environments'*. Sage. London.
- French S. (1994a) The Disabled Role. In French S. (Ed.) *On Equal Terms: working with disabled people*. Butterworth-Heinemann. Oxford.
- French S. (1994b) Disabled people and Professional Practice. In French S. (ed.) *On Equal Terms: working with disabled people*. Butterworth-Heinemann. Oxford.
- French S. (1994c) The Disability Movement. In French S. (ed.) *On Equal Terms: working with disabled people*. Butterworth-Heinemann. Oxford.
- French S. and Swain J. (in press) Young disabled people. In Stainton Rogers W., Tucker S. and Roche J. (ed.) *Working with young People: a reader*. The Open University Press. Buckingham.
- Ladd P. (1988) *The Modern Deaf Community*. In Miles D. BBC Books. London.
- Mason M. (1992) Internalised Oppression. In Rieser R. and Mason M. (eds.) *'Disability Equality in the Classroom: a human rights issue'*. (2nd ed.) Disability Equality in Education. London.
- Morris J. (1989) *Able Lives*. The Women's Press. London.
- Morris J. (1991) *Pride Against Prejudice*. The Women's Press. London.
- Oliver M. (1993) Disability and Dependency: a creation of industrial societies? In Swan J., Finkelstein V., French S. and Oliver M. (eds.) *'Disabling Barriers - Enabling Environments'*. Sage. London.
- Parsons T. (1951) *The Social System*. Routledge and Kegan Paul. London.
- Sutherland A.T. (1981) *Disabled We Stand*. Souvenir Press. London.

## RESULTS OF GAIT QUESTIONNAIRE

### JO WALTERS

Senior Physiotherapist  
Child Development Centre  
Southlands Hospital  
Shoreham by Sea  
West Sussex  
01273 455622

First of all, many thanks to the Conference Committee for including my Gait Questionnaire in the Conference pack and thanks to all who filled it in. I collected 31 forms in all, [shame on those who did not fill them in!] and thought I should share the results with yourself and other members through the Journal.

For those who did not get to Conference or see the questionnaire, I will repeat it alongside the results.

Although this is only a very small sample, it raises several questions, some of which should be considered further.

All of the respondents are assessing and recording data, however some still think that they are not, so we need to ask ourselves how and where these facts are kept. There may be information which a member of your team can take further.

None of those who responded worked with Neuropaediatricians when assessing children's gait ... Why not? If we are aiming to manage the posture of children who have Cerebral Palsy, in lying, sitting and standing, their input would be valuable.

Although I have recently noticed a surge of Gait and Research posts advertised, it seems that none of these Therapists attended Conference. Are any of them APCP members, and can we persuade them to share their findings with the rest of us?

Overall, we are obviously prescribing orthotics for children, recording a variety of facts, and not making decisions in isolation. If this process is documented it saves time and prevents any omissions, which will enable us to retrieve information for each child as they grow and change. It does not require huge amounts of money or technology, just a willingness to document the procedure.

Over the past four years we have held regular gait reviews for all children in the Worthing District who have long term Gait problems. The protocol now involves approximately eight items.

With the aid of a standard video camera, we have been able to record children's gait with and without orthotics over a measured distance of 25 metres, and static balance on both or either leg during a 30 second period.

## CONFERENCE 1996

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A heart rate monitor has enabled us to measure the Physiological Cost Index of walking in and out of prescribed orthotics for individual children, and at present we are evaluating the use of Seattle DAFOs. I plan to measure these across a force platform in the near future to provide precise information regarding balance and stability.

Through the Questionnaire responses, I can contact those Therapists who are prescribing Dynamic AFOs, to discover if their findings differ from ours in Worthing. If any other Therapist is using these and would like to share their findings please do contact me.

### QUESTIONNAIRE

1. Do you keep any records of children's gait? Yes=18 No=13
2. How long ago did you commence? <1 yr=6  
2 yr=2  
5 yr=5  
>5 yr=5
3. Does your team have a formal procedure? Yes=5 No=13
4. Does your team use any of the following in their assessment?

	YES RECORD	NO RECORD	TOTAL
Powder prints	3	0	3
Lipstick prints	3	0	3
Ink prints	4	0	4
Video	17	5	22
Paedobarograph	1	0	1
PCI Heart rate	3	0	3
PCI Pulsed oxymetry	1	0	1
Joint Range	11	7	18
EMG	1	0	1
Force Plate	2	0	2
Biofeedback	2	0	2
Any Other			
Timed Walk	1	0	1
Benesh Notation	1	0	1

## HEAD, SHOULDERS, KNEES & TOES

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5. What do you currently prescribe?

	Yes Record	No Record	Total
AFOs	16	10	26
Hinged AFOs	13	7	20
Dynamic AFOs	11	2	13
Commercial Insoles	11	2	13
Bespoke Insoles	11	4	15

[Five people probably omitted to turn over the questionnaire page]

6. Is the assessment with a Physiotherapist only?

Yes=23

Did not respond=8

7. Do you have joint assessments with any of the following?

	Yes	No
Orthopaedic	12	14
Orthotist	24	2
Chiropodist	9	17
Podiatrist	9	17
Any Other	0	26

TWELVE THINGS YOU OUGHT TO KNOW BEFORE ORGANISING  
THE A.P.C.P. CONFERENCE

GINNY HANCOCK

Vice Chairman

Organising Committee

1. Take a stress management course.
2. Never assume that you have a foolproof application form and that everyone can fill it in correctly.
3. Try to attend a conference before you organise one.
4. Confiscate your Chairperson's passport to prevent her leaving the country.
5. Take your own mug to conference.
6. Resign from the Regional Committee before it is your turn to organise conference.
7. Make friends with your exhibitors, especially Mr Able.
8. Remember that delegates lose their common sense and all sense of direction while attending conference.
9. Take a foot spa with you.
10. Humour your organising committee and let them have first choice of sweatshirts.
11. Someone will always complain.
12. Never take anything personally!

head  
shoulders  
knees  
& toes

## BOOK REVIEW

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### SETTING UP A DYSPRAXIA PHYSIOTHERAPY SERVICE

**Michele Lee, Grad DipPhys. MCSP, SRP**

**Available from:**

**Michele Lee, Blaire House, Denham Green Lane, Denham, Bucks UB9 5LQ**

**Price £7.00**

This ring bound book is written to aid physiotherapists plan and implement a physiotherapy service for children with dyspraxia which is both effective and within available resources. The book compliments her previous publication *Dyspraxia - a handbook for Therapists*.

The first main section of the book examines issues regarding the demand for the service, the department's ability to provide it and who could make referrals. Following this the cost of providing a service is detailed and the method of marketing it.

The section detailing the service provided outlines referrals, assessments and treatment. The final and largest section of the book is a group of appendices which include parental questionnaires, assessment forms, examples of letters, school programmes and parental information.

There was a considerable amount of material in this book which is also in the handbook. Some sections such as example letters and reports seemed particularly patronising and may hamper true reporting.

Michele's assessment and treatment methods are impressive but many departments are using other validated assessments and incorporating group work into their practise and these are worthy of a mention considering limited resources.

This book would be a useful addition to the physiotherapy department and helpful to those who offer or may wish to begin a service for children with dyspraxia.

**TERRY POUNTNEY  
MA, MCSP, SRP**

## THE BOAT RACE

There was once a boat race between a Japanese car firm and an NHS team. Both practised long and hard to reach their peak performance, but on the big day the Japanese team won by a mile.

The NHS team became discouraged and morale sagged as they had worked unerringly for months.

The NHSE decided the reason for the crushing defeat must be found, and set up a working party to investigate the problem and recommend action.

They concluded that the Japanese had eight people rowing and one steering, while the NHS team had 8 steering to one rowing!

The NHSE hired a consultancy to look at the teams structure. Millions of pounds and several months later the consultant reported that too many people were steering and not enough rowing!

To avoid losing again, the team structure was re-organised to create - 3 assistant steering managers, one executive steering manager and a director of steering services. A performance related pay and appraisal system was also set up, to give the person rowing the boat more incentive to work harder.

The Japanese were challenged to another race - and won by 2 miles. The NHSE responded by laying off the rower for poor performance, selling the oar and cancelling orders for a new boat. The money saved was used to finance higher than average pay awards for the Chief Executive!

~~~~~

## THE TEAM APPROACH

Occupational  
Therapist

Prosthetist/  
Orthotist

Bioengineer

Physiotherapist



Nurse

Doctor

### What do these people have in common?

They represent professions that are part of the clinic team concerned with rehabilitation. The team approach is widely recognised as the method of choice in treating people with disabilities, with each member of the team - clinician, therapist, prosthetist/orthotist etc. - contributing particular skills and expertise.

They naturally belong to their appropriate professional bodies, which they look to to represent their professional interests. But, in addition, they all belong to ISPO - the International Society for Prosthetics and Orthotics.

UK National Member Society  
For further information contact Rosalind Ham,  
Wheelchair Services, St. Andrews Hospital,  
Devons Road, Bow E3 3NT.  
Tel. 0171-363-8251 Fax. 0171-363-8258.



HERE AND THERE

## SLCP HOME PAGE



**Comité Permanent de Liaison des Kinésithérapeutes de la UE**  
**Standing Liaison Committee of Physiotherapists of the EU.**

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PHYSIOTHERAPY WORLD NAVIGATOR

The General Secretary SLCP,  
24 High Street, Henley-in-Arden, West Midlands B95 5AN  
United Kingdom  
Tel. (01564) 792751  
Facsimile. (01564) 795008

## OBITUARY

**KAREN FARRER (Nee SHARPLES)**

*July 1958 to July 1996*

Karen was born on 12 July 1958 in Kaduna, Nigeria.

Her father was working in Nigeria as an Colonial Educational Officer and she lived there for the first few years, then she moved to Halesowen with her mother and two brothers.

Karen started her career in 1979 in Barnsley as a Junior Physiotherapist for 14 months, then she moved to Sheffield for approximately one year, she then returned to Barnsley until the present day.

Karen worked totally in Paediatrics, initially covering in-patients and community mainstream work, but then worked totally in the community and mainstream education setting as the service developed. She completed the Paediatric Bobath Course and was a member of B.A.B.T.T. and A.P.C.P.

Karen was a dedicated, conscientious children's physiotherapist who will be sadly missed by her family, colleagues and friends, as well as all the thousands of families she has been involved with over her career.

She leaves a husband and two beautiful children.

### A USEFUL ADDRESS FOR CAR SEATS AND HARNESSSES

**John Lyus, In Car Safety, Unit 5, 37 Erica Road, The Autocentre,  
Stacey Bushes, Milton Keynes. MK12 6HS. Tel. 01908 220909.**

## FORMER APCP MEMBER RECEIVES ACCOLADE



APCP were delighted to hear that an ex-member of the Association has been honoured by the Association of Chartered Physiotherapists for People with Learning Disabilities (ACPPLD). Lyn Weekes has been presented with the Anne Russell Memorial Award for her outstanding work for people with Learning Disabilities.

Lyn was a founder member of the East Anglia Region and was Chairman when the Region organised the 1992 APCP Conference in Norwich. She also served on the National Committee and was Treasurer for 4 years.

It was during her time as a Paediatric Physiotherapist that Lyn started working with children with learning disabilities and first became interested in girls with Rett's Syndrome. She is now an international expert in advising and treating Retts and has lectured in this country and in Europe and has run workshops for therapists and Rett's sufferers and their families in Spain and Bulgaria.

Lyn also helped introduce Vibroacoustic Therapy, working alongside her Music Therapy Colleagues at Harperbury Hospital where she was based. She has done a lot of research into the effects of this therapy in conjunction with a similar group of colleagues in Scandinavia and has visited their country several times to give lectures and exchange information.

As her work became more involved with people of all ages with learning disabilities (she is Manager of Physiotherapy Services for Horizon NHS Trust) Lyn felt it would be more appropriate to join ACPPLD and resigned from APCP where she was much appreciated for her commitment and hard work on behalf of the Association.

APCP are very proud that one of their former members has been a recipient of this award and should like to congratulate her for that and for all the work she does.

## APCP MATTERS

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### APCP INTRODUCTION TO PAEDIATRICS COURSE 1996

This course which was held for 5 days at the end of February at the CSP in London, was attended by 31 physiotherapists from across the country including one delegate from Malta.

All passed the multiple choice questions at the end of the week and 23 completed the course by submitting their case studies later in the year.

Participants were asked to complete a questionnaire to evaluate the course and assist course leaders in planning the next one. Comments were generally favourable, all found the course interesting and the overall standard of lecturing was considered high, with information presented at an appropriate level. 96% would recommend this course to other physiotherapists.

The course team would like to thank all the lecturers, the delegates and everyone involved in helping with the course, and give our congratulations to all those who completed the course with their case studies, all of which gained pass marks.

|                |                 |                    |
|----------------|-----------------|--------------------|
| Diana Baird    | Clare Coulthard | Wendy Hicks        |
| Sonya Bartolo  | Emma Dakin      | Mandy Humphrey     |
| Sue Booth      | Fiona Down      | Christine Leighton |
| Alison Botting | Julia Dyer      | Letitia Meyer      |
| Wendy Brougham | Samantha Fallon | Ann Price          |
| Linda Brown    | Helen Gambier   | Pam Thirlwell      |
| Janice Colvin  | Caroline Gray   | Bernice Worrall    |
|                | Fiona Gray      | Karen Watson       |

The Post Registration Education Team are planning another course which it is hoped will be organised by a local committee and run in the North-West in September 1997.

Possible venues being looked at include Salford University, Alderhay Children's Hospital or Chester College. For further information please contact Sue Leech, the North-West Rep.

Carole Hurran  
Post Registration Education Committee

## APCP MATTERS

### LIST OF PUBLICATIONS

| BOOK/TITLE                                                                                           | QUANTITY | PRICE LIST |
|------------------------------------------------------------------------------------------------------|----------|------------|
| <b>SERIAL SPLINTING IN HEMIPLEGIC<br/>"CEREBRAL PALSY"</b><br><i>by Margaret Jones (2nd Edition)</i> |          | £3.50      |
| <b>THE CHILDREN ACT 1989</b><br><i>'A Synopsis for Paediatric Physiotherapists'</i>                  |          | £2.50      |
| <b>PAEDIATRIC PHYSIOTHERAPY</b><br><i>Guidelines for Good Practice</i>                               |          | £2.50      |
| <b>DYSPRAXIA - A HANDBOOK FOR THERAPISTS</b><br><i>by Michele Lee and Jenny French</i>               |          | £5.50      |
| <b>GUIDELINES FOR CALCULATING PAEDIATRIC<br/>PHYSIOTHERAPY CASELOADS - FACTSHEET</b>                 |          | £1.00      |
| <b>BABY MASSAGE - AN INTRODUCTION<br/>FOR PARENTS - FACTSHEET</b>                                    |          | £2.50      |
| <b>STANDARDS OF PRACTICE - PAEDIATRIC<br/>PHYSIOTHERAPY</b>                                          |          | £2.50      |

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|                |                |                              |
|----------------|----------------|------------------------------|
| Post & Packing | Single copies  | £0.50                        |
|                | 2-5 copies     | £1.00                        |
|                | 6-10 copies    | £2.50                        |
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**Birmingham Childrens Hospital**

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**Please supply Name and Address for delivery**

## REGIONAL REPORTS

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### SOUTH WEST

Julia Graham  
Child Health Services  
Lodden NHS Trust  
G Floor  
The North Hampshire Hospital  
Aldermaston Road  
Basingstoke  
Hants RG24 9NA  
Tel. 01256 817718

I was pleased to attend the first National Committee Meeting as APCP representative for the South-West region, on October 4th.

I would like to express my thanks on behalf of all the SW Region Committee and Membership to Gill Smith for her dedicated work over the past years as regional representative and I am pleased to report her continued support for the association on the Editorial board.

We look forward to our next Study Day on 8 March 1997 which will combine our AGM with a Study Day on Legal Issues. Look out for final details in the next APCP Journal.

Merry Christmas and a Happy New Year to all our members.

### NORTH WEST

Sue Leech  
Walkden Clinic  
Bridgewater Road  
Walkden  
M28 3JE  
Tel. 0161 790 3625

Our membership is around 153 and as we approach the year end - a reminder to everyone to please try and recruit a new member for the New Year. We are one of the largest groups in the country so try and let the membership total reflect this.

Our study day on 24 hour Management of the Disabled Child was successful despite the vibrations from the Manchester bomb blast half way through, and many of you borrowed the posture control bags to try. Please contact Jan Lawton if there are any stray ones lying forgotten in corners!

We had a very informative day on Dyspraxia early October well attended by over 100 PT's OT's and SALT's and some education staff. Thank you to the joint efforts of NAPOT and APCP North West for their extremely hard work in producing a splendid programme.

1997 AGM on March 3rd at Blackburn - topic Neurotrophic stimulation - look out for a separate mailing.

Gross Motor Function Testing will be in Summer and possibly, Feeding in the Autumn.

Before that - look out for a Respiratory day in January - venue Salford. More details out soon.

If anyone has borrowed a video from Jean at Ormskirk CDC (or more recently Gill Holmes at Alder Hey) we are missing 2 - one of which is "Oh my back". Please return if found!

The committee would welcome your ideas on topics for courses and for promoting APCP in the North West - keep ideas coming please!

### SOUTH EAST

Terry Pountney  
190 Surrenden Road  
Brighton  
BN1 6JB

The committee has finally recovered from the conference in April, thank you all for your support and kind comments.

A study day on Paediatric Othotics is planned for October 12th at the Post Graduate Medical Centre are Brighton along with a belated AGM.

## REGIONAL REPORTS

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### NORTH EAST

Mrs Teleri Robinson  
Physiotherapy Department  
Pinderfields General Hospital  
Aberford Road  
Wakefield  
WF1 4DG

We have not had a Study Day since the last report but we have one planned for the 16th November on Gait Analysis so if you have not booked a place, apply now. It will probably be the last time we can get together before the National Conference. You should have received a flyer in the last journal.

Make sure you renew your membership this year as soon as possible. How about photocopying the application form to distribute to your colleagues who are not members to boost our numbers.

It may be a little early but we wish all our members a very happy Christmas and every best wish for the New Year.

### EAST ANGLIA

Sue Whitby,  
3 Manor Way,  
Hail Weston,  
Huntingdon,  
PE19 4LG  
Tel. 01480 214718 (home)  
01480 415203 (work)

We finally made our 150 members for East Anglia. Let's go for 200+ in 1997! If you all fill in your direct debit forms in good time (if you haven't already), it will make it so easy for everyone and then we can use all our energies recruiting new members.

Now we are all getting more involved with Continuing Professional Development (CPD) we can really help ourselves by planning courses, study days, seminars etc. to improve and consolidate all that knowledge. We, as a large group of paediatric physios., are ideally placed to organise just what we want.

**PLEASE LET YOUR COMMITTEE KNOW WHAT YOU WANT TO LEARN ABOUT.**

We need lots of ideas to plan next year's programme. We would like to organise study days/meetings in all areas of the region. Please talk amongst yourselves, then let us know what and where we can hold events and come along and enjoy yourselves.

We have tried weekends and weekdays but so far neither seem to suit many people. Do you think more localised "in service" type training would work? with some "away days".

I hope to meet lots of you at Conference in April 1997. Wakefield is easy to get to and the setting is really good.

Date for your diary - AGM on Saturday, 1 March 1997 at Cambridge.

### N. IRELAND

Adare Brady  
8 Ballyloughlan Avenue  
Ballymena  
BT43 5HN

The Northern Ireland Branch has almost fifty paid-up members - reminders have been sent out to those who have lapsed their membership. Our evening programme for 1996/97 is already under way.

Mr. Trevor Taylor (Consultant Orthopaedic Surgeon in Paediatrics), gave a very interesting talk on Paediatric Orthopaedics - he explained very clearly the procedures involved in surgery in the CP Child (16.09.96). The rest of the programme is as follow :-

#### **Monday 11th November The Griffiths Development Assessment**

Speaker : Dr. Claire Bailie, SCMO.

Venue : Physiotherapy Department,  
Antrim Hospital

Time : 7.30 p.m.

## REGIONAL REPORTS

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### Monday 13th January "Syndromes"

Speaker : Dr. Barbara Bell  
Venue : Physiotherapy Department,  
Antrim Hospital

Time : 7.30 p.m.

### Monday 10th March

**AGM - 7.30 p.m.**

MOVE Update

Speakers : Ruth Clark and Margaret  
Carville  
Physiotherapy Department,  
Antrim Hospital

Time : 8 p.m.

Study Days for the year are still in the planning stages. Any suggestions for these can be sent to me.

### LONDON BRANCH

Di Coggings,  
7 Union Street  
Barnet  
Herts.  
EN5 4HY

I would like to thank all those members who have recently joined the London Branch. Our membership number is now up to 160.

We would like to say a sad farewell to Viv Read who has resigned from the Committee and would like to thank her for all her hard work and efforts over the years.

Our study day on 5th October, titled "Complimentary Therapies", unfortunately had to be cancelled due to lack of interest. Could I once again make a plea for members to let me know of any subjects they would like organised within our region.

For those who did not read the London report in the last journal, please do, as if you are short of funds for courses attended in 1996, we may be able to help to !!

Last but not least - Happy New Year to you all.

### SCOTLAND

Lesley Smith  
Physiotherapy Department  
Royal Hospital for Sick  
Children  
Yorkhill NHS Trust  
Yorkhill  
Glasgow G3 8SJ  
Tel. 0141 201 0061

A.G.M. and Study Day "Food for Thought"

22nd February 1997. Venue to be decided.

Agenda items for A.G.M. to : Kathy Banford, Mountainhall Children's Centre, Bankend Road, Dumfries. (Secretary A.P.C.P. Scotland)

No reports received from the following :

### WEST MIDLANDS TRENT

Carol Foster  
90, Greenhill Road  
Moseley  
Birmingham  
B13 9SU

Elaine Lloyd  
18 Balisfire Grove  
Leicester  
LE4 0LT  
Tel: (0116) 2359110

### WALES

Donna Morris  
Physiotherapy Department  
Prince Charles Hospital  
Merthyr Tydfil  
Mid-Glamorgan  
CF47 9DT

# THE BOBATH CENTRE

*for Children with Cerebral Palsy*

**Courses being run by The Bobath Centre between 1996-97.**

**Advanced Course on Perception** will be held at The Bobath Centre from 2nd-6th December 1996. The course fee is £375.

**Refresher Course** will be held at The Bobath Centre from 9th-13th December 1996. The course fee is £265.

**Introductory Courses** to The Bobath Approach to the treatment of children with cerebral palsy will be held at The Bobath Centre, in June and October 1997, cost for 3 days £165. Bobath Scotland will hold a 3 day introductory course in May 1997 and Bobath Cymru will hold a 3 day Introductory course in November 1997, both courses will cost £165. We will also hold 2 day courses at various venues in the UK, cost £110.

**8 Week Paediatric Courses** will be held at The Bobath Centre in London in the Winter, Spring, Summer and Autumn. The course fee is £2250.

**Proposed Doctors Course** will be held at The Bobath Centre from 17th-19th March 1997. The course fee is £300.

**Teachers Course** will be held at The Centre from 2nd-3rd June 1997. The course fee is £110.

**Baby Course** will be held at The Bobath Centre from 8th-9th September 1997. The course fee is £750.

**Advanced Course - (Case Discussion)** will be held at The Bobath Centre from 8th-12th December 1997. The course fee is £375.

**Application forms and further information on all the above course are available from RACHEL WOOLFSON,**

**Course Organiser, The Bobath Centre, 250 East End Road, London N2 8AU.  
Tel. 0181 444 3355, Fax 0181 444 3399.**

**E-MAIL ADDRESS - 101527.1440@compuserve.com**

## FUNCTIONAL ELECTRICAL STIMULATION IN PAEDIATRICS

Shoreham by Sea,  
West Sussex

15th FEBRUARY 1997

1.30 - 5.30 p.m.

A half day workshop on the use of F.E.S. with children including some practical demonstrations.

Tutor : Jane Burridge  
Research Physiotherapist  
Oddstock Hospital

Cost : £15.00

To apply contact :  
Julie Young  
Child Development  
Centre  
Southlands Hospital  
Shoreham by Sea  
West Sussex  
01273 446017

## DYSPRAXIA WORKSHOP

This one day workshop is designed for physiotherapists and will cover lectures and practical sessions on assessment and treatment. Extensive handouts will accompany the lectures.

*Date:*  
Thursday 6 February 1997

*Venue:*  
Denham Hospitality  
Licensed Victuallers National  
Homes  
Denham, Buckinghamshire

*Tutor:*  
Michele Lee MCSP SRP

*Cost:*  
£35 (including lunch)

*Apply to:*  
Angela Hurlstone  
Blaire House  
Denham Green Lane  
Denham  
Bucks. UB9 5LQ  
Tel: 01895 835144

## COURSES

### CONTINUING EDUCATION OFFICE INSTITUTE OF CHILD HEALTH

30 Guilford Street, London WC1N 1EH

**96:22**

20-22 Jan 97

£195

#### PHYSICAL DISABILITIES

*Course Director: Dr Lucinda Carr*

The course is intended for clinicians working with disabled children and their families and presents relevant new information at an advanced level. The programme includes aspects of juvenile arthritis, spina bifida/neuropathic bladder, the cerebral palsies, neuromuscular disease, orthopaedic management, osteogenesis imperfecta and genetics.

*Intended participants: Consultant paediatricians and senior registrars, paediatric neurologists, community paediatricians, disability physicians, therapists and orthopaedic surgeons.*

**96:23**

27-31 Jan 97

£200 or

£45 per day

#### UPDATE IN PAEDIATRIC PHYSIOTHERAPY

*Course Directors: Sue Chillingworth, Nikki Shack and  
Jeane Hartley*

The purpose of this course is to provide an update in a range of specialist paediatric subjects for physiotherapists established in paediatrics. The programme is divided into topics, to facilitate attendance on a daily basis.

*Intended participants: Physiotherapists established in paediatrics.*

**96:27**

20-21 Feb 97

£130 (doctors)

£65 (paramedics)

#### PAEDIATRIC RHEUMATOLOGY

*Course Director: Professor Pat Woo*

This course provides an update on the latest science and practice of paediatric rheumatology. The programme will include a mixture of lectures, case demonstrations and practical workshops.

*Intended participants: Paediatricians, GPs, rheumatologists, physiotherapists, occupational therapists, nurses and other paramedics and allied professionals dealing with children with rheumatic disorders.*

## Notes for Contributors

The Editorial Board welcomes research material; referenced articles and evaluations of physiotherapy practice; informal articles.

Manuscripts should be sent to Lin Wakely, 2 Ash Bank, Pipers Ash, Chester, Cheshire, CH4 7EH, U.K.

Copy to be submitted should be typed on one side of the paper, double spaced and with ample margins. All pages should be numbered consecutively.

**Manuscripts** should provide the title of the article and the author(s) name(s) and full postal address for correspondence.

**References** should be given in the Harvard System.

In text Author(s) name and initials followed by the date of publication. Use a,b, to indicate more than one publication in the same year. Where there are 3 or more authors use first name followed by et al.

For books Laszlo, J. & Bairstow, P. (1985) *Perpetual Motor Behaviour* (Rinehart and Winston)

For chapters

within books Morley, T.R. (1992) Spinal deformity in the physically handicapped child, in : G.T. McCarthy (Ed). *Physical Disability in Childhood* (Churchill Livingstone)

For articles Scott O.M., Hyde S.A., Goddard C.M., Dubowitz V., (1981a) Prevention of deformity in Duchenne muscular dystrophy. *Physiotherapy* 67(6), 177-80.

## Tables and Figures

The approximate position of the tables and figures should be indicated in the manuscript.

Keys to symbols should be included.

Tables should be numbered by Roman numerals and figures by Arabic numerals.

Figures should be supplied in a finished form, suitable for reproduction. Figures will not normally be redrawn.

Proofs will be sent to authors if major alterations have been made to the text.

The Editorial Board reserves the right to edit material submitted for publication.

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