

**ASSOCIATION OF
PAEDIATRIC
CHARTERED
PHYSIOTHERAPISTS**

JOURNAL



SEPTEMBER 1998

ISSUE
NO. 88

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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



Liz Hardy
Chairman

It has become tradition that the editorial for the Conference edition of our Journal is written by the new Chairperson. My dictionary informs me that this is the place where I can give my opinions- so here goes....

The APCP National Conference is regarded by many of our members as the 'Event of the Year' - it's highlight. It is an opportunity to bring together a large group of paediatric physiotherapists. Each year a small group, from a single APCP region, puts in many hours of work and total commitment in order to create an event which meets the needs of as many members as possible. Formulating a programme of lectures and workshops, which will be stimulating for both the inexperienced and the expert within our speciality is indeed a daunting challenge. It is, however, equally as difficult to achieve the 'right' atmosphere in which to learn new facts, discuss ideas, form networks, renew and form friendships. Planning conference is the 'event' of several years for each organising committee, and once again, in 1998, we have cause to thank them for their dedication to the task, and congratulate them on an excellent conference - definitely the 'Event of the Year'!

This Journal contains summaries of several of the lectures presented at this year's Annual Conference, which was held in Birmingham in March. I hope that they will prove useful, particularly to those members who were unable to attend. Remember, conference belongs to YOU the membership - ALL of you!

In 1995 Jill Brownson, who was then chair of APCP, asked for your views about the way we run conference. Last December, National Committee compiled a questionnaire on the same subject. Thank you to all who took the time to reply - a summary of the results is printed in this Journal. Members put forward many useful ideas on a range of topics. As we move towards the next millennium, many of you are proposing changes, and National Committee have already started to act upon some of them.

Next year's conference will be slightly different, and heralds a new venture for APCP. We will be one of a group of seven SIG's participating in the CSP's 1999 Congress, called 'A New Beginning'. We will, as usual, provide our own clinical programme, but this will be just one part of a much larger event. Delegates will be able to dip in and out of all the lectures which will cover a large range of specialities. I am sure you will agree that this is an exciting prospect. I hope it will, not only raise the profile of physiotherapy as a whole, but of our own clinical interest group, APCP. It should certainly achieve status as the 'Event of the Year'.

LETTERS TO THE EDITOR

Child Development Centre
Leicester Royal Infirmary
Infirmary Square
Leicester
LE1 5WW
22/7/98

Dear Miss Wakley,

I am currently involved in the treatment of a 10 month old girl with a chromosome abnormality (13q minus) and absence of corpus callosum. She is hearing impaired and shows marked developmental delay. She also has dysmorphic features.

I am told that the chromosome absence is very rare and have been unable to find much literature relevant to this condition. I would be very grateful if anyone who may have been involved with any children with this condition could contact me, or if anyone may know of any information which could help me with a management programme for this child. I am unable to form any clear idea of a likely prognosis, and what progress she may be likely to make.

Thanking you in anticipation

Jo Ellis
Sen II Paed Physio

Ms. Adele Jones,
Occupational Therapist and
Mrs. Ruth Hilton, Physiotherapist
Child Development Unit,
Peterborough District Hospital,
Thorpe Road,
Peterborough
PE3 6DA
Telephone/Fax 01733 874718

Dear Colleagues,

re: *Sleep Systems*

We are increasingly receiving requests from parents re advice on sleep systems.

Does anyone have experience or knowledge, positive and/or negative re these systems and who pays, Social Services, health or others?

Any information would gratefully be received. Many thanks.

Yours sincerely

Ms. Adele Jones,
Occupational Therapist and
Mrs. Ruth Hilton, Physiotherapist

LETTERS TO THE EDITOR

Lindsay Wrightson
Senior Physiotherapist
Child & Family Services
Isaal Maddox House
Shrub Hill Road
Worcester
WR4 9RW

Dear Lin,

I have been asked to represent Paediatric Physiotherapy on the Worcester Paediatric Asthma Care Process Group, which is writing a protocol for the treatment of all asthma children from acute to chronic stages, from hospital to community.

Other quoted protocols from around the country do not mention physiotherapy. Until recently we used to treat asthmatics here in the community; the drugs companies coming on the scene has cut down our work to nothing.

I believe we still have a role in the treatment of these children in that we can teach relaxation, panic control, breathing control and posture improvement, and generally give them a form of self-treatment and ownership of their condition.

CSP seem to have no guidelines for this treatment. Is anyone else in the country doing this work, or have we given it all up to the drugs companies and specialist respiratory nurses who are now keen to learn our skills?

If anyone is doing this work, (and I want to work with specialist asthma nurses in general practice as part of my community caseload) what parameters of successful outcome are you using? For example increased peak flow, reduced number of acute episodes of asthma or frequency of night-time cough or altered drug requirement could all be logged on the computer.

Any comments?

Yours sincerely

Lindsay Wrightson

Senior Community Paediatric Physiotherapist

North Tyneside General Hospital
Department of Physiotherapy
Rake Lane
North Shields
NE29 8NH
Tyne & Wear

Dear Lin,

The Local Education Authority are being taken to an Educational Tribunal in October by parents wishing to remove the physiotherapy and speech and language provision from Section 5 of the Statutory Assessment of Special Educational Needs to Section 3 where they are asking for daily physiotherapy to be provided by Education instead of the NHS.

The boy involved attends a school for children with severe learning disabilities. He is a thirteen year old spastic quadriplegia with athetosis and parents want 'daily arm exercises' to be given by a physio to improve his left arm and hand function so he can sign in Makaton and access his touch talker more effectively. We have naturally gone through the discussions of the provision as it is at the moment but I am to be called to give evidence at the tribunal.

I was wondering if any other paediatric physiotherapists have been involved in the situation and can offer any advice as to how it should be handled?

It could have enormous repercussions on our service nationally and I understand that there has already been a judgement for speech and language provision to be moved to Section 3.

I'd be most grateful for any help readers can offer.

Yours sincerely

Brenda Shell

Superintendent Physiotherapist

LETTERS TO THE EDITOR

North West Anglia Healthcare Trust
Child Development Unit
Peterborough District Hospital
Thorpe Road,
Peterborough
Cambs,
PE3 6DA

Dear Lin

We are currently reviewing our provision of footwear for children with special needs between the ages of 0 to 18 years.

We are writing a procedure for the above but feel we need evidence based literature to support our current guidelines.

We would be grateful for any articles, references etc. that any member may have and would be willing to share.

Yours sincerely,
Ruth Helton
Acting Head Paediatric Physiotherapist

Ann Parkin MCSP
PAMS Group
BPRG
Children's Hospital
Steelhouse Lane
Birmingham
B4 6NL

Re: British Paediatric Rheumatology Group

The British Paediatric Rheumatology Group (BPRG) is a multi-disciplinary group for professionals interested and involved in the treatment of children with arthritis and associated diseases. Membership of this group is open to doctors, nurses, physiotherapists and occupational therapists, and any other professional with interest in paediatric rheumatology.

There is a Paramedic Committee and sub-group of the BPRG, the chairman of which has a seat on the Executive Committee. The PAMS group is keen to encourage colleagues to join BPRG and also try and provide education for PAMS. Part of our vision is to try and standardise training available, and we are now able to offer a one-day training package for all PAMS, which can be staffed from specialist units in the UK. This is a "basic" day, providing information on all aspects of treatment for children with arthritis and allied conditions.

To join BPRG - send your CV, indicating your interest/involvement with paediatric rheumatology to Prof T Southwood, Rheumatology, Children's Hospital, Steelhouse Lane, Birmingham, B4 6NH.

If you are interested in a training day - contact Mrs Ann Parkin at the same address, Telephone 0121 333 8221.

The Autumn meeting of BPRG will be in Canterbury on October 15/16 1998 - and there is a morning set aside for a PAMS programme. Details of booking for BPRG conference from Mrs J Toms, Kent & Canterbury Hospital 01227 766877

The BPRG is a very active and worthwhile group, and the PAMS group want to encourage you to join us !

Yours sincerely
Ann Parkin MCSP
PAMS group of BPRG

LETTERS TO THE EDITOR

Kim Peacock
Therapy Services
The Sanderson Centre
North Avenue
Gosforth
Newcastle Upon Tyne
NE3 4DT

Dear Miss Wakley,

I am interested in learning more about the use of Physiotherapy Gymnastic balls, in the treatment of Cerebral Palsy Children.

I was wondering if any of your readers have any information regarding the use of these balls. I would also be interested to know if there are any published articles or courses being run on this subject, or experts who can be contacted.

I would be grateful to hear from any Physiotherapists who are using the Gymnastic Balls in the treatment of Cerebral Palsy children.

Your sincerely

Kim Peacock

Paediatric Physiotherapist

**COPY FOR DECEMBER 1998 JOURNAL
MUST BE WITH THE EDITOR BY
10TH OCTOBER**

The board reserve the right to edit material submitted

APCP CONFERENCE 1998



APCP NATIONAL CONFERENCE 1998

THE CHAMBERLAIN HOTEL

BIRMINGHAM

THURSDAY 26 - SATURDAY 28

MARCH 1998

TIME TO MOVE ON

A conference of mixed interests

A.P.C.P. CONFERENCE 1998



Delegates wait for the Conference to begin

Sally Braithwaite, Chairman of Organising Committee opens the Conference



Mary Goy, Secretary, opens the AGM

The National Committee Assembled for the AGM



A.P.C.P. CONFERENCE 1998



The Conference Organising Committee,
National Committee,
with the Mayor and Mayoress of Birmingham

Delegates enjoy a chat after the conference dinner



Coffee break. L-R Adare Brady, N. Ireland Rep, Eileen
Kinley, Publications Officer and Liz Hardy, Chairman

Conference Dinner



EARLY DIAGNOSIS OF CEREBRAL PALSY

DR A. LLOYD EVANS

The Bobath Centre for Children
with Cerebral Palsy

A DEFINITION OF CEREBRAL PALSY

(This is an arbitrary definition: others would do)

"An umbrella term covering a group of non-progressive, but often changing, motor impairment syndromes secondary to lesions or anomalies of the brain arising in the early stages of its development"

"The ability to achieve a classification based on aetiology would be the breakthrough sought by all working in this field"

(Mutch et al. 1992)

The noteworthy features are as follows:

1. There is an **early event** or **several events** in which damage to the brain occurs.
2. This event or events result in a **number of abnormalities** most noticeably involving the **motor** system, but also involving the sensory systems (somatosensory, visual, auditory and vestibular), perceptual impairment, global cognitive impairment, more specific learning disabilities, autonomic impairment and epilepsy. Even the motor disorder may remain undiagnosed for quite some time.
3. However, the various observed abnormalities **change over time** because the nervous system and the rest of the child are **developing** and changing. This means that some abnormalities may become more noticeable over time, but equally, some might resolve.

It may be best to limit cerebral palsy to damage occurring pre/perinatally up to and including term. This allows a more manageable classification. Most cases of cerebral palsy arise from two main sources: (1) prematurity; and (2) unexpected, and to some extent unpreventable, perinatal asphyxia. However, only a very small number of babies are thought to get into difficulties at the time of birth. Perhaps the majority of those apparently damaged from perinatal asphyxia are now thought to be damaged because an event or events occurring earlier during the pregnancy may result in brain damage before birth, reducing fetal ability to participate in the birth process, so that the perinatal asphyxia is a result of brain damage rather than its cause; or the earlier events may set the fetus up to become asphyxiated at birth and therefore suffer brain damage; or both mechanisms may occur.

HOW BIG IS THE PROBLEM?

Swedish cerebral palsy rates according to Hagberg:

2.2/1000 live births:

57% term

43% preterm

(i.e. the majority are term as, although the prevalence rate is lower, more term infants are born at term)

spastic 65%

diplegia 0.9/1000 live births

(50% from vascular damage in preterms, leukomalacia/haemorrhage)

hemiplegia 0.8/1000 live births

quadriplegia 0.2/1000 live births

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dyskinetic 35%

choreoathetoid about 0.3/1000 live births

dystonic 0.2/1000 live births

The last few years have seen considerable advances in prenatal and postnatal imaging, vast improvements in neonatal intensive care, attention to the NICU environment (NIDCAP) and the better use of assessment tools, including the (re)emergence of structured baby observation. Despite all this children continue to present late in the first years of life or even in the second year of life with clear signs of cerebral palsy.

The older literature is not really worth reviewing in detail as it enshrines late diagnosis as a principle. Most authors suggest a silent period for 5 months or more, some saying that specific signs are not present until 9-12 months or even later. For example, Drillien writing in 1972 said that the majority of motor disorders (80%) were identified in the first 2 years of life. A much more recent neonatal text (1994) quotes 2 years, and others 'by crawling age'. A very recent retrospective survey of child health centre screening in Stockholm (Lindström and Bremberg 1997) suggested that even with a screening programme in place, the median age of referral was 8 months and the mean 12 months. This excludes at risk children referred in other ways.

DEFINING THE AT RISK INFANT

Perinatal asphyxia in the term infant

Only around 10% of cerebral palsy in term infants is thought to occur as a result of birth difficulties, the remainder either occurring earlier in the pregnancy or via a combination of the two factors. Birth asphyxia is quite difficult to define in clinical terms. There is deficient gas exchange across the placenta which may occur for a wide variety of reasons. This leads to depression of the fetal heart. This in turn leads to hypoxic ischaemic damage to various fetal organ systems, including the brain. Various indicators are used: fetal heart rate, scalp blood sampling, presence of meconium, cord blood pH, Apgar scores. Unfortunately, none of these have any relation to subsequent neurological impairment.

In babies born at term there is a fairly well-defined clinical sequence seen in the neonatal period which does relate in part to later neurological abnormality. This is what is called *hypoxic ischaemic encephalopathy*. It comprises hyperalertness, declining consciousness, seizures, abnormal movements, abnormalities of sucking, and of eye movements. The severity can be graded (Sarnat and Sarnat):

1. Hyperalert, hyperexcitable
2. Hypotonic, suppressed primitive reflexes.
3. Stuporous, flaccid, absent primitive reflexes.

This clinical picture is considered to be a sign that the infant has suffered enough so called 'asphyxia' to cause brain injury. The possible outcomes

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are complete recovery, persistent neurological abnormality, or death. There is some relation of severity to outcome, for example most infants whose abnormal signs resolve by 48 hours are eventually normal. If a full term infant has an uncomplicated neonatal course with no evidence of HIE or any other neurological disturbance then birth asphyxia is unlikely to be the cause of any disability in the long term. It is possible to use measures of brain metabolism such as magnetic resonance spectroscopy or of blood flow such as near infra-red spectroscopy to help decide whether damage has occurred but this is not a precise science. EEG can be helpful if it shows little normal activity or excessive seizure activity. Standard ultrasound or magnetic resonance imaging have little to offer, unlike in the preterm infant.

Haemorrhagic and ischaemic lesions of the preterm brain

We know a great deal about damage to the preterm brain and to a certain extent prediction of 'at risk' babies is possible. Haemorrhagic and ischaemic lesions of the brain during the perinatal period are responsible for damage in the preterm infant. The two main pathologies are (a) periventricular haemorrhagic infarction, which can be unilateral or asymmetric or (b) periventricular leukomalacia, which is bilateral and symmetrical. However, a combination may also occur, just to increase the variability and individuality of cases!

The part of the brain damaged in the preterm infant is limited to the white matter rather than the cortex or the basal ganglia. Damage to the preterm brain, whether haemorrhagic or ischaemic, results in spastic cerebral palsy. Preterm infants do not show athetosis but they may be dystonic. It is worth remembering that a similar type of ischaemic damage may also occur prenatally.

Hagberg's data from Sweden shows that by type, diplegias were 75% preterm, 25% term. In term diplegia, 50-60% showed third trimester pregnancy abnormalities, 25% had perinatal hypoxia-ischaemia. MRI showed periventricular leukomalacia, suggesting **intrauterine** term PVL in the third trimester. Quadriplegias were 50% prenatal, 30% perinatal, and 20% postnatal.

(a) Periventricular venous infarction and intraventricular haemorrhage

Haemorrhage is most common in infants who are born less than 30 weeks gestation. Most occur in the first 3 days of life. Severe infantile respiratory distress syndrome and acidosis are the main contributors. In the preterm infant 90% of haemorrhages occur into the lining of the ventricle. In about half of all babies with this problem it is bilateral. The bleed may rupture into the ventricular system. Bleeding confined to the germinal layer or the ventricular system without dilation does not lead to severe neurological damage, but may be related to more subtle motor and learning difficulties

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in the future. More severe bleeds block the venous return in the terminal vein which runs past the ventricle. Congestion in the medullary veins which drain into the terminal vein leads to venous infarction of the periventricular white matter which may be later visible as a hole (porencephalic cyst). Blood can block the flow of CSF in the ventricular system causing hydrocephalus (post haemorrhagic ventricular dilation), and may also increase the likelihood of brain damage because of pressure effects further impeding the cerebral circulation. Unilateral haemorrhage may result in hemiparesis. Bilateral haemorrhage results in whole body cerebral palsy of the diplegic, or more often quadriplegic, distribution. The prevalence of this kind of damage seems to be falling, probably following the introduction of surfactant therapy.

Grading of intra- and peri-ventricular haemorrhages.

- Grade 1: is localised to the germinal layer with little or no intraventricular haemorrhage.
- Grades 2 & 3: extend into the basal ganglia and there is usually blood in the lateral ventricles.
- Grade 2: shows a 10-50% bleed in the lateral ventricles
- Grade 3: shows a > 50% bleed in the lateral ventricle.
- Grade 4: shows a haemorrhage extending into the white matter: actually white matter infarction.

Clinically, infants may remain hypotonic for long periods of time but this can lead to either a normal or an abnormal outcome. However, persistent asymmetry of tone with a contralateral porencephalic cyst suggests the later development of a hemiparesis. Poor outcome in intraventricular haemorrhage is related to the extent of brain involvement and to the extent of ventricular dilation (IPE = intraparenchymal extension).

Outcome	Normal	Abnormal
Grades 1-2	92-95%	5-8%
Grade 3	60-70%	30-40%
Grade 4 (localised IPE)	10-20%	80-90%
Grade 4 (generalised IPE)	0	100%

As a group, infants with haemorrhage do much better than infants with ischaemic damage.

(b) Ischaemic damage in the preterm infant

Ischaemic damage to the white matter in the preterm infant is called leukomalacia (thin white matter). It is bilateral and fairly symmetrical in distribution. Consequently, these children show bilateral neurological abnormality. This is spastic in type, and whole body in distribution (either diplegic or quadriplegic). Leukomalacia results from ischaemia in the border zone white matter which has a precarious blood supply, easily disturbed by adverse factors. Coagulation necrosis occurs, leading to cystic change and ultimately large ventricles with reduced periventricular white matter. These changes are most often seen at the back of the lateral ventricle disrupting cortical connections to the lower limbs.

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As for haemorrhages, leukomalacia can also be graded:

Grade 1. Transient echodensities lasting 7 days or more

Grade 2. Small localised fronto-parietal cysts

Grade 3. Periventricular cystic lesions

Grade 4. Cysts extending outwards (mixed leukomalacia)

Ultrasound scans show an early phase of echodensities (white area on scans) which may later develop into cysts (dark areas on scans). The ultrasound grading can be related to outcome.

Outcome:

Grade 1: normal outcome, transient neurological signs, minor motor difficulties, poor motor performance, cerebral palsy.

Grade 2: normal outcome or mild neurological signs.

Grade 3: spastic diplegia, visual problems.

Grade 4: quadriplegia, severe learning difficulties, blindness, hearing loss.

Transient echodensities can be associated with normal outcome, transient or permanent neurological abnormality.

Definite cystic lesions such as PVL in the occipital area result in spastic diplegia.

With extension of the lesions into the subcortical areas, the arms become more involved. Significant learning difficulties and cortical blindness become more common.

These preterm infants are initially hypotonic, but become irritable and hypertonic by the time they reach term. There is flexion of the upper limbs and extension of the lower limbs in supine, head control too good on ventral suspension, head retraction in sitting, marked flexion of the arms and extension of the legs when held standing.

By 6 months old, the irritability has improved, but the hypertonia remains. For the cystic PVLs, marked spasticity may not be obvious until 5-6 months old. Trunk control may be good in the first year, but then deteriorates. MRI shows good myelination, whereas mixed and subcortical leukomalacia shows a worse clinical picture and poor myelination on MRI. The diagnosis for these infants should be quite clear at 6 months old.

NEUROLOGICAL EXAMINATION

There are various systems for formal neurological examination of the newborn, either term or preterm. Authors include: Andre Thomas, Amiel Tison, Dubowitz, Prechtel, König.

Classical neurophysiology used preparations designed not to show spontaneous movement i.e. decerebrate in order to invent the concept of synapse and reflex. This led into some neurological examination techniques: not especially predictive since some abnormal patterns

EARLY DIAGNOSIS OF CEREBRAL PALSY

normalise and some are now considered to relate to the method of nursing on the NICU.

A representative system is one developed by Victor and Lilly Dubowitz at the Hammersmith Hospital. This system uses a collection of items describing posture, tone, primitive reflexes, and behavioural responses, including assessment of vision and hearing.

Abnormal neurological signs in the preterm infant can be:

Delayed: e.g. poor head control in pull to sit and in ventral suspension.

Accelerated: e.g. head control in ventral suspension too good (implying excessive extensor tone).

Deviant: e.g. persistent differential head control
arm flexion greater than leg flexion
tight popliteal angle
frequent tremors and startles
asymmetries
absent plantar grasp
abnormal Moro reflex
abnormal finger or toe posture
irritability

Some patterns of aberrant signs can be related to ultrasound appearances, for example asymmetry related to a unilateral lesion.

Ameil-Tison says that in an appropriately grown preterm infant a normal neurological examination is a good outcome predictor if the cranial ultrasound is normal when the baby reaches term. In growth retarded infants a longer period of follow up is necessary for more subtle deficits even if the ultrasound is normal (ultrasound has a definite limit of resolution). Abnormal signs include arching posture, clonic movements in 4 limbs, poor response to stimulation, need to wake for feeds, poor suck/colour change (autonomic), axial floppiness, abnormal eye movement. Good eye contact, visual pursuit, efficient sucking and swallowing are sufficient to rule out CNS depression.

NEUROBEHAVIOURAL ASSESSMENTS

These include Bayley, Movement Assessment of Infants, Miller Assessment for Preschoolers and the Brazelton neonatal behavioural assessment scale.

Some assessments used in at risk infants are able to pick up early signs of cerebral palsy quite well. Harris (1989) found that the Bayley and the Movement Assessment of Infants could be useful in picking up children likely to show cerebral palsy. A retrospective study examined early neurodevelopmental behaviours of children with spastic diplegia, spastic

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hemiplegia, and quadriplegia (spastic, athetoid, or mixed) who had been followed up longitudinally in a high-risk infant follow-up clinic. Compared with peers with normal outcomes, children with all three types of cerebral palsy had significantly lower scores on the Bayley Mental Scale at 4 months of age; children with hemiplegia and quadriplegia also scored significantly lower on the Bayley Motor Scale. On the Movement Assessment of Infants at 4 months of age, the children with hemiplegia and quadriplegia showed significantly higher risk scores than the nondisabled group. The Movement Assessment of Infants was more than three times as sensitive as the Bayley Motor Scale in detecting motor abnormalities in 4-month-old infants with diplegia and more than twice as sensitive in detecting early abnormalities of hemiplegia. At 1 year of age, however, the Bayley Motor Scale was extremely sensitive in picking up motor deficits in children with all three types of cerebral palsy.

What about children who do not go on to show definite cerebral palsy but end up with coordination and/or learning difficulties? Unfortunately 10% of survivors from neonatal units suffer major disabilities such as cerebral palsy, blindness or severe learning difficulties. Many of the remainder who appear normal actually have subtle learning difficulties. 50% of low birth weight children need remedial help at school compared to 20% of the normal population. Many of the children who fail at school have developmental coordination disorder, expressed as clumsiness. It is possible to identify these children during the preschool years and to provide effective remedial treatment.

OBSERVATION OF BABY MOVEMENTS

This is not a new concept. It has been around in various forms since the end of the last century. Milani-Comparetti described "motoroscopic examination" which looked at patterns of movement. 'Pattern analysis is a better clinical tool than the traditional examination of muscle tone disorders for the early diagnosis of cerebral palsy.'

The immature nervous system generates a number of specific movement patterns. Real time fetal ultrasound shows coordinated motor patterns emerging 7-8 weeks after conception. The fetus does not show any movement patterns which cannot be observed in infants after birth. There is therefore a continuum of neural function from prenatal to postnatal life. There are endogenous pattern generators in the developing nervous system that are proactive rather than reflexive (response to a stimulus). These behaviours, e.g. reaching, are subsequently refined by environmental modulation).

Spontaneous motor activity is more sensitive to adverse conditions than reactivity to sensory stimuli. Pattern recognition can be a powerful instrument for detecting pathological alterations in the complexity of movements.

EARLY DIAGNOSIS OF CEREBRAL PALSY

The human fetus and young infant have a repertoire of distinct movement patterns that are spontaneous. One set of these movement patterns is known as **general movements**.

After birth, general movements are commonly referred to as **writhing movements**. At the age of 6-9 weeks post term the form and character of general movements of normal infants changes from writhing type into a fidgety pattern. **Fidgety movements** are defined as an ongoing stream of small circular and elegant movements of neck, trunk and limbs. Fidgety movements of normal infants are a transient phenomenon. They emerge gradually at 6 weeks, come to full expression between 9-13 weeks post term and taper off again between the ages of 14-20 weeks post term.

Prechtl's group looked at 130 infants (74% preterm) with cranial ultrasound and standardised neurological assessments up to 2 years corrected age. The ultrasound scans were classified into low risk (54%, e.g. transient echodensities, Grade 1 IVH), and high risk (46%, e.g. PVL grades 2-4 and Grade II-IV IVH). The high risk group were at risk of permanent neurological damage.

67/70 of infants with normal fidgety movements had a normal long term neurological outcome. Of the 3 abnormal 1 had motor delay and 2 very mild cerebral palsy.

13/16 infants with abnormal fidgety movements had abnormal outcome, 6 with cerebral palsy and 7 with developmental delay.

All 44 infants with absent fidgety movements had abnormal outcome: 1 developmental delay, 43 cerebral palsy.

Prediction of outcome based on ultrasound had a lower validity than that based on fidgety movements assessment. Observation is also better than standardised neurological assessments.

	Specificity	Sensitivity
Ultrasound	83%	80%
Fidgets	96%	95%

Observing the quality of fidgety movements in young infants allows valid predictions about later neurological outcome to be made long before the first signs of spasticity appear. Not only are abnormal and absent fidgety movements indicative of a poor outcome but normal fidgety movements are an excellent marker for a normal neurological outcome. The qualitative assessment of general movements before the onset of fidgety movements has an equally high sensitivity, but its specificity is considerably lower.

REFERENCES

REFERENCES

- André-Thomas, Chesni, Y., Sainte-Anne Dargassies, S. The Neurological Examination of the Infant. *Clinics in Developmental Medicine*, 1, National Spastics Society, London 1960.
- Blasco, P.A. Primitive reflexes: Their contribution to the early detection of cerebral palsy. *Clinical Pediatrics* **33**:388-397, 1994.
- Brazelton, T. B., Nugent, J.K. Neonatal Behavioural Assessment Scale 3rd edition. *Clinics in Developmental Medicine*, **137**, Mac Keith Press, Cambridge 1995.
- Dubowitz, L., Dubowitz, V. The Neurological Assessment of the Preterm and Full Term Newborn Infant. *Clinics in Developmental Medicine*, **79**, Spastics International Medical Publications, London, 1981.
- Hagberg B., Hagberg, G., and Olow, I. The changing panorama of cerebral palsy in Sweden. VI. Prevalence and origin during the birth year period 1983-1986. *Acta Paediatr.* **82**:387-393, 1993.
- Hagberg, B., Hagberg, G., Olow, I., and Von Wendt, L. The changing panorama of cerebral palsy in Sweden. 7. Prevalence and origin in the birth year period 1987-90. *Acta Paediatr.* **85**:954-960, 1996.
- Harris, S. R. Early diagnosis of spastic diplegia, spastic hemiplegia, and quadriplegia. *American Journal of Diseases of Children* **143**(11): 1356-60, 1989.
- Hempel, M.S. Neurological development during toddling age in normal children and children at risk of developmental disorders. *Early Hum. Dev.* **34**:47-57, 1993.
- Köng, E. Early detection of cerebral motor disorders. *Med. Sport. Sci.* **36**:80-85, 1992.
- Lindström, K., Bremberg, S. The contribution of developmental surveillance to early detection of cerebral palsy. *Acta Paediatr.* **86**:736-739, 1997.
- Milani-Comparetti, A.M. Pattern analysis of motor development and of its disorders. *Psychiatrie, Neurologie und Medizinische Psychologie - Beihefte* **13-14**:41-9, 1970.
- Morgan, A.M. and Aldag, J.C. Early identification of cerebral palsy using a profile of abnormal motor patterns. *Pediatrics* **98**:692-697, 1996.
- Mutch, L., Alberman, E., Hagberg, B., Kodama, K., and Perat, M.V. Cerebral palsy epidemiology: where are we and where are we going? *Dev. Med. Child Neurol.* **34**:547-551, 1992.
- Pharoah, P.O.D., Stevenson, C.J., Cooke, R.W.I., and Stevenson, R.C. Prevalence of behaviour disorders in low birthweight infants. *Arch. Dis. Child.* **70**:271-274, 1994.
- Prechtl, H.F.R. The Neurological Examination of the Full Term Newborn Infant, 2nd edition. *Clinics in Developmental Medicine*, **63**, Spastics International Medical Publications, London, 1977.
- Prechtl, H.F., Einspieler, C., Cioni, G., Bos, A.F., Ferrari, F., Sontheimer, D. An early marker for neurological deficits after perinatal brain lesions. *Lancet* **349**(9062): 1361-3, 1997.

CLINICAL GENETICS

PROF PETER FARDON

Professor of Clinical Genetics
Birmingham Regional Genetic Service

Hardly a day goes by without an advance in genetics being reported in the newspaper. It is the exciting job of a clinical geneticist to use all this new scientific information to enable families to make choices and decisions which are right for them.

Genetic diseases and congenital malformations occur in about 4%-5% of live births and 10% of adults have a chronic disease with a major genetic component (such as heart disease, hypertension, diabetes). Mutations in genes can be solely responsible for some of these conditions, or can work with influences in the environment to cause the condition. Such genes are increasingly being recognised, isolated, their genetic code read. This leads to an understanding of the function of the gene which for some diseases will be the first step on the long road to new forms of therapy.

Making a genetic diagnosis is important -

- 1 To give families information about the course, prognosis and treatment of genetic and part genetic disorders
- 2 To offer genetic information (through "genetic counselling")
- 3 To offer families the possibility of presymptomatic (eg Huntington's disease), prenatal (in any case where the location of the gene is known, or the gene itself has been isolated) and definitive diagnosis without the need for more invasive investigations (eg by demonstrating a deletion in the dystrophin gene in a boy suspected of having Duchenne muscular dystrophy).

Recent advances clinically useful include:

UNDERSTANDING OF PATHWAYS INVOLVED IN DEVELOPMENT

By studying the genes involved in developmental pathways in other organisms such as the fruit fly and the mouse, genes responsible for several congenital malformation syndromes have been identified. From the work on other organisms, complex pathways involving many genes in normal development are being delineated.

FINE RESOLUTION OF CHROMOSOME STRUCTURE

Each chromosome contains thousands of genes and therefore a chromosome anomaly (eg deletions or duplications of chromosomal material) will affect many genes. The hallmark of chromosome anomalies is that a person has multiple abnormalities in multiple organs systems together with growth and developmental delay. Techniques have been available very recently to examine the structure of chromosomes in much greater detail - by a technique known as "FISH" (fluorescent in situ hybridisation). This technique is able to detect abnormalities of chromosomes too small to be detected by the conventional light microscopy which is used for routine chromosome analysis. This technique has demonstrated, for instance, that Williams syndrome is caused by a small submicroscopic deletion on chromosome 7 involving the area of the chromosome including the elastin gene. An extension of this technique is

CLINICAL GENETICS

very useful for detecting the chromosome anomalies associated with various kinds of leukaemia.

TRACING DISEASE GENES THROUGH FAMILIES AND/OR DIRECT DETECTION OF A MUTATION

Disorders caused by a fault in just one of the thousands of genes which humans possess ("single gene disorders") give the highest recurrence risks in families. They include such conditions as spinal muscular atrophy, cystic fibrosis, Duchenne muscular dystrophy, myotonic dystrophy, Fragile X syndrome. For many single gene disorders the precise localisation of the gene on a particular chromosome is known, and DNA markers within this region of the chromosome can be used in a family to identify the chromosome containing the disease gene and then to track its segregation through its family members. This can allow presymptomatic and prenatal diagnosis. For many disorders now, however, the gene has been identified and the laboratory can determine the precise fault within the gene itself. This offers highly accurate DNA diagnosis for family members. DNA tests, however, can take many months to organise and complete, and therefore a family considering prenatal diagnosis, for instance, should contact the genetic department before embarking on pregnancy to determine if such diagnosis would be possible for their family.

CANCER GENETICS

In about 5% of cases of breast cancer and of colon cancer, the cause is a mutation in a single gene. The genes involved do not actually cause the cancer themselves, but confer protection. When the gene becomes damaged then cell control can be lost and a cancer subsequently develop. Several such genes have been isolated. Most genetic units have guidelines for determining which families are most likely to have a mutation in one of these genes and to offer them DNA testing, because it would not be possible to offer all cases of breast and colon cancer DNA testing. Further details will be available from your local regional clinical genetics service.

THE POSSIBILITY OF GENE THERAPY

There are current clinical trials of gene therapy for cystic fibrosis. There are basically two approaches in trying to introduce into the lungs the normal gene code for the cystic fibrosis transmembrane receptor protein - either by coupling it to a virus which then infects the respiratory lining, or encasing it in lipid molecules which fuse with the respiratory lining.

Specialist genetic information - such as organising and explaining diagnostic DNA testing, and the diagnosis of children with dysmorphic syndromes - is available through the regional genetics services. It is common practice for them to hold genetic clinics in district general hospitals as well as in the main regional centre allowing easy access for patients. As discoveries are coming so thick and fast in genetics, it would be wise for a family who had previously been told that prenatal diagnosis would not be available for a rare disorder, to check with the regional genetics service before embarking on a further pregnancy to see if there had been any advances.

JUVENILE CHRONIC ARTHRITIS

PHYSIOTHERAPY

ANN PARKIN MCSP

Senior Physiotherapist
Birmingham
Childhood Arthritis Unit

As a specialist unit, the treatment of children with juvenile chronic arthritis (or juvenile idiopathic arthritis as it will shortly be renamed!) is our "bread and butter" - but we realise that many therapists may only see one or two children with the disease, or indeed may never see it at all. As most of us learn "from experience" - knowing what to do when confronted by a child with arthritis when one has never seen it before can present a bit of a challenge. We hope to give you whistle stop tour of a child with arthritis, and give you a brief outline of what treatments may be used to overcome some of the problems encountered.

The treatment of JCA is a team effort, not just the doctors, physios and OTs, but includes many other professionals, the family and other carers. It is essential that we all work together for the benefit of the child, and not in our own "specialities" working against each other.

In the management of JCA early diagnosis is the key, and although diagnosis is usually seen as the doctors job, therapists can often be helpful too. A child may be referred by the orthopaedic team with a swollen knee to the therapists, but it may be the eagle-eyed experienced therapist that senses that it may be arthritis!

Pain relief is the first objective to enable the maintenance of function. Drug therapy programmes will be needed to "control" the disease, though we may never get control of severe disease.

The drug programme etc are all needed to enable the physical therapy to take place. The drugs are the main factor in reducing inflammation, but please remember that you can't afford to wait for them to work before starting physical therapy!

The overall aim of physiotherapy is to prevent deformity and thereby maintain function.

We aim to reduce pain, inflammation and muscle spasm
To maintain/improve/restore range of movement
To maintain/improve/restore muscle power
To maintain/improve/restore cardio-vascular fitness - an often forgotten aim!

To maintain/improve/restore normal gait
To facilitate normal development - a factor that can be overlooked, poorly children can be very cut off from normal life and activities.

Education is an important role of therapists - the child, the parents, the family, the teachers, other carers, "Joe Public" - we need to teach them as

JUVENILE CHRONIC ARTHRITIS

much as possible about the child's disease, so that a clear understanding of the reasons for therapy can be gained by all concerned.

We will start at the top and work through the joints!

CERVICAL SPINE.

In the cervical spine, pain and muscle spasm are the main problem, leading to reduced range of movement. The loss of extension is the main concern, although all movements are important. Because of the way we all sit and work, with necks in flexion, extension can soon be lost.

A word of caution - when the cervical spine is involved, ensure check X rays are done so that you know exactly what you are treating.

Fusion of the cervical spine can occur at one or more levels. Passive stretches and movements, and traction would not be helpful, and indeed could be dangerous!!

Collars can be used. Either soft collars, or tailor made plastazote collars. These are easy to make in the department, and ensure a well fitting and effective collar. Some soft collars are little more than a muffler!! The collar should be made with head erect, and should be worn intermittently, not continuously. Active exercises to try and restore normal range of movement should be done daily. Collars can be worn when working, and when in the car.

In summary - we can treat necks with hot packs, collars, and TENS to reduce discomfort, active exercises, and prone lying to restore and maintain movement.

THE JAW.

The jaw is a joint that can easily be overlooked. The effect of arthritis of the TMJs will be reduced mouth opening and jaw movements.

If one side is more affected, there may be a dramatic swing when the child opens the mouth.

The child may have overbite and be unable to get his teeth together. Parents may complain that the child is a slow or fussy eater, and may even give the child some stick for it. It is important that the parents understand the reasons why eating is slow, and that they allow enough time for the child to eat his meals.

Dental care may also be a problem if the child cannot open the mouth. Attention to dental care should not be overlooked.

Active exercises for the TMJs are vital to maintain range of movement e.g. oo-aaah - na-na, monster/rabbit!

LUMBAR AND THORACIC SPINE.

Problems with the lumbar and thoracic spines can be stiffness with or

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without pain. Most commonly found in spondylo-arthropathies, but also present in poly arthritis.

Lordosis is often associated with flexion contractures of the hips, and may be secondary to flexion contractures of the neck.

Prone lying is encouraged, along with active exercises to restore movement, or prevent stiffness - preferably the latter!

Exercises and general back care are important, and for our teenagers we run a back school afternoon.

Leg length should be checked - as a scoliosis may be the result of a difference in leg length.

SHOULDERS.

Pain in the shoulders can be treated with hot or cold packs, depending on the preference of the child.

Active exercises again are vital to maintain range as stiffness can be insidious in onset.

Muscle weakness can quickly follow.

A typical picture of a child with restricted movement at the shoulders is on the order "arms up above your head" the arms go half way up, and the head comes down to make up for the loss of range!

A pulley for use at home is a great way to restore and maintain the joint range, and this pulley is made for use on the doors at home.

ELBOWS.

Elbows are a problem! Fixed flexion deformities and loss of movement are the main problems.

Hot/cold packs can be used to ease pain. In theory you can use serial splints to restore extension, but our experience with this was disastrous! Yes we regained extension, but the child was unable to get her hand to her mouth to feed herself the day after. We tend to favour active exercises!

A dynamic splint can be used if needed. The advantage of this splint is that the child can flex the joint, and then the splint will extend it when relaxed. This would be worn at night.

It is fairly easy to use if the patient and parents are motivated enough to fiddle with it!

The children seem to get on well with this sort of splint - this could be something to do with the fact that we tell them that it costs £250!!

HIPS.

Pain and muscle spasm, fixed flexion deformities, reduced range of movement, and rotational deformities are all problems encountered.

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Non weight bearing exercise on dry land and in the hydrotherapy pool are given. Care is taken to ensure that the child knows that hydrotherapy is not enough on its own!

The child is encouraged to "keep moving" and to avoid prolonged periods of sitting. We may need to go into school to talk to teachers about the need for a child to be allowed to get up and walk about the classroom sometimes.

Parents are shown how to do passive stretches for the hips.

Wedges can be used at night time, with de-rotation bars, although it has to be said that we rarely use these.

To reduce Fixed flexion deformities we encourage prone lying - especially when watching Home and Away, and we may use a prone stander for a limited "contracted" period to restore movement. Stretches and active exercises are vital.

Hip contractures may lead to an increased lumbar lordosis, and may also cause knee contractures.

Prone lying helps everything - knees, hips, spine, neck, shoulders and is to be encouraged daily.

Leg length discrepancies may occur. Please note that the affected leg will be longer than the good leg - due to bony overgrowth around the affected joints.

Shoe raises are done for these children to ensure good mechanical position of the hips and spine, and also to reduce the likelihood of a flexion contracture of the affected knee.

KNEES

Knee flexion contractures can be reduced by using serial casting. An option when using serial casts is to progress to a drop out splint - where the front lower section is cut away, and the child can actively exercise quads, and use gravity to improve range of extension.

Night resting splints are supplied for children with active arthritis - we make them in thermo-plastics or Cellamin - depending on the child's preference.

Parents are shown how to passively stretch tight knees. It is vital that the correct technique is used to prevent subluxing the knee!

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FEET

Ankles can be painful, swollen, show equinus deformities, and instability.

Valgoid deformities may develop, and may be a job for the surgeons when the child is older. Stapling or osteotomies may be needed to correct.

Night splints are worn when ankles are acute, to rest the joint in a correct - mid-position.

Insoles are used to correct ankle foot position.

Other foot problems - pain

metatarsalgia - rocker bars/pads

Subluxed MT heads are treated with active foot exercises, and rocker bars to enable correct walking action.

Hallux valgus/overriding toes - can be eased with toe dividers

Hallux rigidus can be helped by rocker bars.

CONCLUSION

Remember that JCA is a painful disease, and that the child may be acutely ill at times.

Children may not be able to describe in words what the pain is like, and may even say it doesn't hurt!

Points to consider about therapy compliance

Should treatment be all the time or in short bursts?

Can you stop?

What about other more pleasant therapies?

Set goals but be realistic. Make goals that can be measured, achieved, long and short term, and functional!!

Involve the child and parents, in treatment planning at all times.

Be practical.

Remember - it is a child with arthritis, not an arthritic!

JUVENILE CHRONIC ARTHRITIS

OCCUPATIONAL THERAPY

J. HACKETT BA (Hons) Dip COT 1995

Revised by:

K HEBDON B. Sc. (O.T.) 1998

Birmingham Childhood Arthritis Unit

INFORMATION GATHERING

Initial assessment including details of past medical history and family and social history needs to be carried out (see Physiotherapy 'subjective assessment').

Child's perception of the disease is very important. Information gathering on early morning stiffness (EMS), pain, fatigue and self-esteem give good indication of how they feel it affects their lives at home, school, leisure, with friends/peers.

HAND ASSESSMENT

The hand requires detailed assessment with the emphasis being firmly placed on function.

Objective

X-rays, scan results etc. should always be considered as this will have a bearing on treatment.

Screening

Major abnormalities are unlikely if a child can make good fists, a DIP tuck, oppose thumbs, press palms together with wrists at 90 degrees and vice versa for flexion. Hyper extension should be noted as this can sometimes cause pain.

Appearance

Heat, colour, effusions, muscle wasting should all be noted as this gives good indication of disease activity.

Check for tenderness on palpation.

Deformity

Contractures, subluxed joints, ulnar and radial deviations of the wrists and fingers should all be noted.

Range of Movement

A goniometer should be used to measure joint ranges.

Muscle Strength

A vigorometer/sphigrometer can be used to measure grip strength.

Splints

Assess existing splints for fit, comfort, function and whether they are doing their job effectively.

Hand function

Has the disease affected the child's normal hand function? Hand assessments involving all 8 hand grasps can be carried out, as can speed and dexterity tests from standardised assessments such as Movement ABC.

JUVENILE CHRONIC ARTHRITIS

HAND THERAPY

Prevention of contractures

Important to prevent contractures of the hand/wrist in a non-functional position - flexion contractures of wrist, MCP, PIP and DIP joints. (It may not be possible to prevent loss of joint range).

- * Exercise - passive and active
- * Early splinting

Reduce pain and inflammation

- * Wax baths
- * Splints
- * Joint protection
- * Relaxation techniques and 'playtime'

Maintain and improve/restore range of movement

Each child needs individualised hand exercise programme through full range of movements, both passive and active. Also various creative therapeutic hand activities can be used.

Strengthening of Hand

To establish the balance between the extensors and flexors in order to maintain alignment and maximise function.

- * Active and resisted exercise such as using theraputty

Examples of Wrist and Finger Activities for a Child with JCA

Wrist

activities positioned at shoulder height
hand prints
wipe chalk board/tables
knead dough with heel of hand
sanding
ball push (light beach ball)

Fingers

finger painting - foam, sand, window
finger puppets
clay modelling/pottery
card
sewing
typing

Correction of Deformity

Flexion contractures of the wrist or limitation of movement of the digits

- * passive exercise
- * serial splinting/casting (need to establish that there is sufficient joint space)

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ACTIVITIES OF DAILY LIVING

It is important to assess child's level of independence and function. Screening tests can be done e.g. bathing, feeding assessments or Juvenile Arthritis Functional Assessment Scales (JAFAS). JAFAS is a very useful assessment when administered regularly to objectively measure level of functioning following medication changes for example.

EQUIPMENT

Does the child have/need any small aids? (identified from ADL assessment)
Are they useful/cumbersome/portable?
Can an alternative method be taught rather than issuing an aid?
Will an aid increase the child's feeling of disability?
Does a piece of adult equipment need adapting?

SCHOOLING

Liaising with teachers re: special educational provision, IEP's and possibly statementing and school attendance. Educating teachers about the disease is also important.
"Self report" student checklists are often helpful (e.g. Wetherby & Neil '89)

DEVELOPMENT

Lack of mobility, pain and stiffness, decreased range of movement and fatigue can all lead to lack of exploration, and the lack of/late development of motor skills. Also much time is taken up with medical appointments, therapy programmes etc.
It is important for children to be given normal experiences and sensations and for them to be encouraged to be as independent as possible.

EDUCATION

For the child, parents and family about the disease and treatment can have a major impact on how they perceive the illness, their sense of control and their ability to cope.
Also education of friends, teachers and any others involved.

BOOK REVIEW

EARLY SENSORY SKILLS

By Jackie Cooke

Winslow Press Ltd. Oxon 1996

ISBN 0-86388-145-9 168 pages £33.45

The author, Jackie Cooke, is a speech therapist specializing in communication problems of children and adults with severe learning difficulties. She has a particular interest in teaching social and sensory skills.

This publication is an extremely practical guide intended for anyone working with young people and children in a variety of settings.

The manual is divided into logical sections relating to sensory development, each giving clear aims. Ideas are given for activities to stimulate and develop the senses of vision - looking at people, self and objects; promoting tactile awareness and exploration; and developing an awareness of both taste and smell.

Permission is given by the author to photocopy the activity sheets although the colour of the headings in the text, pale blue, does not reproduce well and although the manual is ring bound there is a thick outer spine which is obstructive in the photocopying process! When read one after the other the activity sheets can appear repetitive in some aspects but each stands alone when reproduced.

Check lists are given at the end of each section to allow evaluation and reflection of progress, and a neat system of documenting this.

The manual could be used with children with a wide variety of abilities and disabilities and provides an ideal 'good parenting skills' guide. However, children with more severe physical disabilities may need additional advice on handling and positioning specific to their individual needs.

Every day activities to promote sensory development are suggested at the end of the book, along with games and topics for the older, more able child and these are linked to the educational curriculum.

In summary the book, although not referenced, is a useful addition to any library - professional or personal. New parents, therapists, or teachers will find it a valuable resource for ideas and activities.

Julia Graham BSc MCSP

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Web site: <http://www.obk.co.uk/halliwick/index.html>

Summary of Issues Discussed at the APCP National Committee Meeting Held at the Chartered Society of Physiotherapy on 3 July 1998

1. **SCOPE**

No further information received regarding the reprinting of the 'SCOPE' leaflet. Jill Brownson continues to meet with SCOPE representatives Mark Fox and Isabel Chilton to finalise aspects of the project to develop a large ring binder for parents to keep a record of their child's progress. The final meeting of the APCP/SCOPE working party will be held in the autumn.

2. **MANAGEMENT**

Liz Hardy attended a meeting of Physiotherapist Managers. The group is to be called 'Paediatric Physiotherapists in Management Support' (PPIMS). An article will be published in the APCP Journal explaining the group's functions. A database and contact list are to be established.

3. **ARC**

The APCP Committee is still hoping to receive from regional committees possible motions to put forward for discussion at ARC 1999.

4. **APCP CONFERENCE**

The data obtained from the 287 APCP Conference questionnaires returned is to be published in the APCP Journal.

5. **AUDIT COMMISSION**

There is a major study to be undertaken on Rehabilitation and Remedial Therapy. Terry Pountney will represent APCP.

6. **NHS DRAFT GUIDANCE - Commissioning Specialist Services**

The Chairman had responded to the document on behalf of APCP. A copy of the final CSP response had not yet been received.

7. **HEALTH ACTION ZONES**

The Chairman hoped that APCP members would become involved in the activities of 'Health Action Zones'. She advised members wishing to establish involvement in their local areas to contact the Chief Executive.

8. **APCP JOURNAL**

Central mailing is now up and running. The Editor advised members that she will be on annual leave prior to the publication of the December edition. Articles etc for publication must reach her by 9 October 1998.

9. **EDUCATION LIAISON**

The 'Tests and Measures Pack' was piloted at the APCP Conference. Future packs, costing £2, are obtainable from the Publications Officer. The Education Liaison Officer reported on her attendance at a one-day conference on CPD.

A.P.C.P. MATTERS

10. **RESEARCH**

CSP now have a new Research Database form. The APCP form is to be adapted to include extra information requested by CSP, but it will be a little less formal to attract those members who are shy of publicising their work and/or who do not see themselves primarily as researchers.

11. **PUBLIC RELATIONS**

A high demand for information continues from a wide variety of organisations. The PRO herself spoke on Radio 4's 'You and Yours' about Karate for 4 & 5 year olds. Di Coggins appeared on GMTV (again!) to give an opinion on the baby walker saga regarding safety issues raised by Liverpool Trading Standards Office.

12. **MEMBERSHIP**

The current membership is over 1355.

13. **PUBLICATIONS**

The Haemophilia booklet is now ready for sale, cost £3.50.

14. **CLINICAL GUIDELINES**

Following a meeting with Judy Mead, the APCP National Committee hopes to be able to give members more information on this topic after the next committee meeting.

15. **APCP CONFERENCE**

The 1999 APCP Conference programme has been accepted by the CSP as part of 1999 National Physiotherapy Conference 8-10 October 1999.

NB The 1999 APCP Annual General Meeting will be held on 17 April 1999 at the Sir James Spence Institute of Child Health, Royal Victoria Infirmary, Newcastle.

16. **NEXT MEETING**

The next meeting of the APCP National Committee will be on Friday 3 October 1998, at the Chartered Society of Physiotherapy.

A full copy of the minutes of the committee meeting can be obtained from your regional representative.

APCP Conference Questionnaire

Final Report - June 1998

287 Replies were received from a total sent out to the whole membership with the December 1997 *APCP Journal*. One was discarded as it was incorrectly completed.

The results were as follows.

- 74% of respondents had attended an APCP Conference.
- 69% prefer Conference to be held annually and 31% every 2 years. No one felt that APCP should never hold a Conference.
- If a Conference was not to be held, 98% of those responding felt that the AGM should be held in conjunction with a study day.
- 74% felt that Conference should last for 2 days, with 26% preferring a 3 day Conference.
- Just over half of those responding (54%) liked the convenience of half-days at the beginning and end of Conference.
- Respondents preferred days on which to hold conference were as follows: Monday 22%, Tuesday 24%, Wednesday 29%, Thursday 71%, Friday 96%, Saturday 77%, Sunday 17%.
- 66% of respondents liked Conference to be held in a different APCP region each time, whilst 32% felt that 3 selected venues would be preferable, and 2% considered London to be most suitable.
- The current $\frac{1}{2}$ day allowed for workshops was thought to be appropriate by 70% of respondents, although 29% felt there should be less emphasis and 1% more.
- 24% of those who replied were happy with basic study-bedroom accommodation, and 14% preferred hotel-type accommodation. More than half of all respondents (62%) would like en-suite bedrooms.
- 92% of respondents would like the cost to be between £76 and £150, this was for a Conference lasting 2 days, to include all lectures, on night B&B, 2 lunches, one dinner, tea and coffee.
- Holding a formal Conference dinner was not important for 66% of respondents.
- 7% of respondents felt that all APCP Conferences should be held alongside the CSP Congress, whilst 48% preferred the APCP to remain separate. 45% considered it appropriate to hold some Conferences with CSP

A.P.C.P. MATTERS

Discussion

Every Conference Committee issues an evaluation form to those who attend, but it was felt that the information provided could be expanded upon - hence this questionnaire, designed to canvas the opinion of *all* APCP members about our Conferences.

The National Committee wish to thank those members who took the time to reply. The final response rate was around 25% of the total membership, although this was only achieved 2 months after the closing date! The answers provided, and all the valuable additional comments, give us a broad representation of members views.

Some of your requests have already been put into practice:

- There is to be a study day with the AGM in April 1999;
- 1999's Conference will, for the first time, be held in conjunction with the CSP Congress in October, and will last for 2 days, including $\frac{1}{2}$ day sessions on the first and last days;
- The 1999 Conference organisers will arrange hotel accommodation, similar to that available for Conference 1998;
- National Committee will host a less formal evening function, since the CSP Annual Dinner will also be held during Congress.

National Committee are aware of the time and financial constraints which influence members ability to attend Conference. We will continue to do our best to provide the type of value-for-money Conference YOU have requested, and we hope you will support Conference by attending.

Please do keep letting us know your views.

Liz Hardy

Advance Notice

The Scottish Region of APCP are hosting

**INTRODUCTION TO
PAEDIATRICS**

Monday 7th - Friday 11th June 1999

at

GLASGOW CALEDONIAN UNIVERSITY

(Accommodation in Caledonian Court)

The course will be open to physiotherapists who are just beginning to work in paediatrics or who are planning to specialise in the field.

Anyone interested should contact:

Christine Shaw

Scottish Regional Representative

Superintendent Physiotherapist

Westerlea School

11 Ellersly Road

Edinburgh EH12 6HY

Further information in the December Journal

1999 Congress and exhibition of the Chartered Society of Physiotherapy A New Beginning 8-10 October at the International Convention Centre, Birmingham

CALL FOR ABSTRACTS

The next Congress and exhibition of the Chartered Society of Physiotherapy will take place from Friday 8 October until Sunday 10 October 1999 at the International Convention Centre in Birmingham.

The 1999 programme will feature seven concurrent programmes, each including free-paper sessions. Abstracts are invited from the following specialist areas:

- Acupuncture
- Care of the elderly
- Education and Continuing Professional Development
- Hydrotherapy
- Massage
- Mental health
- Neurology
- Orthopaedics
- Paediatrics
- Pain management
- Personnel/management issues
- Reflextherapy
- Sports medicine

However, to acknowledge the conference theme of 'a new beginning' and the diversity of physiotherapy research, papers from other specialist areas will be accepted.

Guidelines for the presentation of abstracts are available from the Events Unit at the CSP. For further information please contact: Events Unit, Chartered Society of Physiotherapy, 14 Bedford Row, London WC1R 4ED.
Fax: 0171 306 6611 E-Mail durhams@cspphysio.org.uk

The closing date for receipt of abstracts is **Friday 26 February 1999**.

Many of you will have seen this 'Call for Abstracts' in the July CSP Journal. APCP requires three papers for our session. Please can you help?

OBITUARY

Mrs Jennifer Bryce MBE, FCSP, Chartered Physiotherapist, Principle of the Bobath Centre for Children with Cerebral Palsy and for Adults with Neurological Disability died on the 11th August 1998, aged 58.

It is with great sadness that I write to the APCP Journal with the news about Jennifer's death. The following short account of her professional life is a tribute to Jennifer from all who knew her. Jennifer Bryce was an internationally known physiotherapist who dedicated her life to the treatment of children and adults with cerebral palsy and neurological disability. She became a member of the Chartered Society of Physiotherapy in 1961 and was awarded their fellowship in 1995. As Principal of the Bobath Centre she was instrumental in continuing the pioneering work of Dr and Mrs Bobath who developed an internationally recognised concept for the treatment of patients with neurological disabilities. As a focus for their work they opened the Bobath Centre in 1951. Jennifer trained at St Mary's Hospital Paddington. From 1962 to 1967 she was a member of staff at the National Hospital for Nervous Diseases (now the National Hospital for Neurology and Neurosurgery), during which time she took the eight week Bobath course. Following this she joined the staff of the Bobath Centre and started teaching on its courses in 1968. Jennifer was appointed Principal in 1976 and became in sole charge in 1986 on the retirement of Dr & Mrs Bobath. Since then Jennifer has taught on Bobath courses given in London and throughout the United Kingdom, USA, Canada, Japan, South America, Australia, New Zealand, Hong Kong and most European countries.

Her special skills as a physiotherapist were not only confined to helping children but also for adult stroke patients who benefited from her help in their recovery. In 1970 Jennifer was involved in the first two week course given in the United Kingdom for Adult hemiplegia and also took this teaching to many other parts of the world for the benefit of both therapists and patients. In 1985 she was a founder member with Mrs Bobath and others of the International Bobath Instructors/Tutors Association for Adult Hemiplegia and in the early years contributed greatly to the development of that organisation.

In the early 1990s a European Association of Bobath Tutors was formed and Jennifer became their President in 1994. This Association is responsible for setting standards of courses in the management of cerebral palsy throughout Europe.

Her dedication and vision led to the opening of new premises for the London Centre in 1993, the opening of two new Centres, one in Wales in 1992 and another in Scotland in 1995, together with the foundation of a British Association of Bobath Trained Therapists.

Jennifer was very special person to therapists and patients alike throughout the world and many of whom became lifelong friends. In addition to her MBE and Fellowship of the Chartered Society of Physiotherapy, she was honoured by the Bobath Memorial Hospital in Osaka, Japan in 1993. We will not only remember Jennifer for her professional excellence and leadership, but also for her generosity, her optimism, her marvellous sense of humour and her selfless attitude to life and her humility.

Ann Shanks
APCP London Regional Representative

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PRIORITIES FOR PHYSIOTHERAPY RESEARCH

CARRIE JACKSON

Research Officer

The CSP has completed its consultation exercise and produced a final report, of which APCP has two copies. This is being widely circulated to potential research funders, such as charitable organisations and regional R&D directors, as well as physiotherapy universities, special interest groups and others involved in the consultation exercise.

The work has already been used to respond effectively to calls for research priorities by the NHS R&D Health Technology Assessment programme and has been used in the form of a poster presentation at a recent Consumer Involvement in R&D Conference.

The four paediatric priorities from the report are detailed below. If anyone would like to see the full report, please contact the APCP Research Officer for a free loan, or apply to the CSP.

PAEDIATRIC RESEARCH ARISING FROM CONSULTATION EXERCISE

Topic Area Children 1	What is the optimum physiotherapeutic input for children with cerebral palsy related to age, severity and developmental stage?
Justification	The frequency and content of physiotherapy treatment sessions for children with cerebral palsy varies greatly between treatment centres. For example, children may be seen several times a week, fortnightly, monthly, individually or in a group. They may have long-term therapy without a break or a prescribed episode of care. As all departments have limited resources, it is important that optimum levels of care are established and that guidelines are available relating input to the age and severity of the child. Work is required to evaluate parent/carer education and training as part of physiotherapy management.
Current research activity	Clinical trials. Systematic reviews.
Suggested study design	A randomised controlled trial of different intensities of physiotherapy and collaborative goal-setting in children with cerebral palsy. Development of reciprocal inhibition in normal children and those with cerebral palsy. An investigation into the effects of a powered saddle which imitates the movements of a horse at work, on pelvic mobility of children with cerebral palsy.

Specific research areas

- i. *The use of serial splinting for tightening achilles tendons in children with cerebral palsy.*

Research is required to investigate when the optimum time is to plaster a tightening tendon in order to achieve the most sustained beneficial effects. It should also examine how long any effect lasts and whether surgery can be avoided or deferred, and if so for how long. This type of procedure is both measurable and reportable and would inform guidelines for best practice.

RESEARCH & DEVELOPMENT

Topic area	
Children 2	Information leaflets for parents and children.

Justification

Many physiotherapy departments devise their own information leaflets for parents of children with acute or chronic disabilities. There is little if any exchange of leaflets, or sharing of the information between departments, therefore much work is being replicated. Research is required to investigate the effectiveness of specific information leaflets, for example 'How to put splints or callipers on' and the most appropriate format and style for publication. Effective dissemination and implementation strategies also need to be explored. This should include the educational role of the physiotherapist and the use of these leaflets as part of treatment programmes. The production of information leaflets should ensure the incorporation of evidence-based information to support recommendations and advice. Research is required to assess the impact of such information on adherence.

Suggested study design	Randomised clinical trials. Qualitative surveys
Current research activity	Nil known.

Topic area	
Children 3	Paediatric respiratory physiotherapy.

Justification

Chest physiotherapy has become an integral component in the treatment of respiratory disorders in babies and young children, especially in cystic fibrosis.

Evidence to establish the efficacy of chest physiotherapy is scarce. Definition of the term 'conventional' chest physiotherapy is often misleading and ill-defined. The majority of physio studies have been conducted in adult populations, conclusions then being applied to the paediatric population. Infants may respond quite differently, by virtue of their anatomy and physiology. The high cost of paediatric respiratory services should be reviewed in the light of a stronger evidence base.

Suggested study design	Clinical Trials. Observational studies
Current research activity	Comparison of active cycle of breathing techniques and Hayek external high frequency oscillator for clearance of secretions in children with cystic fibrosis.

RESEARCH & DEVELOPMENT

Topic Area	
Children 4	Physiotherapy management of children with special needs in mainstream schools.

Justification

As inclusion of children with special educational needs in mainstream schools is becoming more accepted as the standard educational solution, many areas of research are becoming apparent. It is not known if behavioural and motivational difficulties encountered are a result of the environment or a result of delayed or impaired development.

Suggested study design	Multi-centre surveys (seeking views of physiotherapists, educationalists, parents and children). Behavioural study (comparing children in mainstream schools with those in special schools).
Current research activity	Identifying needs of the NHS to support children with chronic illness and disability attending mainstream schools.

Specific research areas

- i. What is the physiotherapist's role in the management of children with physical disabilities in mainstream schools and how does this impinge on the other educational, social and emotional demands on the children.
 - ii. What is the effect of delayed/impaired physical development on behaviour, motivation and social integration?
Specific conditions such as hydrocephalus may be of particular concern as children with this condition may present challenging or unco-operative behaviour. It is suspected that delayed motor or verbal development are associated with this behaviour.
 - iii. Study of outcomes of physiotherapy and a therapeutic approach for children with physical and learning disabilities in schools.
 - iv. Models and outcomes for clinical effectiveness protocols need to be developed.
-

REGIONAL REPRESENTATIVES

EAST ANGLIA

Mrs Trisha Brosnan
Hope Cottage
10 Church Street
Great Shelford
Camb. CB2 5EL

LONDON

Mrs Ann Shanks
2A Oak Lodge
Chigwell
Essex
IG7 5HZ

SCOTLAND

Mrs C Shaw
Supt. Physiotherapist
Westerlea School
11 Ellersly Road
Edinburgh EH4 8EX

SOUTH EAST

Mrs Terry Pountney
Chailey Heritage
North Chailey
East Sussex
BN8 4EF

SOUTH WEST

Mrs Pam Evans
York House
New Road
Swanmore
Hampshire SO32 2PF

NORTHERN IRELAND

Mrs Adare Brady
Physiotherapy Dept.
Antrim Hospital
45 Bush Road, Antrim
N. Ireland BT1 2RL

TRENT

Mrs Anne Peters
Children's Centre
Kings Mill Hospital
Mansfield Road
Sutton-in-Ashfield
NG17 4AL

NORTH WEST

Miss S Leech
4 Hartland Avenue
Urmston
Manchester
M41 9OG

WALES

Mrs Sian Howells
17 Carlton Close
Thornhill
Cardiff
CF4 9EF

WEST MIDLANDS

Mrs Fiona Nicholson
Physiotherapy Dept.
Birmingham
Children's Hospital
Steelhouse Lane
Birmingham
B4 6NL

NORTH EAST

Mrs M Harrison
11 Whitsundale Close
Knaresborough
N. Yorkshire
HG5 0HX

OVERSEAS

Mrs Sue Whitby
PRO
3 Manor Way
Hail Weston
Huntingdon
PE19 4JG

REGIONAL REPRESENTATIVES

SCOTLAND

Christine Shaw
Superintendent Physiotherapist
Westerlea School
11 Ellersly Road
Edinburgh
EH12 6HY

The Scottish Branch of the Association will be hosting the next Introduction to Paediatrics Course in Glasgow next year. The course will be held in Glasgow Caledonian University and accommodation will be in Caledonian Court. The course will run from Monday 7th to Friday 11th June and will be open to all physiotherapists who are just beginning to work in paediatrics or who are planning to specialise in that field. Anyone interested should contact Christine Shaw, Scottish regional representative. Further information forms will be in the December journal.

The Scottish Branch is holding a study day in Glasgow on September 11th. The title of the day will be "The Treatment and Management of Osteogenesis Imperfecta".

EAST ANGLIA

Mrs Trisha Brosnan
Hope Cottage
10 Church Street
Great Shelford
Camb CB2 5 EL

We continue our busy schedule of courses:

Firstly I would like to thank Janet Durrant for organising the G.M.F.M. course at Kings Lynn, on 3rd June. It was fully attended and everyone passed their creditation - well done!

An introductory Bobath 2 day course is being held in Huntingdon on the 8/9th September - the course tutor is Sarah Jarry.

We are organising a study-day on Seating given by Sandy Clarke in October - time and venue to be finalised.

In Huntingdon, on the 14th November, Colin Stevens is running a day on 'The junior school C.P. child'. If you wish to attend please contact Fiona Down - Tel 01480 415203.

New members are always being sought! so if you have moved into this region do make yourselves known and contact Kishan Kooner (secretary) on 01480 415203 for a form.

I look forward to meeting some of you at these courses.
Tricia Brosnan

NORTH EAST

Mrs M Harrison
11 Whitsundale Close
Knaresborough
N. Yorkshire
HG5 0HX

There is already a very good response to our next Study Day on 'Erbs Palsy' on Saturday 26th September 1998 at St James University Hospital, Leeds. If you intend being there, do send your application in plenty of time to Jane Howland - don't be disappointed.

REGIONAL REPRESENTATIVES REPORTS

FUTURE STUDY DAYS

Saturday 6th February '99

Dyspraxia + AGM
White Hart, Harrogate

May 1999

Chronic Fatigue Syndrome
Venue to be arranged

Wednesday, September 1999

Coping with loss
Probably York

Unfortunately, Yolande Noble, one of our local Committee members, is moving to new pastures with her husband and new baby Brendan. We wish them well in their new home and workplace and thank Yolande for her contribution to the NE region.

TRENT

Ann Peters
Children's Centre
King's Mill Hospital
Mansfield Road
Sutton-in-Ashfield
NG17 4AL

I have recently taken over from Sue Pargeter and would like to thank her for all her hard work as Trent's previous representative.

Trent - The committee are working hard to prepare a programme for the coming year aiming for a termly study session.

A postural care study day is being arranged for November 1998.

Fliers are to be sent to Trent Paediatric Physiotherapy departments to promote membership of APCP and encourage networking in the Trent Region.

Ideas for topics for study days would be greatly appreciated, suggestions made include Rebound Therapy and a case study presentation day.

SOUTH EAST

Mrs Terry Pountney
Chailey Heritage
North Chailey
East Sussex
BN8 4EF

I have now returned as your regional rep until April next year to numbers on the national committee. I have also taken on the role of Education Liaison Officer so will have a busy few months.

Unfortunately the planned study day on Dyspraxia in July had to be cancelled due to lack of interest but we are hoping to run it on two half days of the 9th and 16th October. Please try and support your local study days and let the committee know if you have any specific topics you want covered.

The possibility of having a local newsletter and book and video library were discussed at the last committee meeting and ideas on this would be welcome.

REGIONAL REPRESENTATIVES REPORTS

SOUTH WEST
Mrs Pam Evans
York House
New Road
Swanmore
Hampshire
SO32 2PF

Julia Graham has now become National Treasurer of APCP and I have taken over as regional rep. Thank you, Julia for all your hard work for the SW region.

A group of SW APCP members met at Salisbury in July to discuss the way forward in developing clinical guidelines or at least some consensus of opinion in the region. It is planned to hold a practical session on the art of critical appraisal, led by a professional in the Autumn. Please contact Julia or myself if you are interested in being involved and please send any existing treatment protocols, standards or local guidelines that are already in existence to me.

The second Gait Analysis weekend was fully subscribed and very interesting to all who attended.

Our next Study Day is on 3 October in Salisbury on topical issues including FES, botulinum toxin and collaborative goal setting. (see Courses)

The AGM/Study Day will be in March 1999 in Dorchester and will be on Orthopaedics and cranio-sacral therapy.

There will be a Wessex CP workshop on the PMLD child at Lynwood School, Poole on 30 September, 1-3 pm. Contact Gill Smith for details (01202 448251).

WALES
Mrs Sian Howells
17 Carlton Close
Thornhill
Cardiff
CF4 9EF

We had a very successful and interesting CP Update Day with Jane Pyeman in July - many questions and thoughts were raised which led to much discussion! Thank you Pat for organizing everything so well, and also to Julie and Babs for finding such perfect children for the practical sessions.

We are in the process of organizing an afternoon in September on "Normal Variations in Orthopaedics". Lyn Horrocks has kindly agreed to share her experience in this field with us.

On October 9th a study afternoon has been arranged for a presentation on "Critical Appraisals" by Wendy Chatham, from the Clinical Effectiveness Support Unit at Llandough Hospital, which will be followed by discussion on Clinical Standards.

An afternoon lecture on Chronic Fatigue Syndrome has been arranged in November which will most probably be at the UHW in Cardiff.

That's the plan so far this year so watch out for further details. And if anyone has any ideas or suggestions for future lectures, study days etc., then please let me know.

Hwyl fawr!

APCP REGIONAL STUDY DAYS

SOUTH WEST

TOPICAL ISSUES IN PAEDIATRICS

Saturday 3 October 1998, 9.30 am - 3.30 pm

Salisbury District Hospital, Postgraduate Centre

Subjects will include:

Functional Electrical Stimulation - Jane Burridge

Botulinum Toxin - Elspeth Will

Collaborative Goal Setting in the Clinical Situation

- Eva Bower

Oswestry Movement Centre : Targeted Training

- Penny Butler (to be confirmed)

Fee : APCP members £20, Non-members £25,

Coffee and tea included, lunch facilities available.

For further information and application details please send SAE to : Pam Evans, York House, New Road, Swanmore, Hampshire. SO32 2PF or CDC, 151 Locksway Road, Portsmouth, PO4 8LD (01705 894410)

TRENT

24 HOUR POSTURAL MANAGEMENT

Monday 30th November

Childrens Therapy Team - Central Notts Healthcare Trust

A study day to promote 24 hour postural care of children with complex special needs.

Fee: APCP Members £10

Non Members : £30

For more information, please contact:

Ann Peters, Childrens Therapy Manager, The Childrens Centre, Kings Mill Centre, Mansfield Road, Sutton-in-Ashfield, Notts. NG17 4JL

Tel: 01623 785019

EAST ANGLIA

COLIN STEVENS STUDY DAY

Saturday 14 November 1998

Hinchingbrooke Healthcare NHS Trust, Primrose Lane, Huntingdon, Cambs. PE18 6SE

Cost: APCP members £30; non-members £35

Following the success of last years' study day on the transition of children with cerebral palsy into secondary school, we have arranged for Colin to return to look at children with cerebral palsy at junior school level.

Colin will assess 3 children with cerebral palsy and discuss treatment aims and techniques.

For further information, contact Fiona Down, Paediatric Physiotherapist at the above address or on 01480 415203.

COURSES

HALLIWICK ASSOCIATION OF SWIMMING THERAPY COURSES

Basic Course (four days)

<u>1998</u>				
Edinburgh			Part B	Nov 21-22
Hull	Part A	Oct 24-25	Part B	Nov 21-22
Strood, Kent	Part A	Oct 17-18	Part B	TBA
<u>1999</u>				
Hull	Part A	Feb 6-7	Part B	Feb 27-28
London (Brent)	Part A	Mar 13-14	Part B	May 8-9
London (Brent)	Part A	May 8-9	Part B	Mar 13-14

Advanced courses

(two days each - basic course is a prerequisite)

London (Brent)	Tutor instructor (teaching helpers)	March 13-14
London (Brent)	Group leader (teaching swimmers)	May 8-9

This list is not exhaustive and other courses may be organised

If you are interested in organising a course in your area, send for the course organisers information from Pam Scott

For an application form send a SAE to the individual course organiser

Strood	Brent	Hull	Edinburgh
Di Leonard	Michael Buck	Rose Mulchinock	Philip Puckrin
82 Weston Road	26 Stone Grove	8 Woodcroft Avenue	18 Broomshield Avenue
Strood	Edgware	Hull	Fulwell
Rochester	Middlesex	HU6 8LH	Sunderland
Kent ME2 3HD	HA8 7UA		SR5 1SH

THE BOBATH CENTRE

Courses being run by **THE BOBATH CENTRE** in 1998/99

SPECIALIST COURSE (£375) (Adolescents/adults with cerebral palsy)	7th-11th December 1998
DOCTORS' COURSE (£300)	14th-16th December 1998
1 DAY WORKSHOP (Eating & drinking for mealtime assistants)	28th January 1999
REFRESHER COURSE, WALES (£325) (Bobath Cymru/Whitchurch Hospital)	1st-5th March 1999
1 DAY TEACHERS COURSE	15th March 1999
2 DAY ASSISTANTS COURSE (for PTs/OTs)	16th-17th March 1999
1 DAY CARERS COURSE	18th March 1999
2 INTRODUCTORY COURSES (£165)	14th-16th June 1999, 27th-29th September 1999
ADVANCED COURSE (£375) (on Perception)	6th-10th December 1999
REFRESHER COURSE, LONDON (£325)	13th-17th December 1999
8 WEEK PAEDIATRIC COURSES (£2350)	
WINTER 1999 (split in 2 parts)	11th Jan-12 Feb (part I) 10th-28th May (part II)
SUMMER 1999	28th June-20th August
AUTUMN 1999	4th October-26th November

FURTHER INFORMATION AND ENROLMENT FORMS 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, email101527.1440@compuserve.com

website://www.bobath.org.uk

COURSES

CONTROVERSIES IN CEREBRAL PALSY



Friday November 13th

Postgraduate Medical Centre, Derriford Hospital, Plymouth

This annual multidisciplinary conference organised by the Special Families Trust aims to promote a wider understanding of cerebral palsy. Leading experts will be speaking on a range of topical and controversial subjects.

For further details write or ring Special Families Trust, Erme House, Station Road, Plympton, Plymouth, Devon. PL7 3AU. Tel: 01752 346861.

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CHILD HEALTH DIRECTORATE

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An experienced physiotherapist is required to join our team of 7 community paediatric physiotherapists. Based with the team at Hyde in Manchester, the post will cover a small geographical area in the district and carry a varied caseload in schools, nurseries and children's own homes.

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The district is on the eastern side of Manchester close to the beautiful Peak District and has good rail and road links to Manchester City Centre and other parts of the country.

For further information or an informal visit please contact: Mrs Linda Whitaker, Supt. Physiotherapist on 0161 368 4242 ext 301.

For a job description and an application form contact: The Personnel Department, Community & Priority Services NHS Trust, Tameside General Hospital, Fountain Street, Ashton-under-Lyne, Lancashire, OL6 9RW. Tel: 0161 331 5111 (24 hour answerphone) Minicom 0161 331 5371 quoting P254/98J.

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- 3) Associate Membership is also open to Physiotherapy Students.
- 4) **Annual subscription for 1999 is £21.00**, and runs from 1st January to 31st December.
- 5) Retired Members are only required to pay half the total annual subscriptions.

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I wish to *apply for/renew my membership of the Association of Paediatric Chartered Physiotherapists.

*Delete which is not applicable

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First Names:

Surname:

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APCP No.

Profession

Grade

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Place of Work

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If you are a new member please complete the questions overleaf.

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What type of facility is it?

Is your work place a regional or famous centre? *Yes/No

If 'Yes', what speciality?

About you and your own work:

Your speciality in Paediatrics

Do you have a sub-speciality? *Yes/No

If 'Yes', in what area?

.....

Would you be willing to teach/lecture in your speciality subject? *Yes/No

Are you willing to have visitors? *Yes/No

If 'Yes', give contact person & address

.....

Would you be able to take students on an elective placement? *Yes/No

If 'Yes', who should be contacted?

Name:

.....

Address:

Subscriptions are due by the 1st January.

Journals will **not** be sent until membership is renewed. Members who are late renewing their membership forfeit the right to back issues and will only receive them subject to availability.

Please notify the Membership Secretary of any change in address.

Currently we are not permitting commercial mail shots to be sent to members. Should there be a change in this current policy, and you should not wish to receive such communications, please indicate by ticking this box.

Please complete and return, with your cheque (to APCP) to:
Mrs. T. Robinson, APCP Membership Secretary, 22 Leith Court, Thornhill,
Dewsbury, W. Yorkshire WF12 0QP

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.

Cover designed by John Soper

Printed and bound by
G. H. SMITH & SON, EASINGWOLD, YORK
ISSN 1368 - 7360



In this issue

Early Diagnosis of cerebral palsy

Clinical Genetics

Juvenile Chronic Arthritis

