In this issue:

Variability in the Physiotherapy Treatment of Talipes Equinovarus

The challenge of providing evidence-based physiotherapy to infants with obstetric brachial plexus palsy: A critical review of the literature
NATIONAL COMMITTEE OFFICERS AND MEMBERS

CHAIRMAN  Lesley Smith  Physiotherapy Dept  Royal Hospital for Sick Children  York Hill NHS Trust  Dahesh St  GLASGOW G3 8JH  lesley.smith@yorkhill.scot.nhs.uk

VICE-CHAIRMAN  Peta Smith  Physiotherapy Dept  Mary Street Hospital  43 New Dover Rd  CANTERBURY CT1 3AT  peta.smith@ukdht.nhs.uk

SECRETARY  Laura Wiggins  26 Braidpark Drive  Giffnock  GLASGOW G46 6NB  laura.wiggins@ntlworld.com

TREASURER  Fiona Down  5 Home Farm Close  Hitchen  HUNTINGDON  Cambs  PE25 4QW  fiona.down@btinternet.com

PUBLIC RELATIONS OFFICER  Lindsay Rae  Physiotherapy Dept  The Children's Hospital  Steelhouse Lane  BIRMINGHAM B3 6NH  lindsay.rae@tech.nhs.uk

VICE PUBLIC RELATIONS OFFICER  Adele Leake  Snr Lecturer in Physiotherapy  College of Preceptorship  Sheffield Hallam University  SHEFFIELD S10 2BT  a.c.leake@shu.ac.uk

PUBLICATIONS OFFICER  Lorna Stybelska  Paediatric Physiotherapy Dept  Cumberland Infirmary  CARLISLE  Cumbria CA2 4FY  stybelska01@aol.com

MEMBERSHIP SECRETARY  Susan Cleverley  Physiotherapy Dept  Orchard House  CHICHESTER PO19 6QP  susan_rideout@hotmail.com

EDITOR  Terry Pountney  Child Health Heritage  Clinical Services  North Chailey  EAST SUSSEX BN8 4JN  Terry.Pountney@southdowns.nhs.uk

RESEARCH  Joanne Hartley  36 Cascade Avenue  Muswell Hill  London N10 3PU  joannehartley@hotmail.co.uk

CIG LIAISON/ DIVERSITY OFFICER  Sue Coombe  Jenny Lind Physiotherapy Dept  Norfolk & Norwich University Hospital NHS Trust  Colney  NORWICH NR4 7UZ  susan.coombe@nnuh.nhs.uk

Committee Members  Sarah Crombie  10a Record Road  Emworth  Hants  PO10 7NS  scrumbie@bt.co.uk

Linda Fisher  Special Educational Needs and Pupil Support Services  South Essex Area Education Office  The Knares  BASILDON  SS16 SRX  linda.fisher2@essexcc.gov.uk

Sally Braithwaite  531 Church Road  Ynysymaeol  Wrexham  LL11 8RF  Sally.Braithwaite@btinternet.com

Chris Sneade  Child Development Centre  Alder Hey Children's Hospital  Eaton Road  LIVERPOOL  christine.sneade@rlc.nhs.uk

Co-opted national committee member  Ruth Jacklin  Paediatric Physiotherapy  Child Development Centre  Shangrove Park Hospital  SOMERSET TA1 5DA  ruth.jacklin@btst.nhs.uk

REGIONAL & SUB-GROUP REPRESENTATIVES

EAST ANGLIA  Stephanie Cawker  Physiotherapy Dept  Mecklenburgh Square  LONDON  WC1N 2AP  cawkes@gosh.nhs.uk

SOUTH WEST  Lynda New  Physiotherapy Dept  Milestone School  Lonford Lane  GLoucester GL2 9EU  Lynda.New@glos.nhs.uk

NORTH WEST  Elaine Lloyd  Physiotherapy Dept  Booth Hall Children's Hospital  Charlestown Rd Blackley  MANCHESTER  M9 7AA  elaine.lloyd@cmcc.nhs.uk

SOUTH EAST  Ann Martin  Children's Therapy Centre  Goldie Leigh  LODGE HILL  SE2 0AY  ann.martin@7759@hotmail.com

TRENT  Claire Hill  Physiotherapy Dept  Sheffield Children's Hospital  Western Bank  SHEFFIELD  S10 2TH  claire.wagstaff@talk21.com

WEST MIDLANDS  Helen Bayliss  Sandwell PCT  The Crest  West Bromwich  B4 6NH  helen.bayliss@nhs.net

NORTHERN IRELAND  Felicity Dickson  Scrabo Children's Centre  Ards Community Hospital  Church Street  NEWTONARDS  BT23 4AS  N. Ireland  felicity@dickson22.fsnet.co.uk

NEONATAL CARE GROUP  Barbara Haederle  SJUH  Child Development Centre  Beckett Street  LEEDS LS7  peterbop@tesco.net

CRITICAL CARE GROUP  Rachel Hutton  Physiotherapy Dept  Royal Manchester Children's Hospital  Hospital Road, Pendlebury  MANCHESTER M24 4HA  rachel.hutton@cmcc.nhs.uk

CHEMICAL group  Ruth Jacklin  Child Development Centre  Shangrove Park Hospital  SOMERSET TA1 5DA  ruth.jacklin@btst.nhs.uk

REGIONAL & SUB-GROUP REPRESENTATIVES

SCOTLAND  Alison Gilmour  Physiotherapy Dept  Braidburn School  107 Oxogans Rd North  EDINBURGH EH14 1ED  Alison.gilmour@braidburn.edin.sch.uk

WALES  Diane Rogers  Head of Children's Physiotherapy  Room 386  Paediatrics North Corridor  UHW CF14 4XW  rogersd@cardiff.ac.uk

OVERSEAS  Public Relations Officer  Public Relations  5 The Ridgeway  Guisley  LS20 8FA  hangilley@aol.com

STUDENT GROUP  Public Relations  5 The Ridgeway  Guisley  LS20 8FA  hangilley@aol.com

EUROPEAN GROUP  Public Relations  5 The Ridgeway  Guisley  LS20 8FA  hangilley@aol.com

NEUROMUSCULAR GROUP  Gill Holmes  Gait Laboratory  Alder Hey Children's Hospital  Eaton Road  Liverpool L12 2AP  Gill.Holmes@rlc.nhs.uk
The challenge of providing evidence-based physiotherapy to infants with obstetric brachial plexus palsy: A critical review of the literature

Ingrid Cole, Senior 1 Paediatric Physiotherapist, Ninewells Hospital, Dundee

Variability in the Physiotherapy Treatment of Talipes Equinovarus

Denise Hart MSc, Grad Dip Phys, MCSP, Senior Neonatal Physiotherapist, Southampton General Hospital

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

In March the APCP National Committee met for a working weekend in Belfast. The committee were involved in working groups on a variety of topics pertinent to APCP and paediatric physiotherapy. They included, competencies for paediatric physiotherapists, a review of the APCP Constitution in light of its changing format with the affiliated groups and work to raise the profile of APCP and its role. Further details of the working weekend can be found in APCP Matters.

The application forms for the APCP conference in Glasgow appear in this edition. The programme is varied and interesting with a parallel neo-natal study day on the Saturday. This conference offers an opportunity to visit Glasgow a vibrant and exciting city and boost your CPD by finding out about the latest developments in paediatric physiotherapy.

This issue also includes an excellent literature review from a student on the APCP Paediatric module at Queen Margaret University College and an interesting audit on Talipes Equinovarus.

I look forward to receiving your copy for the September journal.

TERRY POUNTNEY

EDITORIAL BOARD

<table>
<thead>
<tr>
<th>Name</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Terry Pountney – Editor</td>
<td><a href="mailto:Terry.Pountney@southdowns.nhs.uk">Terry.Pountney@southdowns.nhs.uk</a></td>
</tr>
<tr>
<td>Lesley Smith</td>
<td><a href="mailto:lesley.smith@yorkhill.scot.nhs.uk">lesley.smith@yorkhill.scot.nhs.uk</a></td>
</tr>
<tr>
<td>Lindsay Rae</td>
<td><a href="mailto:lindsay.rae@bch.nhs.uk">lindsay.rae@bch.nhs.uk</a></td>
</tr>
<tr>
<td>Alison Gilmour</td>
<td><a href="mailto:alison.gilmour@braidburn.edin.sch.uk">alison.gilmour@braidburn.edin.sch.uk</a></td>
</tr>
<tr>
<td>Felicity Dickson</td>
<td><a href="mailto:felicity.dickson@ucht.n-i.nhs.uk">felicity.dickson@ucht.n-i.nhs.uk</a></td>
</tr>
<tr>
<td>Diane Rogers</td>
<td><a href="mailto:rogersd@cardiff.ac.uk">rogersd@cardiff.ac.uk</a></td>
</tr>
</tbody>
</table>

Copy for the SEPTEMBER 2006 JOURNAL must be with the editor by 1st AUGUST 2006. The editorial board reserve the right to edit all material submitted.
The challenge of providing evidence-based physiotherapy to infants with obstetric brachial plexus palsy: A critical review of the literature

Ingrid Cole, Senior 1 Paediatric Physiotherapist, Ninewells Hospital, Dundee

Obstetric brachial plexus palsy (OBPP) describes peripheral nerve damage to the brachial plexus at birth. It is commonly divided into 4 categories: (1) C5,6; (2) C5,6,7; (3) flail upper limb (UL); (4) flail UL and Horner’s-syndrome (involvement of plexus supplying the face) (Narakas, 1987). Whilst most cases will resolve spontaneously (Dodds, 2000) the outcome of the remaining cases is greatly influenced by the care they receive. The following commentary reviews the challenges encountered in providing the evidence-based physiotherapy for infants with OBPP.

Introduction

Infants diagnosed with OBPP require immediate and intensive treatment to maximise their potential for recovery and to optimise outcome (Dunham, 2003; Waters, 2005). Whilst optimal treatment for this condition is not properly understood, it is well documented that all infants should receive coordinated, expert and evidence-based care that is delivered by a physiotherapist as part of a multidisciplinary team (Terzis et al., 1999; Waters, 2005; Benjamin, 2005a). Integrated care pathways (ICP) are a medium for establishing such a framework and reports investigating the effectiveness of such models have been positive in other domains of health-care (Currie et al., 2000).

ICP’s are created through the assimilation of the current evidence for a specific episode of care (Ellis et al., 1999). However, in the domain of OBPP, there are no randomised control trials (RCT) and the few studies that do exist primarily focus on natural history and are fraught with methodological problems. Differences between study designs, outcomes and poor standardisation means that meta-analysis is impossible. Therefore, the literature can only be reviewed in descriptive terms. This literature review focuses on conservative management of OBPP in infants up to 6-months old and aims to determine the evidence base available in order to develop an ICP and to standardise care across centres. Incidence, recovery rates, assessment, interventions, outcomes and parental support will be discussed, as well as the challenges associated with establishing an evidence base.

Literature search

A search of the literature was undertaken using the key words ‘obstetric brachial plexus palsy’, ‘Erbs Palsy’, ‘Klumpke’s’, ‘Duchenne’, ‘brachial plexus injury’, ‘shoulder dystocia’, ‘birth injury’, ‘birth trauma’, ‘upper limb’, ‘infant’ and ‘physiotherapy’. The terms were entered into the BNI (British Nursing index, 1985–November 2005), CINAHL (Cumulative Index of Nursing and Allied health Literature, 1982–November, 2005) and MEDLINE (1966–November, 2005) databases. For terms yielding greater than 300 results and combination of terms were used to narrow the search field. Reference lists from the literature obtained were also used and papers with related titles were included in the review. All papers were in the English language.

Incidence and recovery

The reported incidence of OBPP varies in the literature, ranging between 0.13 and 3.6/1000 births (Dunham, 2003; Piatt, 2005). Incidence specific to Britain is unknown (Birch, 1993), as the national database for birth abnormalities does not include OBPP (Allen et al., 2000). Inconsistent definitions of OBPP and the high occurrence of spontaneous recovery soon after birth, may account for the condition being under-diagnosed and under-reported. For the purposes of implementing an ICP, it is recommended that the incidence of OBPP is established in the local area. This will provide information regarding how often the condition will be encountered, its relevance to the organisation, whilst helping to identify existing problems in care (Cook et al., 2004).

Reported recovery rates also vary (73–95%) (Steeg, 2003), and these too may be attributed to poor definitions (Hoeksma et al., 2000). In a retrospective study of 13 366 patients, Hoeksma (2000) revealed inconsistent definitions of complete recovery. The authors emphasised the need to differentiate between neurological and functional recovery as the presence of shoulder contractures may contribute to reduced function despite complete recovery of the plexus. This is an important point for the physiotherapist to consider when determining discharge criteria, as well as an important consideration when selecting tools to measure outcomes.

Aetiology & prognosis

For many years it was believed that OBPP was due to poor obstetric care (Sever, 1916) and while some authors continue to support this theory (Allen et al., 2000), cases of OBPP following caesarean and uncomplicated deliveries has prompted others to consider alternative and/or intrauterine causes (Benjamin, 2005a; Sandmire 2000). Several risk factors have been identified, including shoulder dystocia, birth weights>4000g, diabetic mothers,
breech presentation, precipitous second stage, assisted/difficult delivery and multiparous pregnancies (Kay, 1988; Platt, 2005).

Efforts to establish the real risk of dystocia have been attempted (James et al., 1993), although most studies are inconclusive due to small numbers and reporting problems. A key study by Gorik et al., (1991) reviewed 26,033 births, demonstrating OBPP independent of shoulder dystocia. This finding is later corroborated in smaller studies (Jennett, 1992; Sandmire, 2000/2002), but more importantly the data obtained suggests that OBPP without shoulder dystocia is more severe with poorer functional outcome than OBPP with shoulder dystocia. This was later confirmed by Chehrman (1998).

Other indicators of poor recovery are generally agreed including lower lesions (C7–T1 involvement) total paralysis and persistent Horner’s-syndrome (Narakas, 1987). Until recently, phrenic nerve palsy was also associated with poor prognosis (Terzis, 1999; Platt, 2005), however Al Qattan’s (1998) investigation of 191 infants concluded that phrenic nerve involvement did not correlate with severity or poor outcome. It must be noted however that out of 191 infants, only 8 presented with phrenic nerve palsy. This demonstrates the difficulties associated with carrying out high-powered studies for one aspect of OBPP. The physiotherapy assessment should therefore include a detailed history of both pregnancy and birth as this information may contribute to establishing the severity and prognosis of the condition. A note of caution however, the current evidence is weak as it is based on expert opinion and retrospective analysis only.

Diagnosis

Assuming exclusion of other diagnosis (e.g. fractures, central nervous system damage, infection), the most common tool for diagnosing OBPP is a physical assessment (Terzis, 1999). Initially, the assessment should identify associated signs requiring further investigation (e.g. Horner’s-syndrome, phrenic nerve signs, torticollis) followed by a detailed examination of the limb and cervical spine. Because of the obvious presentation of OBPP, diagnosis will often be communicated to the family prior to complete assessment, however it is important that prognostic information is realistic in terms of outcomes (Bellew, 2003).

Adjunctive investigations such as myelography, CT, MRI and EMG are discussed, however most authors admit caution as they are less reliable in terms of prognosis than sequential clinical assessment (Piatt, 2005; Bae et al, 2003). Many authors however, suggest twice yearly radiographs for persistent palsies to check for subluxation or dislocation (Dodds et al, 2000). This is based on expert opinion only, but seems to be established as a standard of care.

Assessment

Outcome measures that accurately reflect patient status is a critical component of any ICP (Currie, 2000). Numerous subjective and objective tools are described in the literature, however extensive psychometric testing on any one of these tools is minimal (Pondaag, 2004). Table 1 summarises the justification for the inclusion and exclusion of assessment tools in an ICP for infants.

Observation of the infant in prone and supine should be conducted across the full spectrum of arousal; rest, quiet alertness and agitation (Platt, 2005). The assessment should be detailed, as observations such as pain, neglect and quality of movement are not currently quantifiable. Sensory deficits should be assessed with reaction to light touch and pinprick as this can be elicited in infants (Dunham, 2003), and skin and trophic changes should be recorded as this may indicate sensory and/or sympathetic involvement (Dunham, 2003). Reflexes should also be assessed (Waters, 2005). It is worth noting however, that these assessment parameters are based on current practice only. No empirical evidence underpins them.

Range of movement (ROM) is a key component of assessment, aiming to reveal structural and/or progressive contractural changes. This measurement tool is widely documented as valid, reliable and sensitive (Pellecchia, 1998; O’Donoughue, 2000) and recommended for use, however results have been extrapolated from adult populations and need to be considered with caution.

The Toronto grading system (TS) is an 8-grade scale assessing motor activity and is the most consistently used scale in infants as it does not require active participation (Michelow, 1994). Validity and sensitivity has only been reported on the basis of expert opinion (APCP, 2001) and therefore no conclusions can be made regarding changes to underlying pathology. Reliability has only been reported in one study (Bae et al., 2003) and by its own admission further testing in the infant population is required. In addition, suggested age-spans for application is inconsistent ranging from 0-1month (APCP, 2001) to 0-3years (Al Qattan, 2003; Dumont, 2001). Furthermore, shoulder movement is not assessed. However, despite many shortcomings and the critical need for further evaluation, it is the recommended scale for infants (APCP, 2001). The scale is easily administered, standardised and communicable. It is also used to direct referral to
The challenge of providing evidence-based physiotherapy to infants with obstetric brachial plexus palsy: A critical review of the literature

TABLE 1: JUSTIFICATION FOR THE INCLUSION/EXCLUSION OF ASSESSMENT TOOLS IN AN ICP FOR INFANTS

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Subjective/ Objective</th>
<th>Validity</th>
<th>Reliability</th>
<th>Sensitivity^</th>
<th>Feasibility in infants</th>
<th>To be included in ICP for infants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Observation</td>
<td>S</td>
<td>Unknown</td>
<td>Unknown</td>
<td>Unknown</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Sensory Testing</td>
<td>S and O</td>
<td>Unknown</td>
<td>Unknown</td>
<td>Unknown</td>
<td>Light touch/ pinprick #</td>
<td>Yes</td>
</tr>
<tr>
<td>Reflexes</td>
<td>O</td>
<td>Unknown</td>
<td>Unknown</td>
<td>Unknown</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Range of Movement (ROM)</td>
<td>O</td>
<td>Unknown</td>
<td>Unknown</td>
<td>Unknown</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Toronto Score</td>
<td>O</td>
<td>Unknown</td>
<td>1 study•</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Mallet Scale</td>
<td>O</td>
<td>Unknown</td>
<td>1 study•</td>
<td>Yes</td>
<td>No (&gt; 3yrs cooperation required)</td>
<td>No</td>
</tr>
<tr>
<td>Medical Research Council scale</td>
<td>O</td>
<td>Unknown</td>
<td>Unknown</td>
<td>Poor</td>
<td>No (&gt; 3yrs cooperation required)</td>
<td>No</td>
</tr>
<tr>
<td>Gilbert and Tassim scale</td>
<td>O</td>
<td>Unknown</td>
<td>Unknown</td>
<td>Poor</td>
<td>No (&gt; 3yrs cooperation required)</td>
<td>No</td>
</tr>
<tr>
<td>Cookie Test</td>
<td>O</td>
<td>Unknown</td>
<td>Unknown</td>
<td>Unknown</td>
<td>Unknown</td>
<td>No</td>
</tr>
<tr>
<td>Towel Test</td>
<td>O</td>
<td>Unknown</td>
<td>Unknown</td>
<td>Unknown</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

**KEY:**
- * Established in adults (Pellecchia, 1998; O’Donoughue, 2000)
- • Positive findings, further study necessary (Bae et al., 2003)
- # Expert opinion only (Dunham, 2003)
- ^Expert opinion only (APCP, 2001)

specialist centres; with a score < 3.5 requiring referral (APCP, 2001).

The Mallet scale is also widely reported in the literature (Clarke, 1995). It assesses shoulder function, however it is not suitable for children under age 3-4 years as it requires active participation. The Medical Research Council and Gilbert-Tassim systems both lack sensitivity (APCP, 2001) and also require patient cooperation (Piat, 2005; Al Qattan, 2003), whilst the use of keys, rattles and bells (Waters, 2005) have also been documented but not used in any trials. Bertelli et al. (2003) reports reliability of the “towel test” however no formal analysis was undertaken in this observational study, whilst the “cookie test” (Clarke et al., 1995) has not been evaluated and its feasibility in infants is questionable due to weaning issues.

Intervention

Range of Movement (ROM) exercises in order to prevent contractures forms the central focus of physiotherapy intervention (Kay, 1998; Durham, 2003; Waters, 2005). However, little evidence exists regarding ROM treatment in infants with OBPP. Concerns regarding unnecessary stress on the plexus has caused much debate regarding when treatment should commence and recommendations vary from 2 days – 3 weeks old (APCP, 2001). Furthermore, no evidence exists regarding the intensity and duration. In the absence of sufficient evidence, expert opinion in the form of the APCP guidelines is advocated. This involves commencing ROM exercises 5-days after birth (5-10 repetitions for 5 seconds each) with nappy changes. This should be coupled with continual re-assessment and feedback from parents (APCP, 2001).

Parents are also required to learn how to safely handle their infant’s UL during activities such as dressing and bathing. Techniques such as stroking and massage to enhance sensory stimulation are also taught, as well as techniques to optimise normal development (e.g. sitting, crawling) (APCP, 2001; Benjamin, 2005b). Although teaching parents these techniques is an established standard of care, there is no scientific basis underpinning it.
splinting of the upper limb is no longer advocated. Concerns over damage to the developing shoulder (Waters, 2005), restricted use of the arm (Sever, 1925), contractions, pain and swelling (Steeg, 2003) coupled with poor compliance (Zaconelli, 1988) resulted in the rejection of splinting and a move towards ROM exercises. The use of Botulinum toxin to reduce antagonist muscle forces has also been presented, however there is no data to guide clinicians on its use (Waters, 2005) and administration in infants has only been reported in one study where ages were not adequately reported (Desiato et al., 2000).

Constraint-induced movement therapy (Mark et al., 2004), electrical stimulation (Libertson, 1987) and the Vojta technique (Barry, 1996) have also been reported as an effective clinical treatment to promote motor recovery of upper limb. However, none of these techniques are discussed in the literature in association with OBPP and therefore cannot be recommended.

**Surgical intervention**

It is beyond the scope of this review to critique surgical care, however, because the decision to operate is based almost entirely on physiotherapy-based assessments, a summary is included. Whilst there is no universal agreement regarding indications for, or the timing of surgery (Bae, 2003) most authors advocate that a flail arm and Horner’s-syndrome warrants surgery from as young as two months (Waters, 2005). Indications and timing for surgery in the presence of some motor activity however, is widely debated.

A key study by Gilbert (1984) was deservedly acclaimed due to its large sample of 178 and 2-year follow-up of 120/178 patients. The results indicated the need for surgery if biceps function at 3-months was absent and this criterion is widely used in many centres. Al Qattan (1999) challenges this time-frame, showing significant spontaneous recovery of the biceps between 3 and 4 months in 11/14 patients. Similarly, Michelow et al., (1994) demonstrated that Gilbert’s criterion will incorrectly predict 12.8% of cases, suggesting that elbow, wrist, thumb and finger extension all be assessed to determine the need for surgery.

Despite the latter two studies having small samples, it is suggested that the recommendations for multiple joint assessment have merit, especially considering deltoid testing featured in the original protocol of Gilbert, but was later excluded due to testing difficulties (Kay, 1988). In light of motor activity being widely used as an indicator for surgery, it is crucial that the ICP includes muscle charting from diagnosis. This information will be important in guiding referrals for surgery.

**Discharge**

There is no evidence or discussion in the literature regarding discharge or follow-up criteria for OBPP. Consistent with usual practice, if physiotherapy does not achieve full function and/or progress plateaus, review by the paediatrician and/or surgeon is advocated. There is some discrepancy regarding what constitutes full recovery and as suggested by Pondaag (2004) follow-up of at least 3-years is required to ensure no lasting deficit or functional problems. Whether or not this is the responsibility of the centre themselves or the community health service, it is still unclear.

**Parental Support**

Bellew et al. (2002) concluded that communication between health-professionals and parents, specifically at the time of diagnosis, strongly influences parents’ coping strategies, and that the majority of parents felt most supported by their physiotherapist. This study deserves merit for its valuable contribution of qualitative data that has not been collected in the study of OBPP before and highlights the importance of including strategies for support and explanation within an Integrated Care Pathway. Details of the Erb’s Palsy group should be provided (questionnaire study by this group demonstrated greater satisfaction with the information provided by this group when compared to health professionals (n=348, however no methodology reported) (Erb’s Palsy group, 1999; Bellew, 2003). Parent information sheets (APCP, 2001) should also be provided and the opportunity to discuss information should be ongoing (Robb, 1999). Behavioural, psychological and social issues are discussed in some review papers (Kay, 1998, Waters, 2005), however evidence is lacking. This is unlikely to be encountered in infants, however the physiotherapist should offer support and refer to the appropriate professional if problems are noted.

**Establishing an evidence base**

Investigations in the form of Randomised Controlled Trials are unlikely as withholding treatment that is established as a standard of care would not be in the best interest of these patients. The profession is therefore faced with an all too common dilemma; how do we establish an evidence base when the withdrawal of treatment strategies for comparison does not obtain ethical approval? The answer remains unclear; however current interventions will need to be reviewed through comparison studies, multiple reporting of single case studies and the formalisation of consensus through rigorous survey studies (e.g. Delphi).
The challenge of providing evidence-based physiotherapy to infants with obstetric brachial plexus palsy: A critical review of the literature

Low incidence coupled with a high recovery rate often leads to small samples, hence power and external validity is often weak. One possible solution is to instigate multi-centre trials but these trials in themselves bring great challenges. Diagnosis, assessment and treatment protocols must be standardised and implicitly defined, whilst outcome measures must be reliable, valid, sensitive, feasible to use in the clinical setting but robust in terms of scientific analysis.

Many studies use retrospective analysis to achieve large samples. This however has inherent problems involving inclusion/exclusion bias and missing data. The prospective studies that do exist are often consecutive convenience samples from specialist centres and therefore the implications of selection bias (possibly of more severe cases) on external validity also requires consideration.

Most studies to date are impairment-focussed and have poor follow-up. This is concerning considering a recent study by Partridge et al., (2004) who presented data on 39 adults with OBPP showing pain and limited function. Although this sample was small and patients surveyed were arguably the most severely affected (adult members of Erbs Palsy UK), the study was otherwise robust and raised important issues regarding long-term pain and disablement. Considering the majority of evidence regarding OBPP is from natural history studies, and that many functional activities will not be embarked upon until the child is older – investigations with longitudinal data are essential.

Conclusion

At present, there is insufficient evidence to draw any firm conclusions regarding the optimal physiotherapy management of OBPP in infants. Current practice is primarily based on expert opinion and whilst this information is sufficient enough to develop an ICP, health professionals involved in their use must be aware of its shortcomings and recognise the critical need for further research. Despite the difficulties associated with developing an evidence base for a condition that already has established treatments, future research must focus on improved definitions, comparisons of treatments and psychometric testing of outcome measures. Long-term outcomes including the impact of OBPP on function and psycho-social domains also warrants investigation.

References


The challenge of providing evidence-based physiotherapy to infants with obstetric brachial plexus palsy: A critical review of the literature


Variability in the Physiotherapy Treatment of Talipes Equinovarus

Denise Hart MSc, Grad Dip Phys, MCSP, Senior Neonatal Physiotherapist, Southampton General Hospital.
e-mail Denise.Hart@suht.swest.nhs.uk

Key words – physiotherapy, talipes, positional, structural, assessment.

Summary

Background and purpose: This paper describes the findings from an audit of physiotherapists who are involved in the treatment of Talipes equinovarus (TEV), both positional and structural. The reason for undertaking this audit was to explore the range of treatments used for this condition, as there are few references to either positional TEV or the physiotherapy treatment of structural TEV in the literature. This audit was done to compare treatment practices at Southampton University Hospital Trust to those used elsewhere across the country, review current practice and guide service development.

Methods: Questionnaires were sent to physiotherapists identified from the neonatal special interest group database and personal contacts. The format was of open questions with no definition of positional or fixed TEV given, to minimise bias. Participants were also asked to include any protocols, guidelines or assessment sheets that they were aware of, and used. The data collected were coded, entered into SPSS 10 and analysed descriptively.

Results: A total of 124 questionnaires were sent out to physiotherapists, 93 (75%) were returned. Positional TEV were treated by 73 (78.5%) and structural TEV by 41 (44.1%). Assessment tools were used by 20 (21.5%) and protocols were available for 26 (27.9%). The Pirani assessment was the most commonly used tool but there is variation on how it is interpreted. The Ponseti regime was the most frequently used treatment method for structural TEV with 55 (59.1%). For positional TEV advice and stimulation with or without follow up was most common although 20 (27.4%) participants reported progressing to fixation with Robert Jones strapping being most common.

Conclusions: Input into the training programmes for the Senior House Officers and Neonatal Nurse Practitioners to ensure accurate initial diagnosis. Standardised guidelines to include the appropriate level for referral for orthopaedic opinion. More work needs to be produced on the efficacy of physiotherapy treatments used for TEV.

Introduction

This paper describes the findings from an audit of physiotherapists who are involved in the treatment of TEV equinovarus (TEV), both positional and structural. The prevalence of structural TEV is quoted at 0.89 – 1 per 1000 live births in the U.K. (Macnicol 2003, Robb 1993, Wainwright et al. 2001) and the prevalence of positional TEV in Southampton University Hospitals Trust (SUHT) in 2003 was 16 per 1000 live births (Campbell 2005). The reason for undertaking this audit was to explore the range of treatments used for this condition and seek consensus where possible. In addition to these variations, at a strategic level, there are also practical considerations, for example, the time pressures on a paediatric service can be high, especially as children with TEV may need to be seen before discharge. This is compounded by the length of stay following birth decreasing, with the majority of women with uncomplicated births now leaving the hospital the day after delivery (DoH 2005). With such potential variations in practice it was therefore decided to compare treatment practices at SUHT to those used elsewhere across the country to review current practice and guide service development.

Literature Review

There are few references to positional TEV in the literature. One of these comes in Physiotherapy in Paediatrics (Shepherd 2000) where it is mentioned that ‘mild positional talipes will be corrected by mobilisation and strapping’. The definition of positional TEV in this case is, that there is initially no bony deformity but this could occur over time if the foot posture is not corrected and the foot muscles are not trained to aid the correction (Shepherd 2000). A form of postural or resolving TEV has also been described in the orthopaedic literature as part of the structural spectrum (Blakeslee 1997; Macnicol 1994): This type of foot is flexible, may have malpositioned tarsal bones or a mild degree of talo-navicular subluxation, and may be similar to the type of foot described by Shepherd. It is also stated that ‘this deformity can respond well to conservative manipulation and serial casting’ (Blakeslee 1997).

The difficulty in judging the severity of the TEV and assessing the effectiveness of any treatments used in the literature has been the relative lack of use of standardised assessments. The difficulty appears to be in finding an assessment that is reproducible, easy to use in the clinical setting and gives a reliable indication of prognosis (Macnicol 2003). There are several assessments in current use and these have been compared in two studies (Flynn et al. 1998, Wainwright et al. 2002). However, these two studies are contradictory in their findings. Flynn assessed the inter-rater reliability of the Dimeglio (Dimeglio et al. 1995) and Pirani (Pirani et al. 1995) assessments, and found ‘very good interobserver reliability after the initial learning phase’ although he found the results were improved if only the
consultant results were included as the physical therapist consistently scored the feet lower possibly due to ‘a stronger corrective force during scoring’ as she was used to using ‘aggressive stretching’ in the treatment programme (Flynn et al. 1998). Wainwright assessed the inter-rater reliability of the Dimeglio (Dimeglio et al 1995), Catterall (Catterall 1991), Ponseti and Smoley (Ponseti et al. 1963) and Harrold and Walker (Harrold et al. 1983) assessments, and found that ‘current classification systems … are not entirely satisfactory’. Again scores were better if only the consultant scores were considered especially on the Dimeglio assessment. In this study it was felt that most of the assessments did not address the three-dimensional aspect of the condition along with the dynamic element i.e. how rigid the foot is (Wainwright et al. 2002).

Physiotherapy treatment for TEV is not well documented and mainly covers the treatment of structural TEV. Bensahel et al. (1990) describe a physiotherapy treatment method with 77% good and fair results before further surgical intervention that led to 96% good and fair results. However the treatment is intensive with a series of specific manipulations being performed daily, (preferably at the same time of day) whilst the baby is asleep, for eight weeks. Denis-Browne splints or strapping are used to maintain the position. From eight weeks to eight months, the sessions drop to three times a week and the manipulations are continued with or without splints as necessary. After this time treatment was as necessary, depending on the correction achieved (Bensahel et al. 1990). The most popular physiotherapy treatment is Robert-Jones strapping. One danger with this treatment is the possibility of pulling the forefoot into dorsiflexion at the mid-tarsal joints instead of the ankle causing the ‘rocker-bottom’ foot (Shepherd 2000). The treatment itself has been well described but there are no studies showing efficacy. There is one study using a combination of continuous passive motion (CPM) and strapping that reduced the need for surgery from 100% to 75% but it is difficult to say whether that was the CPM, the strapping or the combination (Van Campenhout et al. 2001).

In Britain we have no standard clinical guidelines covering the assessment or treatment of these children. In France, the French National Agency for Accreditation and Evaluation in Healthcare (Anaes 2004) produced clinical practice guidelines for the assessment and treatment of isolated congenital foot deformities. Unfortunately they do not quote their source literature, which makes it difficult to assess how they come to their conclusions.

Method
The aim was to determine the current practice across the country with a view to developing guidelines and as it was the first stage in the audit cycle, ethical approval was not sought. No audit instrument was already in existence so it was necessary to develop one. This was achieved with the other eight members of the paediatric physiotherapy team to give the instrument face validity. The format was of open questions to allow respondents to discuss their procedures fully, without any outside influence. There was no definition of positional or structural TEV given, to minimise bias. Participants were also asked to include any protocols, guidelines or assessment sheets that they were aware of, and used.

The physiotherapists were identified from the neonatal special interest group database and personal contacts. They were sent a letter explaining the audit and a copy of the questionnaire, asking the physiotherapist to return the completed form in the enclosed addressed envelope. No instruction was given for those who did not wish to participate. Any replies from physiotherapists in community units or hospitals that did not have access to a maternity unit were followed up with a further questionnaire if they had provided details of a hospital to contact. The first round of questionnaires was sent out in July 2004.

The data collected were coded, entered into SPSS 10 and analysed descriptively.

Results
A total of 124 questionnaires were sent out to physiotherapists, 93 were returned giving a response rate of 75%.

The first question for both positional and structural TEV was ‘Do you treat and if not, why not?’ The results for these questions can be seen in Table 1.

<table>
<thead>
<tr>
<th>Question</th>
<th>Positional Fixed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you treat and if not, why not?</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>73 (78.5)</td>
</tr>
<tr>
<td>Community / Tertiary</td>
<td>11 (11.8)</td>
</tr>
<tr>
<td>Not needed</td>
<td>9 (9.7)</td>
</tr>
<tr>
<td>Refer direct to orthopaedics</td>
<td>0</td>
</tr>
<tr>
<td>Missing</td>
<td>0</td>
</tr>
</tbody>
</table>

A total of six responses were written to the open question of why treatment was not needed in positional TEV. From content analysis one code was identified and that was that children with positional TEV would self-correct. For example ‘fully correct on their own without physiotherapy input’, and ‘if it doesn’t spontaneously correct it is not true positional talipes and there would have been evidence of tightness on referral’.

Table 1. Treatment of TEV
Do you treat and if not, why not?
Variability in the Physiotherapy Treatment of Talipes Equinovarus

One physiotherapist commented that ‘consultant orthopaedic findings (unpublished) have shown resolution by six weeks’.

Although the question of why positional TEV were treated was not specifically asked 13 responses were written and from content analysis three codes were identified. They were 1. The possibility of misdiagnosis; 2. Parental anxiety; 3. Evidence base. The most common response with eight physiotherapists mentioning it involved the possibility of misdiagnosis or associated conditions being missed. For example ‘asked SHOs [Senior House Officers] to refer all talipes to assess properly and look for other issues of relevance i.e. hips, torticollis, neuromuscular’ and ‘prefer to assess and advise all as SHOs on ward for short time’, ‘asses all to avoid misdiagnosis’. The second response was mentioned three times and involved parental anxiety, this also was mentioned nine times in with how physiotherapists treat positional TEV. For example ‘problem mainly in parental anxiety’ and ‘parents need lots of reassurance’. The third group covered the evidence for treatment but the two responses were contradictory – ‘because historically treated and there is no evidence to determine the best treatment methods or outcomes’ and ‘Evidence points out that positional talipes resolve spontaneously and stretch and facilitation have been efficient in aiding correction’. The number of structural TEV that had been missed and referred late was small in most people’s recollections. Nine physiotherapists estimated a combined total of 14 missed structural TEV over time spans ranging from one year to 14 years. Some stated that it had ‘happened in the past but not since protocols had been introduced’ or that ‘due to protocols all are referred’. The next question involved the type of treatments used. See Table 2.

Table 2. Treatments used

<table>
<thead>
<tr>
<th>Positional Talipes n (%)</th>
<th>Fixed Talipes n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advice and stretches</td>
<td>24 (32.9)</td>
</tr>
<tr>
<td>Advice, stretches and follow up</td>
<td>29 (39.7)</td>
</tr>
<tr>
<td>Fixation</td>
<td>20 (27.4)</td>
</tr>
<tr>
<td>Fixation</td>
<td>20 (27.4)</td>
</tr>
<tr>
<td>Fixation</td>
<td>20 (27.4)</td>
</tr>
<tr>
<td>Fixation</td>
<td>20 (27.4)</td>
</tr>
<tr>
<td>Unknown</td>
<td>18 (19.3)</td>
</tr>
</tbody>
</table>

1 missing from structural TEV

All physiotherapists who treated positional TEV used passive stretches and lateral stimulation of the evertors and dorsiflexors as standard treatment along with advice and reassurance for parents – ‘problem mainly in parental anxiety’. As shown in Table 2, 24 (32.9%) physiotherapists offer one visit, either on the ward prior to discharge, in an outpatient clinic or at home, to teach the stretches. The children are then discharged with the possibility of referral by General Practitioner (GP) or Health Visitor (HV) after baby checks, if the problem has not resolved.

The length of follow-up offered by 29 (39.7%) physiotherapists varied from one visit to ensure correction of the TEV was occurring, to following-up the child until they walked. It was not possible to analyse these results further as the majority of answers stated that the follow-up continued as long as necessary and thus the duration could not be quantified. However a physiotherapist who does treat found ‘approximately 10% come back when they pull to stand with a similar foot posture’. One physiotherapist who did not feel that positional TEV required treatment commented that they ‘checked all referrals for toe-walkers, in-toers and other gait anomalies for a history of positional TEV but have not found one’. Within the group of 20 (27.4%) physiotherapists who reported progressing to fixating positional TEV 13 responses were written as to what the decision was based on. From content analysis four codes were identified 1. As appropriate; 2. Correction delayed; 3. Semi-structural; 4. Pirani score. Five physiotherapists reported progressing to using some form of fixation ‘if necessary’ or ‘as appropriate’. A further three mentioned ‘if active correction delayed or soft tissue tightness persists’. Another three responding physiotherapists may fixate TEV that are ‘semi-structural’ or ‘mosty positional with structural element’. Two final respondents based the decision on the Pirani assessment ‘score 2-3 consider strapping’ and ‘score <2 stretch / strap’. These decisions were mainly based on clinical judgement as only 3 (15%) used an assessment tool.

The different methods used are shown in Table 3 along with those classified as ‘other’ for structural TEV (see Table 2). The number of treatments used exceeds the number of physiotherapists as many reported using multiple treatment methods depending on clinical judgement.
Variability in the Physiotherapy Treatment of Talipes Equinovarus

Table 3. Methods of Fixation Used in Positional and Structural TEV (Non-Ponseti)

<table>
<thead>
<tr>
<th>Method</th>
<th>Positional Talipes</th>
<th>Fixed Talipes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Robert-Jones strapping</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Casting</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Footwear</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Dynamic strapping</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Medial slabs</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Orthotics</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Antero-medial splint</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

Of the 55 physiotherapists who said that Ponseti (Laaveg et al. 1980, Morcuende et al. 1994) was the treatment of choice for structural TEV, the plastering was reportedly carried out by the orthopaedic surgeon in 33 (60%), the physiotherapist in 13 (23.6%) and a team approach used in 9 (16.4%).

The number of physiotherapists involved in the Ponseti treatment may grow in the future, if funding and staffing are provided as shown by these comments: ‘consultant keen to start Ponseti led by physiotherapist and nursing staff; is gathering funding’; ‘plan to start using Ponseti once training and funding complete’. However there are still difficulties in some areas: ‘no money for paediatric physio therefore plaster by nursing sister or consultant’; ‘have tried to implement Ponseti however difficulty as have not got an orthopaedic surgeon on board’.

The use of protocols / guidelines and assessments is shown in Table 4.

Table 4. Use of Assessment and Protocols

<table>
<thead>
<tr>
<th>Protocols</th>
<th>Assessments</th>
</tr>
</thead>
<tbody>
<tr>
<td>n(%)</td>
<td>n(%)</td>
</tr>
<tr>
<td>No</td>
<td>57 (61.3)</td>
</tr>
<tr>
<td>Standardised</td>
<td>16 (17.2)</td>
</tr>
<tr>
<td>Non-standardised</td>
<td>4 (4.3)</td>
</tr>
<tr>
<td>N/A</td>
<td>16 (17.2)</td>
</tr>
</tbody>
</table>

The most frequently used standardised assessment is Pirani 14 (87.5%) (Flynn et al. 1998, Pirani et al. 1995) with Dimeglio (Dimeglio et al. 1995, Flynn et al. 1998, Wainwright et al. 2002), TELER (Le Roux 1991) and the Catterall Classification (Catterall 1991, Wainwright et al. 2002) all being mentioned once. One respondent used both the Pirani and Dimeglio. Although this group of therapists is using the same assessment tool there is still variation on how it is interpreted (Table 5).

Table 5. Interpretation of Pirani Assessment

<table>
<thead>
<tr>
<th>Four Physiotherapists Interpretations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pirani Scores</td>
</tr>
<tr>
<td>0 0.5 1 1.5 2 3 &gt;3</td>
</tr>
<tr>
<td>Physio 1 Positional – advice and stretches Refer to orthopaedics – Ponseti</td>
</tr>
<tr>
<td>Physio 2 Advice and stretches Ponseti</td>
</tr>
<tr>
<td>Physio 3 Positional – stretch / strap Refer to orthopaedics – Ponseti</td>
</tr>
<tr>
<td>Physio 4 No Treatment Stretch and stimulate Consider strapping Refer to orthopaedics – Ponseti</td>
</tr>
</tbody>
</table>

Table 6 Consensus Analyses of Physiotherapy Protocols

<table>
<thead>
<tr>
<th>Item</th>
<th>Score(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consensus Initial referral via SHO/NNP</td>
<td>13(76)</td>
</tr>
<tr>
<td>Child seen before discharge if possible</td>
<td>13(76)</td>
</tr>
<tr>
<td>Parents shown stretches for the affected foot</td>
<td>13(76)</td>
</tr>
<tr>
<td>Refer to orthopaedics if the foot is not correctible</td>
<td>13(76)</td>
</tr>
<tr>
<td>Majority View Parents given verbal advice</td>
<td>12(71)</td>
</tr>
<tr>
<td>Parents shown peroneal stimulation</td>
<td>10(59)</td>
</tr>
<tr>
<td>Standardised assessment used</td>
<td>9(53)</td>
</tr>
<tr>
<td>Ponseti for fixed talipes</td>
<td>9(53)</td>
</tr>
<tr>
<td>No Consensus Children with positional or fixed talipes referred to hip screening</td>
<td>8(47)</td>
</tr>
<tr>
<td>Strapping for fixed talipes</td>
<td>7(41)</td>
</tr>
<tr>
<td>Parents given written information</td>
<td>6(35)</td>
</tr>
</tbody>
</table>
Variability in the Physiotherapy Treatment of Talipes Equinovarus

Of the 26 physiotherapists who have protocols for the treatment of TEV, 17 included them with their questionnaires, the other nine commented that they did have them but they were in the process of being updated. The 17 protocols were made up of two main groups, 12 (70.6%) covered the total management pathway for the child with the remaining 5 (29.4%) showing initial assessment and who should be referred to physiotherapy or orthopaedics. These 17 protocols were further analysed for consensus using a tool developed by Professor Julius Sim for the CSP Guidelines Development Group where if 100% protocols had an item there was said to be unanimity, 75 – 99% consensus, 51 – 74% majority view and 0 – 50% no consensus (Table 6).

The general comments reflected that there was a need for standards, guidelines and best practice. They also indicated that the treatment of this group of children is an ongoing topic of discussion. These results will now be discussed in relation to the literature.

Discussion
The response rate of 75% was average for a group with an interest in the subject, with Oppenheim (1966) stating that even in this group ‘80% is rarely exceeded’.

The variation in treatments used for true positional TEV, that is children with full passive range of movement in their feet and a zero score on any standardised assessment, appear to be between ‘no treatment’ and ‘stretches and stimulation’ with varying levels of out-patient follow-up. It is often assumed that children in this group may self-correct within six weeks. Unfortunately there is no published evidence to support this assumption, although one consultant has apparently undertaken a study that is yet to be published. This lack of evidence and the historical nature of treatment for this group of children is the most probable reason why so many physiotherapists continue to treat what is essentially a self-correcting condition. Another reason mentioned, was the possibility of misdiagnosis by the person carrying out the baby check. This assumes that they may miss a foot that does not have full range of movement. Input into the SHO and Neonatal Nurse Practitioner (NNP) teaching programmes can help ensure that they are aware of exactly what to be looking for and the other associated conditions that may require a referral. Another way to allay any fears is to run an audit of the children they are referring to see how many are positional and how many are not.

The other problem that was mentioned with this group of children was parental anxiety. A lot of parents have heard of TEV and can link it with clubfoot. As physiotherapists we are aware that true positional TEV has no link with clubfoot, the child will not require surgery and it will not impact on their walking ability. However a large amount of the initial meeting with the parents is often taken up explaining this to them. Some of this anxiety is also caused by the need for their child to be referred to a professional for further assessment and treatment – their child now has a ‘condition’. If the person carrying out the baby check pointed out the problem, told the parents it was a common one and would self-correct in six weeks, then showed them how to stimulate the feet, the anxiety levels would probably be less. The next stage of the audit cycle will be to trial a system like this – the parents will be given an advice sheet that has the physiotherapist’s telephone number to call if the child’s feet are not correcting or they have any concerns. We aim to report the findings from this audit at the end of 2006.

The treatment of structural TEV did not show much variation with the majority of children having Ponseti and the majority of the rest having Robert-Jones Strapping. The decisions of which treatment to use is still very much consultant-led but physiotherapists continue to play a part in its application. The main reason for more physiotherapists not being involved appears to be funding or time-related pressures.

There was a group of children who had the widest variety of treatment and also some possible confusion over which definition they fall into. These children were those where the physiotherapists reported they would progress the treatment on to some form of fixation. This group may also include those who had the longer follow-ups from those physiotherapists offering stretches and stimulation. The reasons given for using some means of fixation were that ‘active correction was delayed’ or ‘soft tissue tightness persisted’. Both of these statements rule out these children’s feet being true positional TEV. These children may have postural or resolving TEV in the structural spectrum as described in the orthopaedic literature (Blakeslee 1997; Macnicol 1994). The variation of treatment for this group is so great, not just because of the number of treatment modalities used, but also because some physiotherapists who use assessment tools would have classed them as structural and referred them on to orthopaedics. The most popular treatment was again Robert-Jones strapping followed by casting, orthotics and footwear such as Be-Bax boots.

Whether treating structural or postural TEV with Robert-Jones strapping or any other method of fixation physiotherapists must be aware of the ‘potential damage that may be caused by careless or forcible techniques’ (Shepherd 2000). The choice of
Variability in the Physiotherapy Treatment of Talipes Equinovarus

treatment, decision to refer to orthopaedics or discontinue treatment once recovery has occurred was based on clinical judgement. While clinical judgement is vitally important in the physiotherapy treatment of any condition, in these times of evidence-based practice, standardised outcome measures are also essential. The lack of evidence of the efficacy of physiotherapy treatments does not mean that they do not work, but it does highlight the need for more studies to allow more informed judgement of the most appropriate treatment methods. These studies could possibly utilise the Delphi method of analysis (Hicks 2000).

The most commonly used assessment was Pirani although there was no consensus on the use of the scale i.e. at what score children have structural TEV and should be referred to orthopaedics. While none of the current assessments currently available are perfect (Flynn et al. 1998, Wainwright et al. 2002) it is better to use an imperfect assessment consistently than none at all. Although it may be preferable for all physiotherapists to agree on one assessment it is possibly best to use the same assessment as that used by the orthopaedic surgeons that the children will be referred to. This can then be discussed with the surgeons at what level they would consider referral necessary as this allows for good teamwork.

The number of protocols available for analysis was very small and the content varied from referral criteria to instructions on how to apply strapping and competencies for Ponseti. This variation showed up in the consensus analysis with no cases of unanimity and the only areas of consensus covering the initial referral, first visit and to ask for an orthopaedic opinion if full correction is not achievable. The other area that achieved consensus was in teaching parents stretches and this would be the same for both positional and structural TEV.

Conclusions
To ensure accurate initial diagnosis it would be useful to input into the training programmes for the SHOs and NNPs to teach them the appropriate assessment tool.

Standardised guidelines to include the appropriate level for referral for orthopaedic opinion on the most frequently used standardised assessments would be beneficial to decrease the variability in physiotherapy practice throughout the country.

More work needs to be produced on the efficacy of physiotherapy treatments used for children with postural/resolving feet and structural TEV to allow better consensus in methods used.

Acknowledgments
I would like to thank everyone who completed their questionnaires for their help with this project. Thanks also to Lisa Roberts for her help and advice while writing this.

References

Bensahel H; Guillaume A; Csukonyi Z; Desgrrippes Y. Results of physical therapy for idiopathic clubfoot: a long term follow up study. Journal of Pediatric Orthopaedics. 1990 vol 10 p 189-92


Campbell L.G. Southampton Hospital Birth Data. Personal Communication. 2005


Dimeglio A; Bensahel H; Souchet P; Bonnet T. Classification of clubfoot. Journal of Pediatric Orthopaedics Part B. 1995 vol 4 p129-36


Variability in the Physiotherapy Treatment of Talipes Equinovarus

Le Roux A.A. TELER Indicators – CTEV. 1991 (Registered Trademark)

Macnicol M.F. The surgical management of congenital TEV equinovarus (club foot). Current Orthopaedics. 1994 p72-82


Oppenheim A.N. Questionnaire Design and Attitude Measurement. 1966 Pub Heinemann p33-35


Van Campenhout A; Molenaers G; Moens P; Fabry G. Does functional treatment of idiopathic clubfoot reduce the indication for surgery? Call for a widely accepted rating system. Journal of Pediatric Orthopaedics Part B 2001 vol 10 p 315-18

Wainwright A.M; Auld T; Benson M.K; Theologis T.N. The classification of congenital TEV equinovarus. The Journal of Bone and Joint Surgery. 2001 vol 84B p1020-4
Profile

Lindsay Rae –
New Public Relations Officer

Public Relations is an important aspect of the APCP. Our image and interactions with our members, the general public and the media has to be an ongoing development and focus. I have now taken on this role from Gill Holmes. Gill worked to promote the Association and I would like to thank her for the work she has done and for her support. I hope together with the Public Relations Team, we can continue to promote Paediatric Physiotherapy for the benefit of the Association and its members and the wider community.

I qualified as a Physiotherapist in 1992 training at the Oswestry and North Staffordshire School of Physiotherapy. I then spent two years working as a junior at the Leicester Royal Infirmary before starting work at the Birmingham Childrens’ Hospital in 1994.

For the last seven years I have worked within an orthopaedic speciality. Initially with Orthopaedic, Burns and Plastics inpatients. For the last two years I have worked as an Extended Scope Practitioner in the Fracture Clinic at Birmingham Children’s Hospital. With the support of my colleagues and the Orthopaedic Surgeons this new role has evolved. I assess a wide range of patients with soft tissue injuries and fractures supervising their ongoing treatment management, alongside my Orthopaedic colleagues. This was a new and challenging development in Paediatric Physiotherapy. The expectations of other disciplines has needed much education into the developing roles in Physiotherapy.

I now look forward to the challenge of my new role as Public Relations Officer and welcome any ideas or concerns that you may have.

The normal APCP committee meeting, dates and time together does not allow more substantial pieces of work to be considered. Within the planning cycle we therefore build in a working weekend to have concentrated time together. Pre planning includes identifying which areas, topics, policies, legislation etc. require to be addressed. Once work to be undertaken is identified, the venue, timetable and groups of those participating are confirmed and preparatory information requested to be available for the weekend. So we convened in Belfast which again we found to be an excellent venue, highly suitable for our purpose.

Three working groups were identified to cover the diverse aspects of APCP development reflecting Clinical Interest Group Business in 2006. As well as regional, Laura Wiggins led the group looking at Constitutional Issues both National and Regional and also considered the inclusion of the emerging affiliated sub-groups which are 3 in number at present: neonatal, critical care & neuromuscular.

Fiona Down’s group covered the Profile of APCP within the exciting but increasingly complex context of how we can better communicate with both our membership but also be involved in supporting paediatric physiotherapy issues with families and media.

It was Peta Smith’s difficult task to lead the “Competencies group.” This was the start of on going work which may take 18 months to 2 years to complete re the Professional Framework Related to Children. A sub-group will reconvene in June and liaise with a representative at CSP prior to our next meeting in July.

Everyone’s contribution was fantastic and I wish to thank one and all for their participation. Your work rate was phenomenal, you achieved a great deal.

Lesley Smith

Working weekend – Review of the Constitution

The role of APCP is to represent the field of Paediatric physiotherapy clinical practice. The Association must demonstrate a clear and valid relationship to the core of physiotherapy as described in the CSP Charter. National committee used this opportunity to review our constitution, which with the formation of the Affiliated groups, becomes ever more complex. The formation of Affiliated groups has been an exciting development, enabling the association to support the development of specific areas of paediatric practice. It was also an opportunity to discuss the relationships between National committee, Regional committees and Affiliated group committees, emphasising that we are all constituent parts of APCP. The roles of a clinical Interest group are clearly defined by CSP:

- **Continuing Professional Development (CPD) and education**
  Providing CPD opportunities
  Providing professional peer support (clinical and operational) influencing the undergraduate curriculum

- **Influencing/informing**
  A network linking the CSP and the clinical perspective
  Providing information e.g. about issues of concern, models of best practice, within a specified clinical field or occupational area that can be used to inform policy nationally and locally
  Informing user groups/other professions/external organisations of the role of physiotherapy within a specified clinical field or occupational area

- **Promoting physiotherapy**
  Promoting the physiotherapy profession as a whole and within a specified clinical field or occupational area Marketing and promoting best practice in a particular field of physiotherapy

- **Quality Assurance**
  Enabling the profession to deliver the clinical governance agenda e.g. by disseminating best practice
  Developing standards/guidelines, participating in audit and developing audit tools

- **Research and Clinical Effectiveness**
  Providing an expert body of knowledge and skills within a clinical field or occupational area
  Developing the evidence base to support practice within a clinical field or occupational area

It was important to consider our Associations objectives and ensure that they reflect the role of a paediatric clinical interest group as described by CSP. We discussed ways of meeting these objectives regionally, nationally & for affiliated groups who represent specific areas of clinical practice.

The CSP also have criteria for the structure of CIG groups and their committees and it was important to ensure that we continued to operate within these. We have suggested changes to the constitution to reflect
APCP Matters

that of the CSP.
In November 2007 APCP will seek re-recognition as a clinical interest group affiliated to CSP. As part of this process we will be asked to evidence our achievements, specific to the roles described for a CIG, over the past five years. We shall be able to present developments from all areas of our Association; Nationally, Regionally and for Specific areas of clinical practice. The revised APCP Constitution can be found on pages 20-23 of this issue.

Laura Wiggins
Secretary

PRO Report
The APCP website has been a major challenge for Gill Holmes over the last couple of years. We have many enquiries with regards to it and feel that it is an important aspect of communication and improves our profile. It is intended to work alongside Interactive CSP as a source of information and contact with the APCP.

Our aim is to have a site which is accessible to our members, other professionals and to the general public, which offers information relevant to Paediatric Physiotherapy. It will also have access for members only to Association matters. The login password for members only can be found on the reverse of the membership cards and will change yearly.

The site should now be up and running in June so please visit it at http://www.apcp.org.uk

The website will undergo continuous evaluation and change as appropriate to meet the needs of its users. Please feedback any ideas or thoughts you may have so we can further improve the site.

Exciting new service for APCP members
A new service has recently been launched across the UK that enables physiotherapists to share their knowledge and experience with each other based around their interests, irrespective of where they live or work.

APCP are partners in this initiative, running the paediatrics network on the service. We are involved because we believe it will greatly improve communications and knowledge sharing across [interest area] physiotherapy. It will also help APCP to improve its services to you and its communication with you.

The service is based around a website developed by CSP called interactiveCSP (iCSP). We want to emphasise, however, that the service is about physiotherapy not technology. Also, the site is easy and intuitive to use so that you really can focus on the content, not the means of accessing it!

The overall responsibility for the [name of network] network on the site will rest with the executive committee but the network will be managed on a day to day basis by members of APCP who volunteered and have been trained for this role. This will help to ensure it is authentic and reflects your voice, needs and issues. However, the only real guarantee of this will be for you to register to the site, join the network and then use it.

The network will give you access to Discussions, News, Events, Documents, useful web-sites and Practice initiatives, all related to [interest area] physiotherapy. Furthermore, you and all other users can contribute content to any part of the network. So you can ask questions of your peers, promote events you are running, share documents that you have created and much more. In addition, you will receive a regular email summarising all the new content that has been added to the network. So you can keep up with developments even if you don’t regularly visit the network. For some more of the benefits see below or refer to the Supplement recently distributed with CSP’s Frontline magazine.

This is a significant undertaking for APCP as it is for many of our sister interest groups. We are involved because it offers the profession the chance to transform its communications and knowledge sharing capacity.
We are delighted that some of your peers have volunteered to help us with this by becoming moderators. Now they and we need your support. We need you to join up and join in.

To use the service and join the network you need to register to interactiveCSP by going to the web-site www.interactivecsp.org.uk and then clicking on ‘Register’.

You need your CSP membership number and an email address to complete the registration process, which will take 5-8 minutes. On the last part of the registration process you will see the list of available networks, including paediatrics. Once you have registered you can login and use the service.

So please register and sign up to the network. If you have any problems registering or using the site please get in touch with icsp team on icsp@csp.org.uk or call 020 7314 7870.

The network is also available to APCP members who are not CSP members. However you will only have access to the network not the rest of the site. Non-CSP members should have received a letter from CSP with details of how to register to the network. If you have not received a letter please email the iCSP team at CSP on icsp@csp.org.uk with the subject ‘icsp ciog access’ and in the main body of the email include your full name and the name of the CIOG.

10 Key features of iCSP

1. Free, easy and effective
2. Fully searchable
3. Users contribute content
4. Password protected
5. Content is personal to your interests
6. Email bulletins highlight new content
7. Users can change interests at any time
8. Single account for iCSP & CSP web-site
9. Users can track interesting discussions
10. Latest content brought to users’ attention
APCP CONSTITUTION - March 2006

1. TITLE
The Title of the Association shall be THE ASSOCIATION OF PAEDIATRIC CHARTERED PHYSIOTHERAPISTS.

2. OBJECTIVES
The objectives of the association shall be as follows:
1. To provide a forum to promote the exchange of ideas between those interested in paediatrics
2. To promote best practice for those working with children and young people
3. To promote and facilitate continuous professional development and educational opportunities in paediatric physiotherapy
4. To encourage research and development in paediatric physiotherapy and related field to enhance the evidence base of physiotherapy
5. To develop and maintain links with other relevant organisations in the UK and overseas
6. To represent paediatric physiotherapy on behalf of the CSP
7. To promote the role and benefits of paediatric physiotherapy

3. MEMBERSHIP
Membership will consist of:

Full Membership
• Full membership of the Association will be open to physiotherapists who are members of the Chartered Society of Physiotherapy. They will have full voting rights. An annual subscription as authorised by the Association will be paid. Physiotherapists who are not members of the Chartered society of Physiotherapy will be Associate members.

Associate Membership
• Associate membership will be open to persons who, in the opinion of the Executive committee, are suitably qualified professional people working in the field of paediatrics. These persons will be nominated and seconded by full members of the Association. Associate members do not hold voting rights. An annual subscription as for full members applies.

Assistant Membership
• Physiotherapy Assistant membership will be open to physiotherapy assistants who are working in the field of paediatrics. The annual subscription will be half of the full subscription as authorised by the association.

Overseas Membership
• Overseas members are welcome as full or Associate members with voting rights as appropriate. An annual subscription as for full members applies.

Student Membership
• Student membership will be open to physiotherapy students. The annual subscription will be half that of the full subscription. Student members do not have voting rights.

Honorary Members
• The retiring chairman of the Association will automatically become an Honorary member. Nominations, with proposers, seconders and full details, will be sent to the Honorary Secretary for the national committee meeting three months prior to the Annual General Meeting (A.G.M.) of the Association. The National Committee will then have the sole right to submit the names of the persons thought suitable to the A.G.M. of the Association for possible election, usually by a show of hands. If fulfilling the criteria for full membership Honorary members will retain full voting rights.

4. COMMITTEES
A: National Committee
The National Committee will consist of up to 16 nationally elected full members; one locally elected full member from each APCP approved region, and a representative from each affiliated group. From this group the required officers will be elected. National Committee members will serve for a term of 4 years and will be eligible for re-election for a further term of 4 years only (8 year rule). Members will then only be eligible for re-election to National Committee after a period of 2 years has elapsed.
The National Committee will comprise of

**Executive Committee**
- Chair
- Vice Chair
- Treasurer
- Secretary

The executive committee officers will manage the day to day affairs of the Association on its behalf and report action to regular National Committee meetings. The Chair will hold office for two years. The Vice Chair will serve for two years as chair elect. All other officers will normally hold office for two years and will be eligible for a further term of two years. If an executive officer is due to retire from the National Committee (under the eight year rule), they may be co-opted to continue their term of office at the discretion of the National Committee.

**Elected Officers**
- Journal Editor
- Public Relations Officer (PRO)
- Membership Secretary
- Education Liaison Officer
- Research Officer
- Publications Officer
- CIG Liaison Officer
- Diversity Officer
- Committee Members (up to four)

Elected officers will normally hold office for two years and will be eligible for a further term of two years.

**Regional Representatives and Affiliated Group Representatives**

Each Regional Committee and Affiliated Group will elect a representative to National Committee. In the event of a representative being elected to an executive or elected office, that region or group will elect a new representative to National Committee. Time served as a regional representative will be included as part of the eight years term of office.

**Representation from Clinical interest/Occupational Groups and ICSP Moderator group**

The national committee will have the right to seek representation from clinical interest or occupational groups as it deems necessary. A representative will be nominated by the interactive CSP website moderator group.

**Co-Opted Members**

The National Committee will have the right to co-opt members to fulfil specific functions, as it deems necessary. The number of co-opted members will not exceed one-third of the National Committee members. Co-opted membership will be reviewed annually prior to the AGM. Co-opted members will have full voting rights.

**Sub Committees**

These will be formed as deemed necessary by the National Committee. The Chairman of such committees will be a National Committee member, but other committee members will be members of APCP with appropriate expertise. They will be approved by the National Committee.

**Voting**

Voting for members of the national Committee will be as follows:
1. APCP members seeking election to National Committee will be proposed and seconded in writing to the Honorary Secretary of the Association at least one calendar month before the AGM. If there are more applications than vacancies, posts will then be filled by a paper ballot at the AGM
2. Regional Representatives will be elected by the Regional Committees and notification must be sent to the Honorary Secretary of the Association
APCP Matters

3. A Liaison Officer will be elected by the committee of each Affiliated group and notification must be sent to the Honorary Secretary of the Association.
4. All executive officers will be elected by the National Committee as necessary during the year.
5. Co-opted members will be elected by the National Committee as necessary during the year.
6. Election of Committee members will be based on a single non-transferable vote. Proxies will not be allowed. The Chair will have a casting vote in addition to an original vote.

Honorarium

The following National Committee members will receive an annual honorarium the value of which will be agreed by the National Committee and reviewed annually:

Executive committee
- Chair
- Vice chair
- Treasurer
- Secretary

Elected officers
- Journal Editor
- PRO
- Membership secretary
- Education officer
- Publications officer
- CIG Liaison /Diversity Officer

B: Regional Committee and Affiliated Groups

The number and location of these shall be at the discretion of the national committee in response to request from the membership. Within each region or Affiliated group there will be elected a Committee to consider the local business of the Association in conjunction with the National Committee.

Each Regional Committee/Affiliated group will elect a Chair, Secretary, Treasurer and Regional representative/Liaison officer and any other officers they deem necessary.

An A.G.M. will be held prior to the National A.G.M. and reported to the National Committee by the Regional representative/Liaison officer.

5. ANNUAL GENERAL MEETING

The Annual General Meeting (A.G.M.) will normally be held in the last 4 months of the year.

Notification of the date, time and venue of the AGM will be made in an appropriate publication not less than three months prior to the meeting.

Reports will be submitted by the Chairman, Treasurer, Research officer, Education Liaison Officer and PRO.

All members of the national committee should be present at the AGM. At least 3 of the five executive committee members must present otherwise the AGM must be postponed and rearranged at the earliest convenient date. If a regional representative is unable to attend the National AGM then a substitute must attend.

6. PROCEDURES

1. Minutes will be taken at all meetings of the Association. These records or reports will be made available to all members of the Association on request.
2. Admission to the AGM will be by a show of current membership cards.
3. The Quorum will be one quarter (25%) at meetings of the National Committee. At the AGM the quorum will be 30 members or 5% of the membership excluding the National Committee whichever is smaller at the time.
APCP Matters

4. A special meeting of the Association may be convened by the Chair, or by a requisition in writing signed by not less than 20% of ordinary members of the Association. Notification by post will take place fourteen days before the meeting. The business at such meetings will be limited to the agenda.

5. Items for the agenda of an ordinary meeting of the Association must be submitted in writing to the Honorary Secretary at least one calendar month before the date of the meeting. Provision for any other business may be given.

6. The rules of debate at all meetings of the Association will correspond to those of the CSP.

7. Notice and agenda for all meetings of the Association will be sent in writing to those persons eligible to attend by the Honorary Secretary of the Association, at least fourteen days before the meeting.

8. Any amendments to this Constitution must be submitted in writing for consideration at the AGM, and agreed by at least two thirds of the voting members present.

9. All Regional group, Affiliated group accounts and National accounts are required to be submitted for examination by the second week in January each year. A report of the examined annual accounts will be available at regional and national AGM’s. The APCP accountants will be adopted at the AGM.

7. **CESSATION**

A recommendation for the cessation of the Association will come from the National Committee to the AGM and will only occur if agreed by at least two thirds of the voting members present. Any funds remaining after completion of all accounting procedures will pass to the Chartered Physiotherapists Benevolent Fund.

A recommendation for merger of the Association with another CIG will come from the National Committee to the AGM and will only occur if agreed by at least two thirds of the voting members present. Any accounts remaining after completion of all accounting procedures will pass to the new group.

Nothing in the Constitution, either expressed or implied, will conflict with the Charter and Bye –laws of the Parent Society. No action will be taken by the Association in any matter affecting the general policy of the CSP, without the consent of Council.

The constitution has been amended to suspend voting rights for physiotherapy assistant grades. This decision was taken following consultation with CSP.

Representation from the Moderator group of the interactive CSP website has been included at the suggestion of CSP and national committee will be able seek representation at committee meetings from other CIG’s as deemed necessary. The section stating that when an officer of the association completes their term they are unable to hold another committee post for two years has been removed. Committee members will still serve four years and may seek re-election for four more years.
Regional and Affiliated Groups’ Reports

SOUTH WEST

Our region has hosted two courses recently. Many thanks to Ruth Jacklin for hosting a Sensory integration Course in Yeovil. There was a good turnout to this interesting and informative course not to mention a great venue. The region also hosted the APCP’s Advanced Cerebral Palsy Course in Gloucester in March, a thought provoking 2 day course. The first day was on ‘assessment and clinical reasoning’ and the subsequent day on ‘evidence based practice’. Many thanks to all those who attended and helped to make this a memorable course. The excellent tutors were Adele Leake and Lorna Campbell. A course not to be missed.

The AGM is being planned for the week beginning 18th September at Salisbury District Hospital, exact date is dependent on speakers’ availability. Further details will follow on iCSP. The AGM is your opportunity to find out how the regional APCP committee runs the group, express your ideas and maybe even join us!!!

The regional committee are busy planning courses for 2006/7. We have many ideas and hopefully the willing speakers but would like these to be hosted throughout the south-west region. Suitable venues are still needed. Any offers???

Here’s looking forward to those long hot lazy days of summer (and the odd round of golf)!!

Have a good one and see you at the AGM if not before.

LYNDA NEW

SCOTLAND

Although the focus of the Regional Committee for Scotland is on the organisation of the National Conference in Glasgow in November 2006, we held a very successful study day and AGM in Edinburgh on the 17th March. Everyone thoroughly enjoyed Mary Anne Houghton’s presentation and practical session on the use of pilates in paediatrics.

Conference plans are going well. The overview of the conference programme included in our March Journal has stimulated a lot of interest amongst members and Lyn Campbell has already received five completed application forms. The Crown Plaza Hotel in Glasgow is undergoing a comprehensive refurbishment programme at the moment. This may affect the number of bedrooms available at Conference time. Taking advantage of the “early bird” application rate for Conference is recommended.

The presentation of free papers and posters is an important part of every APCP National Conference. Members are invited to contribute. For further details please contact Arlene Smillie at Camelon Health Centre, 1, Baird Street, Camelon, Falkirk. Tel 01324 679 129 or by email to arlene.smillie@fvah.scot.nhs.uk

Finally please note that my contact details have changed and were not updated in the March Journal.

Alison M Gilmour
The Physiotherapy Department
Braidburn School
107, Oxgangs Road North
Edinburgh, EH14 1ED
Tel 0131 312 23 25
Email alison.gilmour@braidburn.edin.sch.uk

ALISON GILMOUR

NORTH EAST

Our next study day is imminent. If you have not yet booked there is still time to do so.

The subject is Muscle Strengthening in CP and the course tutor is Jan Morton from Glasgow.

The day will begin with the AGM. This is your opportunity to find out what happens within APCP at local and national levels and to give your opinions. There will also be a discussion about research and we hope to be able to offer practical help for those considering embarking on research but are frightened by the prospect! As usual a tasty lunch is included in the cost, so book soon by calling 01429 522 810 or via www.interactivecsp.org.uk

We are busy planning our courses for 2006/7 and hope to be able to reveal our exciting plans before too long!

We have two new committee members in the region representing the northern reaches. We welcome any other members who would like to contribute to the valuable role of organising particularly from the East of the region, which is not represented.

Would members please check their bank statements carefully as problems with the computer system and direct debits may mean that you will need to pay by cheque this year while new mandates are set up again.

Membership renewal forms will be available at the AGM.
Regional and Affiliated Groups’ Reports

Thank you to all on the NE committee who cover huge distances to be at meetings and put together attractive study days with such great food!

HEATHER ANGILLEY

WEST MIDLANDS

I attended the working weekend in Belfast at the end of March. The aims of the weekend were to:
• begin looking at producing an APCP Competency Framework
• work on the APCP website
• review the regional constitutions and look at ways to support the affiliated groups

There should be some more information on these in the journal – so keep your eyes peeled!

A questionnaire was sent out in the last journal about assistant training, could you complete and return as soon as possible, if you haven’t already.

National Committee have requested that each region has a list of physiotherapists with a particular area of speciality, this is to enable any queries to be directed to the most appropriate person as they arise. I would be grateful if you could contact me if you are a specialist so that I can make a comprehensive list for the West Midlands, my contact details are at the back of the journal.

The APCP conference is fast approaching, we have a couple of free places to offer so if you’re interested please contact me and I can send you details of how to apply. It will probably be first come first served!

Please let me know if there are courses you would like to be run, or any other issues. Unfortunately my email address was printed incorrectly last time – it is helen.bayliss2@nhs.net.

Many Thanks

HELEN BAYLISS

NORTHERN IRELAND

We had a very successful workshop in Feb. on postural low tone instability. The committee would like to thank Felicity and Diane for all their work in organising the day. At present Deidre and Diane are organising The postural management course planned for May. The committee will meet in June to plan next years programme any comments or suggestions are always welcome. There are also empty seats on the committee so if anyone would join the team you can contact me at Kilronan School (028 79301170).

GEMMA LIPSCOMB

LONDON

Hello again. This seems to come around very quickly and, as usual, I have left it until the very last minute. Now I find myself struggling to write on a miserably wet bank holiday Monday, while a disgruntled 5-year-old can’t understand why his mother is not devoting her full attention to him.

Spring seems to have been very full. I had my first national committee working weekend, which proved challenging but enlightening. I was very impressed by the dedication of all the committee members to raise the profile of the profession and keep ahead of the game. I worked in the group looking at Paediatric Physiotherapy competencies, something I thought I knew a bit about. Well I was wrong and I certainly took a while to get my head around the subject. The group’s summaries should be in this journal. I hope I got that right!

One of the issues raised at committee was how the APCP could respond to more local requests for information or comment. Sometimes parents, membership, CSP, or the Media require local information that cannot easily be provided by National committee. If you feel able to offer yourself as a name to go on a regional list for enquiries about specific topics let me know. Enquiries would still go via the PR officer but a list would enable us to respond more appropriately and speedily.

I thought London region were all set with their lecture programme for spring and summer but we seem to have ground to a halt. After having to cancel the last lecture, sadly through lack of interest, and a combination of over commitment and problems with speaker availability we have been unable to produce and advertise our programme. I am sure by the time you read this we will be back on track. It does feel that people are being squeezed in all ways. There certainly seems to be little time for anything outside work and with the current climate I guess this will continue.

I can tell you we have Pam Versfeld talking on Myofascial release techniques in Children with co-ordination difficulties in July, and Elaine Owen as a definite (dare I say that) updating us on Orthotics in the Autumn. If you have contacted me recently with your email details I have forwarded them to Christina Rafter our secretary (raftec@gosh.nhs.uk). You will get the next circulated information hot off the press. We will be advertising on icp website (have you all signed up?) and by email flyer. If you would like a departmental flyer please email Christina the contact details.

We would be grateful for people interested in speaking to small groups i.e. up to 30 people to approach the committee themselves. Also if you have a subject you want to raise for group
Regional and Affiliated Groups’ Reports

discussion and debate the evening meeting could be a way to reach people outside your team. We are happy to provide a venue centrally and advertise and co-ordinate the event we just need enthusiasm and bodies.

I know one lucky person will have been offered a place for conference (I don’t know who yet!). If you weren’t ‘the one’ please do try to get funding and time to go. The programme looks excellent and very professional for your CPD.

I hope to report a new and improved Autumn format but rest assured we have not gone to ground. Looking forward to seeing many of you at future events.

STEPHANIE CAWKER

SOUTH EAST

Just a short report for this Journal as things are rather “quiet on the south eastern front”.

We have just run a very interesting day looking at Disability Sports. Various speakers – Special PE Teacher, elite wheelchair athlete and physios with a special interest and knowledge – came together to talk about sporting opportunities for children with disability. It was both inspirational and aspirational. Special thanks go to our newest committee member, Janine Grainge, who did a splendid job, having ‘volunteered’ at her first committee meeting to organise the venue at Dorton House. Our other new recruit, Rachel Naunton, volunteered to complete the course evaluation summary .... hurray!

The Conference Committee have been working hard to finalise dates and venues for the National Conference in 2007. The conference will be held on 9th – 11th November 2007 and the programme is now in the early planning stage. Watch out for more details and planning progresses.

Long before that comes our AGM. Last year’s afternoon lecture with cocktails and canapés proved such a popular event that we are repeating the format this year on 28th September at Bluewater. Put the date in your diary now and look out for flyers and information on iCSP and in Frontline.

As always, I am making a plea for people to come and join committee. We need new members for the SE Region committee and Conference Committee – a much shorter commitment as by 12th November 2007 it will all be over! Please do think about joining us. The time commitment isn’t huge, you get to meet lots of interesting people and extend your professional network .....it might also look good in your CPD folder! ..... plus it’s fun. My contact details are at the back of the Journal – I look forward to being inundated with e-mails!

ANN MARTIN

NEONATAL SPECIAL INTEREST GROUP

I hope as you read this you have all had a good Easter and are looking forward to a fabulous summer. Although there is little to report that does not mean we have not been busy. The flyer in the last journal was for the Neonatal course in Northern Ireland from 14-16 June. There are still some places remaining and the contact details are available from fiona.price@sth.nhs.uk

In this journal you should find the conference details for Glasgow in November. The neonatal group will have a satellite course running along side this and hopes to be every bit as successful as our first national course in Edinburgh last year. Hopefully you will be able to make the trip, and I can guarantee you will find it thoroughly rewarding and informative. This is certainly not an opportunity to be missed!

As there have been some changes to the committee I thought it would be useful to have an updated list.

Chair – Adare Brady
Vice Chair – Allie Carter
PRO/Publication Officer – Hilary Cruickshank
Secretary
APCP Liaison Officer - Barbara Haederle
Membership – Sian Howells
Multiprofessional Liaison Officer – Sally Jary
Research & Development Officer – Anna Mayhew
Treasurer – Jenny Poole
Education Officer – Fiona Price
Committee Member – Nicky McNarry
Committee Member – Helen Robinson
Committee Member – Peta Smith
Co-opted Committee Member – Finola Beattie

BARBARA HAEDERLE

CRITICAL CARE SPECIAL INTEREST GROUP

We would like to invite you to attend our study day on Tuesday 20th June 2006. It is to be held at Sheffield Children’s Hospital. The topic being ‘Haematological Considerations for the Acute Respiratory Physiotherapist’- content being Analysis of blood results, overview of CVVH, ventilation strategies and the septic neutropenic patient. The cost is £30 for APCP members and £40
Regional and Affiliated Groups’ Reports

for non-members. All are welcome, please contact Mel Lindley on 01142 717000 (Bleep 100) or at melanie.lindley@sch.nhs.uk for an application form.

At this study day in June we will hold our AGM. This will give us the opportunity to feedback from the APCP National Committee meeting which was held in Belfast in March. Two members of the committee, Dave Morgan and Michelle Mooney attended the working weekend and had the opportunity to look at our affiliated group constitution. Our next committee meeting will be held on May 11th in Leicester and progress will be reported at the AGM.

We are looking to improve our links nationally, if you know of any Paediatric Physiotherapists working in acute respiratory care please inform them of our group. For membership details please contact Mel Lindley at the above email address. Andrea Ross has been working with Lindsay Rae (PRO) to develop our APCP website link. We have also developed a formal link with the Paediatric Intensive Care Society (PICS).

Our Critical Care Group is hoping to feature in the September Journal. If anyone would like to write a case study/article please contact me ASAP at rachaelhufton@yahoo.com or call me at Manchester Children’s Hospital on 0161 794 4696 bleep 3772

RACHAEL HUFTON

NEUROMUSCULAR SPECIAL INTEREST GROUP

The Neuromuscular group had their first study day and AGM at the Patrick Centre, Birmingham Hippodrome on the 16th of March. The topic for the meeting was ‘Transition’ and addressed key issues to be considered in management and care during the transition of adolescent patients from children’s to adult services. This is a key time in the lives of our patients for many reasons: the change from child- to adulthood, from paediatric to adult services and often (as in the case of Duchenne muscular dystrophy) a time of substantial physical change as the disease progresses. Changes and improvements in the management of our patient group – such as the introduction of treatment with glucocorticoid corticosteroids, improved respiratory management and long-term ventilatory support and cardiac monitoring - have led to improved survival rates and life-spans, creating new challenges in long-term management and care, which urgently need to be considered and addressed by all involved.

The meeting was well attended with the study day being joined by physiotherapists working in adult services with an interest in neuromuscular disorders and Muscular Dystrophy Campaign’s Regional Care Advisors.

Three very interesting speakers gave presentations covering ‘Psychosocial implications of Duchenne muscular dystrophy’, ‘Respiratory management in adolescents/young adults with Neuromuscular disorders’ and the ‘Development of Transition Services’ within a specialist Neuromuscular Clinic.

A brief synopsis of each presentation is given below.

Psychosocial implications of Duchenne muscular dystrophy

Marina Morrow, Physiotherapy Clinical Specialist in Neuromuscular Disorders, Yorkhill Division, Glasgow:

In order to fully engage with patients, physiotherapists may find it beneficial to improve compliance with management programmes through working in partnership. Setting realistic goals that have involved patient participation is highlighted in literature as being the way forward when working to enhance the patient: professional partnership. However, in Duchenne Muscular Dystrophy (DMD), much of the literature describes the patient as being the family. This may require physiotherapists to have a much more in depth knowledge of the psychosocial implications that surround family life. It is believed that having a depth of understanding in this area may improve the patient partnership and develop better management strategies for those with long term chronically progressive disorders.

Respiratory management in adolescents and young adults with neuromuscular disorders

Dr Michelle Eagle, Consultant Physiotherapist, Newcastle Muscle Centre, Centre for Life

There have been significant advances over the last decade in the management of respiratory complications in various muscular dystrophies. These management and treatment strategies have substantially increased life expectancy and quality of life of young people and adults with muscular dystrophy (MD). Respiratory problems in DMD and other muscle diseases are predictable and so treatment strategies can be taught in advance and management planned. In DMD the use of steroids to prolong ambulation has been shown to impact positively on respiratory and cardiac function. When respiratory function deteriorates or during a respiratory infection, the use of a number of simple techniques can be helpful. Various devices assist deep breathing and the ‘cough assist’ will also improve the ability to cough. Other techniques such
as glossopharyngeal breathing and use of an ambu-bag to inflate the lungs, particularly when breath stacking is employed, can help especially when used with assisted coughing techniques. Respiratory muscle training is controversial but may be useful in some situations. Nocturnal ventilation is a very successful treatment for nocturnal hypoventilation which occurs when the breathing muscles are significantly weakened; and of course the ventilator can be used as an adjunct to chest physiotherapy too. Ventilation has been proven to increase life expectancy and maintain quality of life for several years but now we also need to comprehensively evaluate chest physiotherapy and clearance techniques in this group of patients. The effective and proactive management of respiratory problems associated with MD will help ensure a much improved chance of becoming an adult.

Neuromuscular Group plans for the coming year include:

- The group has outlined plans to develop a Care Pathway for the management of Duchenne muscular dystrophy, and has gained some funding to assist in this development.
- The possibility of developing a ‘rolling programme’ of workshops across the country was also raised as an area to investigate and develop.
- To develop and foster links with other special interest groups such as ACPIN and ACPRC.

The AGM was open to members of the Neuromuscular Physiotherapy Group only.

Thanks to Muscular Dystrophy Campaign for supporting our meeting.

ELAINE SCOTT

Development of Transition Services

_Ruth Barratt, Neuromuscular Nurse Specialist, Hammersmith Hospital, London_

Transition is the purposeful planned movement of teenager and young adults with chronic physical and medical conditions from child centered to adult orientated health care systems (Blum et al 1993). The National Service Framework for Children (2004) recognises transition as a process not an administratvie event. The Royal College of Nursing (RCN) Guidelines on Transition remind us that transition for teenagers should be seen within the context of the broader changes that they are experiencing. It is clear in the literature that it is not only the teenager who may need help to develop skills to manage in adult services but also parents may need some help in the ‘letting go’ process.

It is within this context that we are beginning to look at the process of transition for adolescents who have neuromuscular conditions. We have begun this process, with the help of parents and teenagers by developing a questionnaire that will help us understand the particular needs of our population of teenagers and their parents. The structure of the questionnaire is based around the currents guidelines about Transition produced by the RCN. We have had over 40% response rate to a postal questionnaire and will be working with adolescents and their parents to plan services in a workshop in June.
APPLICATION FORM FOR A.P.C.P. PUBLICATIONS

2005
Paediatric Outcome Measurement ................................................................. £20.00

2003
Special Educational Needs
Code of Practice 2001
Guidance for Paediatric Physiotherapists ....................................................... £10.00

2002
Paediatric Physiotherapy Guidance for Good Practice .................................. £5.00

Obstetric Brachial Plexus Palsy
A guide to physiotherapy management ........................................................... £10.00

Hip Dislocation in Children with Cerebral Palsy
A guide to physiotherapy management ........................................................... £7.50

Evidence Based Practice
• Management of Obstetric Brachial Plexus Palsy ......................................... £3.00
• Hip Subluxation and Dislocation in Children with Cerebral Palsy .................. £3.00
  OR ................................................................................................................ £5.00 for the pair

Paediatric Manual Handling – Guidelines for Paediatric Physiotherapists .......... £10.00

Human Postural Reactions – Lessons from Purdon Martin by Dr J Foley ............ £5.00

Baby Massage .................................................................................................... £1.50

The Children Act 1989 “A synopsis for Physiotherapists” ................................. £1.00

POSTAGE AND PACKING INCLUDED IN THE PRICE WITH ALL THE ABOVE.

FOR MORE THAN 10 COPIES OR FOR POSTING OUTSIDE THE UK – POSTAGE UPON REQUEST.

TERMS: CASH WITH ORDERS ** CHEQUES & POSTAL ORDERS MADE PAYABLE TO:
A.P.C.P. PUBLICATIONS AND INCLUDED WITH THE ORDER PLEASE.

SEND ORDER WITH PAYMENT TO:
LORNA STYBELSKA, PAEDIATRIC PHYSIOTHERAPY DEPARTMENT,
CUMBERLAND INFIRMARY, CARLISLE, CUMBRIA CA2 7HY.
WORK TEL: 01228 814739
e-mail: stybelskal@aol.com

Name and Address for Delivery: ........................................................................

..........................................................................................................................
Here and There

Developing the Early Support Developmental Journal for babies and children with Down syndrome

The Early Support Pilot Programme (ESPP) has been funded by the Department of Education and Skills to improve the quality, consistency and co-ordination of services to young disabled children and their families. As part of this programme, a national advisory group was set up to develop early support materials to use specifically with babies and children with Down syndrome. APCP were invited to provide a paediatric physiotherapy perspective to this group and I have attended several meetings as APCP representative.

The aim of this group was to develop a family friendly resource for families with a young child with Down syndrome to use alongside other generic Early Support materials. It contains information on the usual course of development for children with Down syndrome, a developmental profile for families to check how their child is progressing, and to identify areas of difficulty that may need closer attention and support. Five developmental areas are covered in the Journal: communication, social emotional, cognition and play, motor and sensory, and self help. The aim of the Developmental Journal is to enable the family to have a greater understanding of their child’s development and to be able to share this information with the professionals involved. It is hoped that all those involved with the child will use this Journal to record observations and promote a sharing of information.

It has recently been trialled with families and professionals working with children with Down syndrome. The aim of this has been to check the user friendliness of the Journal and the way families and professionals feel they might use it. We are awaiting the results of this trial.

This Journal has the potential to be a useful parent held record to track the child’s progress. It aims however, to be more than this, and to be a tool to empower parents to seek the support they need, and to ensure that services for this group of children are delivered in a co-ordinated and joined up fashion. Care will need to be taken however, as to how, when and by whom these materials are introduced and how their use is consequently followed up. Work is still in progress to ensure that these materials are in an accessible form for all parents.

As paediatric physiotherapists working with this group of children, we need to be involved in the development of this project and how it is utilised with families. This work is still in progress, but is planned to be released for general use in September this year. More information should be available at Conference in November and in the next Journal.

For further information on Early Support and on this project see www.earlysupport.org.uk

Sarah Crombie
CD Review

Physio Tools: Children with Motor Delay
Sarah Crombie, Senior Physiotherapist, St. Richard’s Hospital, West Sussex

This new Tools RG Module is based on Sarah Crombie’s book ‘Physiotherapy Home Programmes for Children with Motor Delay’. It is intended for physiotherapists and occupational therapists who wish to give individualised advice/programmes to parents and carers involved with the physical management of children with motor delay or dysfunction.

The programme consists of suggested activities to help encourage motor development, ideas to promote relaxation and tone reduction and lifting and carrying techniques for small infants. It also covers specialised stretching techniques for paediatric conditions and pages for individualised treatment aims or goals.

It is easy to use and allows the therapist to choose the most appropriate activities by selecting them from different criteria.

Sort 1: Baby/Infant, Child, Information


Sort 3: Advice Note, Positioning, Home Exercises, Development, Relaxing Techniques, Lifting and Carrying, Activities in One Area, Moving between Positions.

We particularly liked the examples on how to move a child between different positions which give clear sequences. The section titled ‘Activities in One Position’ is useful for giving ideas to parents on how to encourage functional activity in supported positions. The illustrated activities can be given to parents following treatment sessions to enable them to continue treatment at home or, because the pictures and text are clear, some activities can be issued without the need for demonstration. As usual all diagrams come with suggested text which can be modified to suit the individual child or situation.

Disappointingly the section titled Splint Instructions contains only advice on how to put on an Ankle Foot Orthosis. We felt that it would have been useful to include the application of Thoraco-Lumbar-Sacral Orthoses, Dynamic Ankle Foot Orthoses and other upper and lower limb splints. The walking exercises only showed supported walking using different hand holds the inclusion of walking aids would be useful to show a parent how to encourage independent mobility.

As well as illustrations there is written advice for parents on how to communicate and play with their child. We felt that this information was useful to give to parents to support verbal and practical teaching but shouldn’t be given in isolation.

Overall we feel that this new module is a useful addition to Physio Tools and will aid communication between all involved with a child’s care.

Vickie Brant and Clare Emery
Senior Physiotherapists
Chailey Heritage Clinical Services
MOVING FORWARD – Challenging Expectations

FRIDAY
1.00 CONFERECE OPENING & WELCOME  Alison Gilmour (Chair APCP Scotland)
1.20 KEYNOTE SPEAKER
Moving Forward to a Healthier Future  Professor Phil Harlon
Dr Paul Eunson
2.00 Intrathecal Baclofen  Professor Gordon Dutton
2.45 Visual Problems
3.30 TEA
4.00 Current Issues in PICU Physiotherapy  Elaine Dhoudieb
4.45 Paediatric Intensive Care and Physiotherapy  Dr Ulf Theiland
5.30 OPENING of EXHIBITION & ‘A Taste of Scotland’
6.15-7.00 Workshops
• Neuro-biomechanical aspects to gait problems  Dr Barry Meadows
• Kids & Physios having a Ball (Swiss Ball)  Joanne Elphinstone

SATURDAY
9.00 CHAIR Kendryck Lloyd Jones (CSP Policy Officer Scotland)
9.05 KEYNOTE SPEAKER
Moving Forward – Chaos or Development?  Dr Laila de Grout
Movement for Learning & Life (MOVE)  Christine Shaw
10.15 COFFEE
10.45 The Changing Panorama of Neurological Physiotherapy  Dr Margaret Mayston
Neonatal Programme: Early intervention  Dr Laila de Groot
11.50 ANNUAL GENERAL MEETING
12.45 LUNCH
1.45 Balance, Education & Movement – getting BEAM into the curriculum  Anne Finlayson/Dianne Rickard
Neonatal Programme: Neuro - anatomy and physiology of dystonia/dyskinesia and basal ganglia dysfunction – lessons of deep brain simulation in children  Dr Jean-Pierre Lin
2.30 Physiotherapy in Neuromuscular Disorders  Marina Morrow
3.00 Genetic Implications in Neuromuscular Disorders  Dr Douglas Wilcox
Neonatal Special Interest Group Annual General Meeting
3.30 TEA
4.00 FREE PAPERS
Neonatal Programme: Neonatal Programme  Dr Laila de Groot
Guidelines for Essential Medical Surveillance for Children with Downs Syndrome  Dr Patricia Jackson
5.30-6.00 ‘Spot the Differences’ in service provision around the UK  Linda Fisher & Team

SUNDAY
9.00 CHAIR Eva Bower
Paediatric Rheumatology  Dr Janet Gardner Medwin
The Evolution of NIV in Acute Paediatrics  Melanie Lindley
10.30 COFFEE
11.00 Advances in Spinal Surgery in Children  Mr Ian Harding
12.00 CONFERENCE CLOSE
**APCP CONFERENCE**
**GLASGOW 2006**
**10th - 12th November**
(including Neonatal Group Conference
Saturday 11th November)

**DELEGATE NAME**

<table>
<thead>
<tr>
<th>Title:</th>
<th>First Name:</th>
<th>Surname:</th>
</tr>
</thead>
</table>

If you are attending the **NEONATAL GROUP CONFERENCE** on Saturday 11th please tick the following box & complete the relevant boxes from Packages 1, 2 or 3

The following are the 3 individual packages you may choose from - Please appropriate □

**PACKAGE 1 - RESIDENTIAL**
This is the **FULL** conference package & includes: shared accommodation on Friday & Saturday nights at the Crowne Plaza Hotel, all daytime catering, plus ‘Taste of Scotland’ on Friday between 1730 - 1900, entry to all lectures and your selected workshop session on Friday

(Overnight B&B is based on 2 sharing accommodation. Single rooms are available at a £37.50 supplement per night)

*Please see over for workshop list and indicate your choice*

<table>
<thead>
<tr>
<th>Twin en suite (per person)</th>
<th>£265 □</th>
<th>£285 □</th>
<th>£280 □</th>
<th>£300 □</th>
</tr>
</thead>
</table>

Please give name of person with whom you will share:

Please allocate me a delegate with whom I will share:

<table>
<thead>
<tr>
<th>Single en suite</th>
<th>£340 □</th>
<th>£360 □</th>
<th>£355 □</th>
<th>£375 □</th>
</tr>
</thead>
</table>

**PACKAGE 2 - NON RESIDENTIAL**
This includes entry to all lectures, all daytime catering plus ‘Taste of Scotland’ on Friday from 1730 - 1900, but NO overnight accommodation

*Please see over for workshop list and indicate your choice*

<table>
<thead>
<tr>
<th>Attending Full Conference</th>
<th>£160 □</th>
<th>£180 □</th>
<th>£175 □</th>
<th>£195 □</th>
</tr>
</thead>
</table>

**PACKAGE 3 - DAY & HALF DAY RATES (Non Residential)**
*Please see over for workshop list and indicate your choices if applicable*

<table>
<thead>
<tr>
<th>Early Bird before 01/09/06</th>
<th>Booking after 01/09/06</th>
<th>Amount to Pay</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Friday PM</strong> includes entry to lectures, workshop, refreshments &amp; ‘Taste of Scotland’</td>
<td>£50 □</td>
<td>£60 □</td>
</tr>
<tr>
<td><strong>Saturday All Day</strong> includes entry to lectures, lunch &amp; refreshments</td>
<td>£80 □</td>
<td>£90 □</td>
</tr>
<tr>
<td><strong>Sunday AM</strong> includes entry to lectures &amp; refreshments</td>
<td>£45 □</td>
<td>£55 □</td>
</tr>
</tbody>
</table>
Please ✓ ☐ to indicate your preferred workshop
(Limited number of places available)

Friday Workshops 6.15 - 7.00pm

Neuro-biomechanical approach to gait problems Dr Barry Meadows ☐

'Kids and Physios having a ball' (Swiss Ball) Joanne Elphinstone ☐

Please ✓ ☐ to indicate if you wish to attend

OPTIONAL EXTRAS
Saturday evening Conference Dinner & Ceilidh £25.00 ☐

After dinner speaker - Muriel Gray

Amount to Pay

£

Would Honorary members please tick the following box if they wish to attend the Conference Dinner ☐

POSTAL ADDRESS for Correspondence (receipt, pre-conference info etc)

Email: .......................................................... Tel: ..................................................

Place of Work (to appear on conference badge):

National Committee Member: Yes/No

APCP No & Region:

Organising Committee Member: Yes/No

Please tell us if you have any special requirements? (diet, mobility etc):

Payment:

CHEQUES should be sent with application and made payable to: 'APCP Conference Fund'

Please write your name and address on the back of the cheque.

TOTAL AMOUNT - to include either Package 1, 2 or 3 plus Conference Dinner (if applicable) £

TOTAL AMOUNT TO PAY £

Please submit your registration form (as early as possible to receive the discount) to:

Lyn Campbell (APCP Conference)
16 Cammo Walk
Edinburgh EH4 8AN
0131 539 0619

Home email: campbell.l6@blueyonder.co.uk
Work Email: lyn@craigetalbert.org.uk

Please ensure your payment is sent with your application and
enclose a SELF ADDRESSED A5 STAMPED ENVELOPE for pre-conference information

RESIDENTIAL Registration Forms must be received by 9th October 2006
NON RESIDENTIAL Registration Forms must be received by 27th October 2006

Cancellations will be refunded up until the closing date of the 27/10/06 but are subject to a £25 administration
fee, however substitute delegates are welcome at no extra cost

For information on booking alternative accommodation please contact:

www.visitscotland.com or telephone: 0141 204 4400 or
adjacent to the Crowne Plaza is the City Inn at www.cityinn.com
APCP CONFERENCE GLASGOW

NOVEMBER 10th – 12th 2006

CALL FOR ABSTRACTS

If you are interested in submitting an abstract for a Poster or Oral Presentation please contact:

Arlene Smillie at Camelon Health Centre, 1, Baird Street, Camelon, Falkirk
On 01324 679 129 or by email at arlene.smille@fvah.scot.nhs.uk

NOTICE

The 33rd Annual General Meeting
of the
Association of Paediatric Chartered Physiotherapists
will be held on
Saturday 11th November
at
The Crowne Plaza Hotel, Glasgow
beginning at 11.50 am

All paid up members of the Association are entitled to attend. Voting will be restricted to full members of the Association and a current membership card will be required.

Minutes of the last AGM are available from the Secretary by email or on receipt of a S.A.E.

Notification of committee vacancies:
There will be one vacancy. The retiring member is Lesley Smith. Nominations should be sent to the secretary by the end of September 2006 together with names of a proposer and seconder who must be members of the Association.
Would you like to show evidence of CPD as an advanced practitioner in the area of adult neurological rehabilitation or paediatric neurorehabilitation?

The School of Healthcare Studies, Cardiff University, is offering the above two courses for physiotherapists and occupational therapists. The courses aim to provide qualified physiotherapists and occupational therapists with the knowledge and skills necessary to become advanced practitioners in adult neurological rehabilitation or paediatric neurorehabilitation (dependent on which course is followed). Both courses will run over one year, totalling 60 M level credits and will include both theoretical and practical study into the assessment and intervention of children or adults with neurological dysfunction from a holistic viewpoint. The child modules will have a particular emphasis on those with sensory-motor deficit.

If after successful completion of the PgC students wish to continue with their postgraduate studies, they will be able to go onto a Postgraduate Diploma or Masters degree in either Occupational Therapy or Physiotherapy.

Application forms and further information can be obtained from Marie Nation, Postgraduate and Continuing Education Unit, School of Healthcare Studies, Ty Dewi Sant, Cardiff University, Heath Park, Cardiff CF14 4XN, tel 029 20745296, e-mail KaneMJ1@Cardiff.ac.uk

Honorary Membership of APCP

Honorary membership is open to all professionals who have made a significant contribution to paediatrics.

The retiring chairman of the Association will automatically become an Honorary member. Nominations for honorary membership, with proposers, seconds and full details, should be sent to the Secretary for the national committee meeting July 7th 2006.

The National Committee will then have the sole right to submit the names of the persons thought suitable to the A.G.M. of the Association for possible election, usually by a show of hands. If fulfilling the criteria for full membership Honorary members will retain full voting rights.
The aim of the APCP Journal is a forum to disseminate original research, facilitate continuing education for paediatric physiotherapists and provide an opportunity to debate all controversial issues.

Most articles should be no longer than 3,000 words excluding references and abstract. The types of article identified to achieve these aims include:

### Peer reviewed articles

Papers submitted under this section are all reviewed blind.

- **Research Report**

  A report which permits examination of the method, argument and analysis of research using any method or design (quantitative, qualitative, single case study or single case design etc).

- **Scholarly paper**

  A paper sharing ideas and experience or reviews in a specific area of practice

- **Audit Report**

  A report which contains examination of the method, results, analysis, conclusions and service developments of audit relating to children and physiotherapy, using any method or design.

- **Review Paper**

  A critical appraisal of primary source material on a specific topic related to children.

- **Treatment Report/Case Studies**

  A report of the treatment of a child or series of children which provides a base line description of established treatments, or a new insight into the techniques or treatment of children with a specific problem.

  Case reports should be no longer than 2,000 words.

- **Technical Evaluation**

  A description of a mechanical or technical device used in assessment, treatment, management or education to include specifications and summary evaluation.

### Other types of Editorial Material

- **Abstracts of Theses and Dissertations**

  Abstracts from research projects, including those from undergraduate or higher degrees, audits or presentations. They should be up to 300 words and where possible the conventional format: introduction, purpose, method, results, discussion, conclusion.

- **Letters and replies to APCP**

  These can be about any issue pertinent to paediatric physiotherapy or APCP. They may relate to material published in the previous issue(s) of the APCP journal. Copies of replies to editor.

- **Book reviews – up to 500 words**

### Preparation of Editorial Material

Copy should be produced in Microsoft Word. Wherever possible diagrams and tables should be produced in electronic form, e.g. Excel, and the software used clearly identified.

The first page should give:

- The title of the article
- The names of the author(s)
- A complete name and address for correspondence
- Up to three relevant professional and academic qualifications for all authors and their current positions
- Any source of funds supporting the work
- The title, date and location of the conference if the paper is an adaptation of a presentation.

### All Peer-reviewed Articles

The title page should give:

- The title of the paper
- Up to five key words.
- A structured summary of no more than 300 words explaining the purpose and summarising the key points and conclusions. For research reports this should be under the headings of:
  - Background and Purpose
  - Methods
  - Results of Findings
  - Conclusion
Writing for the APCP Journal

Copy should be:

- typed or printed
- double spaced
- on one-sided A4 paper with at least a 1” margin all round
- Consecutively numbered
- include the name, qualifications, current position, and contact address of the author(s).

The text should be well organised and written in simple and correct English under appropriate headings. The positions of tables and figures should be indicated.

References

References should be in the Harvard style:

In text, cite only the author(s) surname(s) followed by the date of publication, e.g. (Robinson, 1994) or Robinson (1994). Use a, b, etc, to indicate more than one publication by the same author(s) in the same year (e.g. 1992a, b). For three or more authors of a cited paper, name the first followed by et al, e.g. (Smith et al, 1990).

In the reference list, include articles in journals and books alphabetically by author. For citations from journals, give the names and initials of all authors (year of publication), title of the article, full name of the journal, volume number, issue number and first and last page numbers, e.g. Brown, A, Green, B and Gold, C (2001). ‘The value of exercise’, Physiotherapy, 87, 1, 77-79.

Referring to books, give the names and initials of all authors/editors (year of publication), title, publisher, place of publication, and the chapter number or the page number of the citation or both, e.g. Gardner, M (2001). The Annotated Alice, Penguin Books, Harmondsworth, Chap 10, page 210.

Tables

Give them an appropriate title and number them consecutively as they are referred to in the text. Use only horizontal lines. Explain all abbreviations in a footnote. Place tables on a separate sheet after the references.

Figures and photographic images

Number them consecutively as they are referred to in the text and place on separate sheets after the tables. List all captions (legends) on a separate sheet.

Permissions and Ethical Certification

Protection of subjects: Written permission from children, parents or guardians to publish photographs of recognisable individuals must be enclosed with the material, or obscure facial features. For reports of research involving people written confirmation of informed consent is required.

Any paper based on a study of children, families or staff, submitted to the APCP journal, must have received ethical approval and state by which REC committee. If for any reason your study is exempt, you must make a statement with the covering letter explaining why it is not applicable.

The use of names for children is encouraged in case studies for clarity and humanity, but they should not be their real names.

Submission of Articles

A disk or CD Rom and 2 hard copies of each article should be sent with a covering letter from the principal author stating the type of article being submitted.
THE APCP RESEARCH GROUP REGISTER

If you would like to be a member of the APCP research group, please fill in the form below and return it to Jeanne Hartley, Research Officer, Physiotherapy Department, Great Ormond Street Hospital, London WC1N 3JH. This information will be used to inform you of research study days and help us to learn more about our members’ research interest.

<table>
<thead>
<tr>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contact</td>
</tr>
<tr>
<td>Address</td>
</tr>
<tr>
<td>Post Code</td>
</tr>
<tr>
<td>Tel. No.</td>
</tr>
<tr>
<td>Fax No.</td>
</tr>
<tr>
<td>E-Mail:</td>
</tr>
</tbody>
</table>

What are your research interests?

Are you undertaking any type of research project large or small? **YES/NO**
If yes please give a brief summary . . .

Would you be happy for other physiotherapists with similar research interests to be put in touch with you? **YES/NO**

*Thank you for completing this form.*
# National Committee Officers and Members

**Chairman**
- Lesley Smith
  - Physiotherapy Dept
  - Royal Hospital for Sick Children
  - York Hill NHS Trst, Dalhousie St,
  - Glasgow G3 8JH
  - lesley.smith@yorkhill.scot.nhs.uk

**Vice-Chairman**
- Peta Smith
  - Physiotherapy Dept
  - Mary Stuart Centre
  - 43 New Dover Rd,
  - Canterbury CT1 3AT
  - peta.smith@kidst.nhs.uk

**Secretary**
- Laura Wiggins
  - 26 Braidpark Drive
  - Giffnock
  - GLASGOW G46 6NB
  - laura.wiggins@ntlworld.com

**Treasurer**
- Fiona Dow
  - 5 Home Farm Close
  - Hilton
  - HUNTINGDON
  - Cambs PE23 9QW
  - fiona.dowen@btinternet.com

**Public Relations Officer**
- Lindsay Rae
  - Physiotherapy Dept
  - The Children's Hospital
  - Steelhouse Lane
  - Birmingham B4 6NH
  - lindsay.rae@bch.nhs.uk

**Education Officer**
- Adie Leake
  - Senior Lecturer in Physiotherapy
  - School of Health & Social Care
  - College of Pre-Cert Campus
  - Sheffield Hallam University
  - Sheffield S10 2BT
  - a.c.leake@shu.ac.uk

**Publications Officer**
- Lorna Stybelska
  - Paediatric Physiotherapy Dept
  - Cumberland Infirmary
  - Carlisle
  - Cumbria CA2 4HY
  - stybelskal@aol.com

**Membership Secretary**
- Susan Cleverley
  - Physiotherapy Dept
  - Orchard House
  - Chichester PO19 6PQ
  - susan rideout@hotmail.com

**Editor**
- Terry Pountney
  - Chasley Heritage
  - Clinical Services
  - North Chasley
  - East Sussex BN4 7NH
  - Terry.Pountney@southdowns.nhs.uk

**Research**
- Joanna Hartley
  - 36 Cascade Avenue
  - Muswell Hill
  - London N10 3PU
  - joannehartley@hotmail.co.uk

**CIG Liaison/Diversity Officer**
- Sue Coombe
  - Jenny Lind Physiotherapy Dept
  - Norfolk & Norwich University Hospital NHS Trust
  - Colney
  - Norwich NR4 7UZ
  - sus.coombe@nnuh.nhs.uk

**Committee Members**
- Sarah Crombie
  - 10a Record Road
  - Emworth
  - Hants PO10 7NS
  - scrombie@outlook.com

- Linda Fisher
  - Special Educational Needs and Pupil Support Services
  - South Essex, Area Education Office
  - The Knees
  - Basildon SS16 SRX
  - linda.fisher2@essexcc.gov.uk

- Sally Braithwaite
  - 531 Church Road
  - Yattendon
  - Berkshire RG33 8GC
  - Sally.Braithwaite@btinternet.com

- Chris Sneade
  - Child Development Centre
  - Alder Hey Children's Hospital
  - Eaton Road
  - Liverpool
  - L65 1SU
  - Chris.Sneade@rcl.nhs.uk

**Co-opted National Committee Member**
- Ruth Jacklin
  - Paediatric Physiotherapy
  - Child Development Centre
  - Shugnave Park Hospital
  - Truro
  - Cornwall
  - SOMERSET TA1 5DA
  - ruth.jacklin@st.nhs.uk

---

# Regional & Sub-Group Representatives

**East Anglia**
- Stephanie Cavker
  - Physiotherapy Dept
  - McKeenburgh Square
  - LONDON
  - WC1N 2AP
  - cawkes@gosh.nhs.uk

**South West**
- Lynda New
  - Physiotherapy Dept
  - Milestone School
  - Lonford Lane
  - Gloucester GL2 9EU
  - Lynda.New@glos.nhs.uk

**South East**
- Ann Martin
  - Children's Therapy Centre
  - Goldie Leigh
  - Lodge Hill
  - SE2 0AY
  - annmartin775@hotmail.com

**South West**
- Diane Rogers
  - Head of Children's Physiotherapy
  - Room 386
  - Paediatrics North Corridor
  - UHW CF14 4XW
  - rogersd@cardiff.ac.uk

**North West**
- Elaine Lloyd
  - Physiotherapy Dept
  - Booth Hall Children's Hospital
  - Charlton Road
  - Manchester
  - M9 7AA
  - elaine.lloyd@cmmc.nhs.uk

**North East**
- Claire Hill
  - Physiotherapy Dept
  - Sheffield Children's Hospital
  - Western Bank
  - Sheffield
  - S10 2TH
  - claire.wagstaff@talk21.com

**Trent**
- Felicity Dickson
  - Scrafo Children's Centre
  - Aird Community Hospital
  - Church Street
  - NewtonARDS
  - BT23 4AS
  - felicity@dickson22.fsnet.co.uk

**South East**
- Lynda New
  - Physiotherapy Dept
  - Milestone School
  - Lonford Lane
  - Gloucester GL2 9EU
  - Lynda.New@glos.nhs.uk

**North East**
- Helen Bayliss
  - Sandwell PCT
  - The Crest
  - All Saints Way
  - West Bromwich
  - helen.bayliss@nhs.net

**Overseas**
- Heath Angilley
  - 5 The Ridgeway
  - Guisley
  - LS20 8FA
  - hangilley@aol.com

**Trent**
- Ruth Jacklin
  - Paediatric Physiotherapy
  - Child Development Centre
  - Shugnave Park Hospital
  - Truro
  - Cornwall
  - SOMERSET TA1 5DA
  - ruth.jacklin@st.nhs.uk

**Neonatal Care Group**
- Barbara Haederle
  - SJUH
  - Child Development Centre
  - Beckett Street
  - LEEDS LS7
  - peterbop@tesco.net

**Critical Care Group**
- Rachel Hufston
  - Physiotherapy Dept
  - Royal Manchester
  - Children's Hospital
  - Hospital Road
  - Pendlebury
  - Manchester M24 4HA
  - rachel.hufton@cmmc.nhs.uk

**Neuromuscular Group**
- Gill Holmes
  - Gait Laboratory
  - Alder Hey Children's Hospital
  - Eaton Road
  - Liverpool L12 2AP
  - gill.holmes@rlc.nhs.uk
In this issue:

Variability in the Physiotherapy Treatment of Talipes Equinovarus

The challenge of providing evidence-based physiotherapy to infants with obstetric brachial plexus palsy: A critical review of the literature