JOURNAL AND NEWSLETTER OF THE
**ASSOCIATION OF CHARTERED
PHYSIOTHERAPISTS INTERESTED
IN NEUROLOGY**

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Syn'apse

JOURNAL AND NEWSLETTER OF THE **ASSOCIATION OF CHARTERED PHYSIOTHERAPISTS INTERESTED IN NEUROLOGY**

- Later stage recovery following severe brain injury – identifying the evidence
- Guidance for use of a treadmill with bodyweight support for neurological patients
- CSP Congress 2003 – ACPIN programme abstracts
- Focus on: Progressive supranuclear palsy

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ACPIN'S AIMS

1. To encourage, promote and facilitate the exchange of ideas between ACPIN members within clinical and educational areas.
2. To promote the educational development of ACPIN members by encouraging the use of evidence-based practice and continuing professional development.
3. To encourage members to participate in research activities and the dissemination of information.
4. To develop and maintain a reciprocal communication process with the Chartered Society of Physiotherapy on all issues related to neurology.
5. To promote networking with related organisations and professional groups and improve the public's perception of neurological physiotherapy.
6. To encourage and participate in the setting of guidelines within appropriate areas of practice.
7. To be financially accountable for all ACPIN funds via the Treasurer and the ACPIN committee.

Contents

From the Chair

Linzie Bassett MCSP SRP
ACPIN Chairperson

Welcome to the Autumn/Winter edition of *Synapse*. As we neurophysiotherapists are aware, in 2001 The Government announced a national service framework on long-term conditions with the aim of setting national standards of health and social care. The NSF is due to be published next year and implemented over the next ten years.

The *Physiotherapy and long term conditions* supplement produced by the CSP – September 2003 describes the focus of the NSF being 'principally neurological conditions' and that 'physiotherapy is at the heart of the care of those with long term conditions'.

We, as neurophysiotherapists, should welcome such a document, and construct an implementation plan as identified in the supplement, ie identifying stakeholders, auditing and evaluating good practice, and developing allied health profession groups. This is the ideal document to promote neurological physiotherapy.

At the recent Labour Party Conference, Phil Gray (CSP Chief Executive) said 'physiotherapists provide essential rehabilitation care for people with conditions like multiple sclerosis' (*Therapy Weekly*). He informed The Government that they need to invest in the physiotherapy workforce in view of the forthcoming NSF.

The NSF will be complemented by the NICE guidelines on MS pack for physiotherapists co-ordinated by Jacqueline Stevenson and Jill Anderson which is due out later this year.

Consultation has also been sought on the NICE guideline on tumours of the brain and CNS.

Last month ACPIN was approached to nominate a member to be considered as a representative for the Allied Health Professionals on a steering group of a new modernisation agency on neurology services, looking to improve quality and access of the service. Two representatives from AHPs would be selected and I am delighted to inform you that Ros Wade (Superintendent Physiotherapist, RD&E, Exeter) was successfully chosen as one of the representatives. She will update ACPIN as to the progress of the steering group.

I mentioned in my last address that the Executive committee was in the process of drafting a new ACPIN Constitution, the final draft is printed in this edition (see pages 28-30) and we value your comments by 28th February 2004. The new constitution, if acceptable to members, will be ratified at the next AGM.

Membership this year has broken all records with a total of 1,410 members! A huge thanks you to all our members for their continued support and encouragement. A new membership form is enclosed with an increase in fee to £25.00 – see the financial report from Jackie Sharp (ACPIN News, page 26).

Synapse continues to provide the vital communication link between members and the National Committee. Louise Dunthorne is working alongside the original *Synapse* team and will take over the role as co-ordinator for the next edition.

ACPIN was recently approached to act as a consultant by scriptwriters for two popular television series. It was interesting to see the storylines develop, and exciting to think ACPIN had been involved in promoting neurophysiotherapy to such a wide audience. Unfortunately, we have at this point been sworn to secrecy as to the programmes and the storylines involved but we will inform you as soon as possible so you too can follow the story!

The use of outcome measures remains one of ACPIN's planned projects and we are hoping to link up with Dr Sue Mawson and Dr Sarah Tyson to develop this rather than trying to reinvent the wheel. Ideas are welcomed from members on this issue: What do you need/want?

Our 4th CSP Congress programme on Progressive Disorders will have taken place by the time you receive this copy. The programme proved to be extremely popular with excellent attendance for all lectures. The feedback so far appears to be very positive with a good range of topics covered, in a 'lovely auditorium' – even if it was 'chilly at times'!

The option of receiving copies of all the Powerpoint presentations was yet again commented on by the delegates, As stated in the Spring edition of *Synapse* (page 23), this is not a viable option and would prove to be extremely costly, time consuming and would add extra pressure for speakers to finalise their lecture.

The fringe meeting was timetabled at 6.30pm to allow members to attend the CSP AGM – this is accordance to CSP regulations.

ACPIN's next conference and AGM is on Saturday March 20th 2004 at the Hilton Hotel, Northampton. The theme is 'Exploring Gait' and we are delighted to welcome many new and eminent speakers to discuss such a complex topic. A full programme and application form is enclosed and this year we are offering 'early bird' conference fees so do remember to book early!

Our second conference next year will be on the topic of 'Neuro-physiotherapy and its clinical relevance', the venue and date to be decided.

The next residential conference is planned for March 2006 and planning will commence spring 2004, the committee seeks ideas for the theme or recommended speakers. Please email me at the address below.

Janice Champion, who was the long-standing Regional representative for Kent, resigned in the summer – we wish her well and thank you for all her hard work promoting Kent ACPIN.

I will be resigning as Chair in March 2004 after many happy years on the National Committee. It has been encouraging and reassuring to see ACPIN go from strength to strength. I can retire in the knowledge that ACPIN will continue to prosper under the guidance of current Vice-Chair Nicola Hancock and the National Committee. My horizontal filing cabinet alias my dining room table may revert back to its original 'ACPIN-free' status! Until then I look forward to bringing you my final report next spring

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STOP PRESS!
Watch out for Terry's stroke and recovery in *Emmerdale*, from October 23rd 2003.

The politics of patient care

Professor Raymond Tallis
ACPIN President

In a previous column, I commented on the present government's mania for setting targets. I have come to the conclusion that it reflects their attitude to professionals. It could be summarised in four words: They don't trust us. And their response to this distrust could be summarised in three words: Regulation, regulation, regulation. The new over-arching Council for the Regulation of Healthcare Professionals (created in the wake of the Bristol Inquiry) has powers to force through changes to, and indeed to regulate, the bodies that the professions set up many years ago to regulate themselves.

Self-regulation is one of the most important distinguishing marks of a profession. Erosion of this mark of trust is a fundamental assault on professional autonomy. There are other assaults. No reader of *Synapse* will be unaware of the extent to which the present government – notwithstanding its rhetoric about giving power and freedom to 'front-line workers' – is obsessed with micro-management of the NHS. A 'sea of parchment' pours out of the Department of Health bearing guidance, guidelines, menaces and warnings. Targets, star ratings and league tables are all ways of subordinating professional judgement of what counts as good practice, and what should be regarded as priorities, to the needs of politicians who want to seem to be doing something in response to the latest 'scandal' identified by the media.

Politicians assume that, without their threats and promises, professionals would not be interested in improving their services and would not be able to identify priorities that matter to patients.

This is, of course, tosh. Speaking personally, I am sick to death of insolent politicians talking of 'reforming' the health service. In fact, all of the real advances in the quality of care provided by the NHS have been initiated by clinicians – physiotherapists, doctors, nurses and so on – supported by enlightened front-line managers. Stroke units were not created by a Select Committee of MPs. Furthermore I cannot recall the name of any Health Minister who helped to gather the evidence that showed that they had such a dramatic effect in saving lives and reducing disability. The changes introduced by successive governments have largely been structural reorganisations most of which have been a flop[1]. These have been immensely costly, have always added to the number of non-clinicians on the NHS payroll, have been vastly time-consuming for clinicians trying to come to grips with new bodies and new acronyms, and have usually been reversed within a few years. The achievements of clinicians in constant, incremental improvement in patient care is doubly commendable against this permanent background of 're-disorganisation', especially since the service has always been seriously under funded. (This year I celebrated my 21st anniversary as a consultant and my 21st successive year of 'cost improvement programmes' – or cuts.)

High profile government targets rarely produce lasting improvements in overall patient care, even when they are achieved. As *The Guardian* recently pointed out[2], they are achieved more through fear of Whitehall retribution than sustainable efficiencies. There is also the problem of 'collateral damage' – or 'the bump in the carpet': when you flatten the bump in one place (say, reduce waiting times to see a consultant) you create an even bigger bump elsewhere (the waiting time to receive definitive treatment for the conditions that took you to the consultant in the first place). There is a trade off of quantity against quality: more usually means worse. The patients get a hurried consultation or a mere 'lick and a promise' of therapy before we move on to the next patient. There is little or no time to respond to the special needs of more complex patients. Meanwhile resources are wasted monitoring the heights of the different bumps in the carpet and reorganising services with the sole aim of flattening them. (It is not surprising that, as from January this year, the number of managers in the NHS – 210,000 – exceeded the total number of beds – 199,000).[3]

Those of us whose main concern is with patients who have chronic neurological diseases have been particularly unimpressed by politically inspired priorities. Because *The Daily Mail* or *The Sunday Sport* doesn't make a fuss about rehabilitation, the inadequate amount of physiotherapy received by stroke patients is unlikely to keep a minister awake at night. Even if promises are made, the minister won't be held to account if they are not kept. Remember the NSF for Older People? Remember the Standard for Stroke? (I do, because I was intimately involved in writing it and I still bear the scars of the gruelling battles with policy wonks in the Department of Health who were not terribly interested in 'Evidence-Based Practice' if it was going to upset the Treasury). The impression I get from talking to ACPIN members is that the amount of physiotherapy received by stroke patients has fallen rather than risen since the NSF was published in April 2001. (I am delighted that ACPIN are about to embark on a survey to see whether this impression is true.) At any rate, the most recent Royal College of Physicians audit indicated that the 2004 target that 100% of patients should be admitted immediately to a designated stroke unit and remain there until it was appropriate for them to move on would be achieved in 2073. Too late for my stroke, and probably for yours.

So what are we to do, when faced with politicians and policy wonks undermining our independence and determining priorities over the heads of professionals? We have to remind ourselves what we have and they don't: expertise (knowledge and skills), experience and commitment. Politicians come and go. John Reid, our present Secretary of State has had five posts in almost as many months. His advisors are remote (in every respect) from the realities of clinical care. Even those healthcare professionals working in the Department of Health will have given up front-line practice many years ago and they will often be bound by an over-riding concern not to rock the boat.

It is because knowledge and expertise is what distinguishes a professional from the politicians, civil servants and senior managers who would presume to prescribe and monitor everything that we healthcare workers and managers on the ground actually do that we should value it all the more. Which brings me to the point of this cry of rage. At the heart of professional expertise - along with our compassion and commitment (something that patients understand but politicians don't) – is knowledge. Against the evidence-free rhetoric of the politicians and the media commentators, we can offer an increasingly robust body of knowledge. The commitment to evidence-based practice is one of the key justifications of our right to self-regulation and to setting the priorities for the service.

There has never been a time when practitioners in all healthcare disciplines have been more committed than the present to basing practice in evidence. While some therapists might worry that much of what they do isn't supported by randomised controlled trials and meta-analyses, the evidence-base is a thousand times more impressive than that which informs government policy – particularly that which has driven the structural changes in the NHS over the last 30 years. Moreover, progress towards evidence-based practice over the last decade or so has been simply astonishing. What's more, the novel therapeutic approaches that are being developed and evaluated are now more than ever rooted in science – and not only the biomedical sciences but also the social sciences.

It is for this reason that I believe the report of the Working Group of the Academy of Medical Sciences[4] may be of importance for all of us involved in neurorehabilitation. The Academy of Medical Sciences was established in 1997 with the aim of ensuring that advances in science are translated as soon as possible into benefits for patients. The Academy has equal numbers of clinicians and biomedical scientists. The Report, which highlights the importance of neurodisability as the key challenge to the NHS over the next few decades, examines the opportunities for new treatments arising out of recent spectacular advances in neuroscience. It notes the barriers in the way of using those advances for creating and evaluating new strategies for helping our patients. Finally, it makes a series of recommendations – addressed as much to policymakers as to professionals – as to how scientists and clinicians might work together more effectively, on a larger scale and in a more coordinated way. It also suggests how academic clinicians might work more closely with practitioners who may not wish or have the time to carry out or initiate research of their own but who have much to offer with respect to developing realistic study designs, patient recruitment, and so on. The report proposes the establishment of regional neuroscience research centres, where specialist services, universities and strategic health authorities can collaborate in supporting large-scale research programmes funded by the usual grant-giving bodies and in advancing the research training of clinicians and basic scientists to participate. There are some very specific recommendations for addressing the serious shortfall in researchers, including research-active physiotherapists.

The report has much else in it, and some of its recommendations may be open to criticism. This is why we have put it out to consultation – to clinicians, researchers, researcher funders, universities, heads of schools, policymakers and others - and have allowed a generous consultation period. ACPIN members will be key consultees and I have already had some very helpful informal comments from some people. The report has been sent out in hard copy to designated bodies but an email copy can be obtained from Mrs Penny Essex at pessex@fs1.ho.man.ac.uk and comments can be emailed to the same address.

I believe that the present is a crucial time for all healthcare professionals. If we are not to have our agenda for patient care pre-empted by politicians who are in turn driven by tabloid editorials and shallow analyses of present discontents with the NHS (a remarkable institution for all its faults), we must re-assert our fundamental and enduring values against the short-termism and populist rhetoric of here-today-gone-tomorrow politicians. What are these values? Compassion, commitment and knowledge-based care. No wonder politicians want to take away our independence and want to reduce us all to servile, sessional functionaries. We stand for things many of them might not understand.

NOTES

1. See Raymond Tallis *Enemies of Progress: (3) Redisorganisations* in *Hippocratic Oaths: Medicine, the NHS and their Discontents* (Atlantic Books, forthcoming, 2004).

2. John Carvel *Target Practice, The Guardian* August 6th 2003.

3. Jonathan Carr-Brown and Lois Rogers *The Times* January 2nd 2003.

4. Report of a Working Group of the Academy of Medical Sciences *Putting the Neurosciences to Work in Neurorehabilitation.*

Later stage recovery

following severe brain injury – identifying the evidence

Martin Watson MSc MCSP,
Brigitt Bailey MSc MCSP,
Hilary Trebble MCSP

This report came about largely as a result of a chance meeting between two of the authors. The first writer was presenting a poster at a physiotherapy conference. Another of the authors went to the same conference and attended the poster session. A conversation ensued between the two and this report was the end result.

The topic of the poster was *The potential for adults to make later stage recovery following severe traumatic brain injury* (severe TBI). Specifically, the poster described the results of a literature review (Watson 1997). This review identified what evidence exists that people with severe TBI can make clinically significant improvements in motor performance more than six months after they are injured.

This topic remains a potentially contentious one for physiotherapists. There has been limited published evidence to show that severe TBI patients have this later stage capability. This is matched by a perception in some circles that most (if not all) recovery has occurred by six months post injury. It has been proposed that therapy that is delivered earlier rather than later will lead to greater improvement (eg Cope and Hall 1984, Shiel et al 2001). There is also evidence to suggest that people who are in physiotherapy treatment at later stages are likely to be more disabled ones and will have reduced potential for any further improvement (eg Cohadon et al 1988, Shah et al 2000).

Against this stands a potential body of evidence, which is based mainly on anecdote. This suggests that physiotherapists regularly treat adults with severe TBI and help them to achieve significant motor improvements, even at much later stages. The review in question (Watson 1997) identified eight studies that document clinically significant motor changes more than six months after injury. Other more recent reports have also contributed further to this literature base (eg Butler et al 1997, Wade 2000, Burke et al 2000).

The above premise encouraged the authors to collaborate and investigate further. Two of the authors felt that they were certainly working with severe TBI subjects who were making clinically significant improvements more than six months post-injury. Furthermore, a recent move within their workplace to document patients' motor outcomes with a standardised assessment meant that a review was feasible. This paper provides a brief report of the findings.

BACKGROUND AND METHOD

A review was conducted by two of the authors (BB & HT). This work aimed to ascertain the extent to which their later-stage patients *were* making further changes. Specifically, the physiotherapy treatment notes and assessment records were reviewed to identify the scale of changes shown by a group of recently treated late-stage patients. All subjects were ones whose outcomes had been monitored using a standardised motor assessment. All subjects had recently received physiotherapy whilst they were inpatients and residents at the unit for the young neurologically disabled where those two authors then worked*.

The review was of subjects who met the following inclusion criteria:

- Physiotherapy treatment had begun more than six months post-injury;
- Patients were *adults*; ie at least 16 years old. This was to exclude children from the review. It has been proposed that *young* individuals with brain injuries have different motor outcomes and rates and patterns of recovery than their older counterparts;
- Patients needed to have sustained a *severe* brain injury. This was to differentiate them from those who had sustained mild or moderate brain injuries. Whilst the latter two groups may also sustain motor problems, the focus remained on those with potentially greater disabilities as a result of more severe brain damage.

Assessment method

Patients had been assessed using the gross motor scale of the Rivermead Motor Assessment (RMA) (Lincoln and Leadbitter, 1979).This is a 13-item standardised measure of gross motor function that is frequently used in UK-based neurological physiotherapy (see *Figure 1*). The use of this as an outcome measure, at the start and end of treatment, was a relatively recent procedure in the unit in question.

Patients

Twelve subjects were identified as suitable for review. This consisted of nine males and three females. This small number came about in part because of the relatively short period of time during which the RMA had been used consistently in the unit as an outcome measure. It was also because a relatively small number of

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* Banstead Place Brain Injury Rehabilitation Centre, Banstead, Surrey

RIVERMEAD MOTOR ASSESSMENT

the thirteen test items of the gross motor function section

1. Sits unsupported
2. Lying to sitting on side of bed.
3. Sit to stand
4. Transfer from wheelchair to chair towards unaffected side
5. Transfer from wheelchair to chair towards affected side
6. Walk ten metres independently with an aid (inside)
7. Climb stairs independently
8. Walk ten metres without an aid (inside)
9. Walk five metres, pick up bean bag from floor, turn and carry back
10. Walk outside 40 metres
11. Walk up and down four steps
12. Run ten metres
13. Hop on affected leg five times on the spot

The patient scores one point for each item in the assessment that they are able to pass, according to predefined criteria (Lincoln & Leadbitter, 1979)

Figure 1

PERIOD OF TIME POST INJURY (IN MONTHS) OVER WHICH PHYSIOTHERAPY WAS BEING RECEIVED BY EACH OF THE TWELVE SUBJECTS

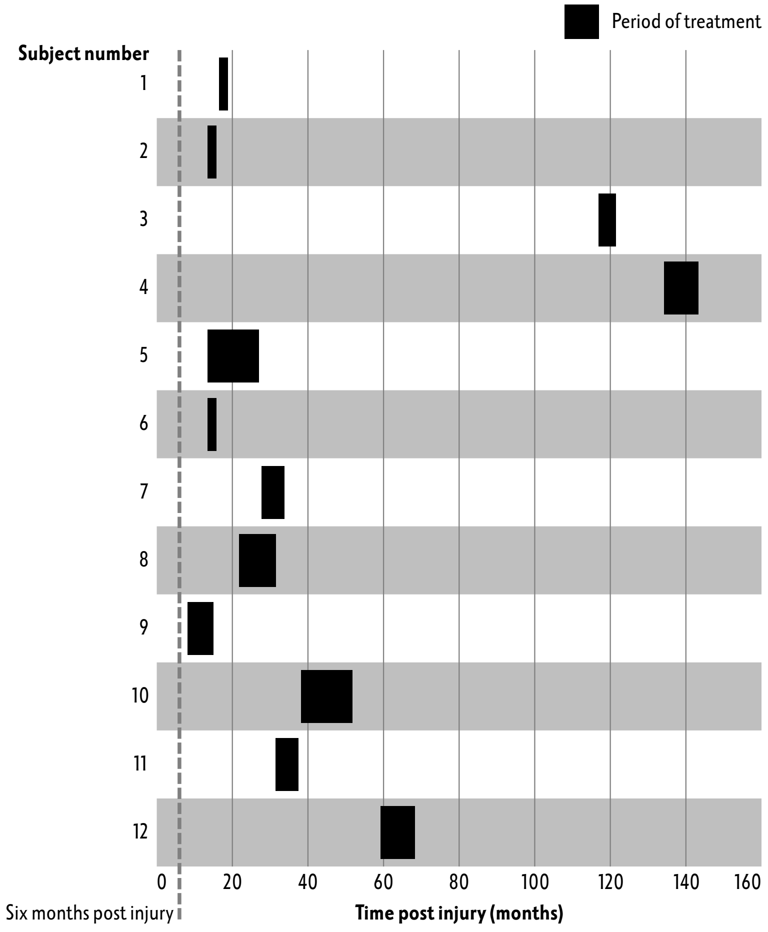


Figure 2

subjects could be confidently categorised as having sustained a *severe* TBI. Severe injury is recognised as resulting in a loss of consciousness (LOC) of six hours or more (Medical Disability Society 1988). Consciousness is in turn usually measured using the Glasgow Coma Scale (GCS). Whilst records did not permit the precise identification of initial GCS in all instances, all twelve subjects were recorded as having had long periods of unconsciousness post-injury, typically of many days if not weeks.

In most instances the cause of brain injury was traumatic. Ten of the subjects had been injured as a result of a road traffic accident (RTA). One subject had been injured during an assault. The one remaining subject's cause of brain injury was unclear but was thought to have been because of a spontaneous subarachnoid haemorrhage (SAH).

The ages of subjects at time of injury ranged from 9.9 years to 34.5 years, with a mean of 22.9 years (SD 6.99 years). Clearly this meant that some of the subjects could not be defined as adults according to the stated inclusion criterion. However, patients' ages on admission and commencement of treatment ranged from 16.6 years to 36.8 years, with a mean of 22.9 years (SD 5.33 years). Therefore, for the purposes of the review, any functional improvements that occurred could be said to relate to motor changes observed in an *adult* group of patients.

RESULTS

Figure 2 shows the periods of time for each patient to which this report relates. Each horizontal bar represents the period of treatment; ie the time between initial and final RMA assessment. This is shown in relation to the time since injury. Overall it can be seen that most of the patients were being treated between 6+ and 70 months post-injury. However, two subjects were treated at much later stages; ie 10 or more years (120+ months) after injury. Typically, the time that patients were first seen ranged from 7 months to 134 months post-injury, with a median value of 25 months. The periods of time between initial and final assessment ranged from 62 days to 393 days, with a median value of 189 days.

In terms of motor abilities, initial RMA scores across the group ranged from 0 to 12 points, with a median value of 9.5 points. Final scores ranged from 0 to 13 points, with a median value of 10 points. The typical changes in score ranged from 0 to 3 points with a median improvement of 1 point. In other words, the most common improvement in score was to gain a further point on the RMA.

Figure 3 further illustrates these figures. The horizontal bars represent the changes in RMA score over time for each of the 12 patients. This simply emphasises that 9 of the 12 subjects showed some improvement in RMA score during their periods of treatment, typically of one further point. One might argue that there is also some suggestion here that subjects are falling into one of two groups:

1. Subjects who had started with relatively low scores on the RMA and who then went on (in most cases) to make improvements of 1, 2 or 3 points.
2. Subjects who had relatively high scores initially and then went on (in most cases) to improve by a further point on the scale.

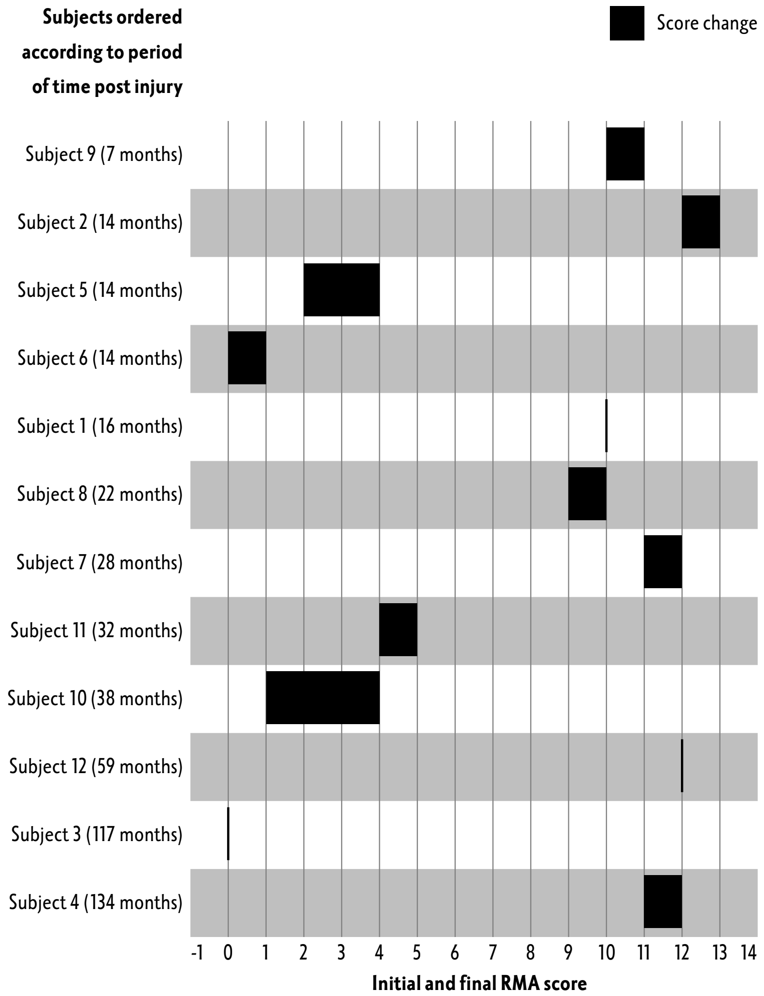
It is interesting that there were no subjects who achieved scores lying in the middle range of scores (ie 6, 7 or 8 out of 13 points); ie changes had been happening at either the lower or the higher end of the scale of ability.

A further insight into recovery is gained when one considers the nature of the changes in function that were achieved. The RMA could be said to be divided into two types of functional motor skills (see the text box). There are the first five items, which relate to transfer-type skills. Then secondly there are items 6 to 13, which are all higher order skills relating to gait and aspects of upright mobility. On initial assessment, five of the twelve subjects were unable to perform any of the higher order skills. By the time of later assessment, this status remained unchanged for all subjects. In other words, though the majority of subjects had made small improvements in function, none had moved on from one area of physical functioning to another.

To facilitate interpretation, *Figure 3* shows subjects ordered according to the amount of time that has elapsed since injury. This helps to identify the extent to which there is a relationship between length of time since injury and potential for further improvement. This would appear to show that change is occurring irrespective of the amount of time that has elapsed. In other words, whether subjects are earlier or later post injury, they appear in most cases to be showing improvements. This is also the case whether subjects initially achieved low or high RMA scores on admission. However, with such a small number of subjects in the sample one must obviously be careful as to the conclusions that are drawn.

Figure 4 gives an alternative representation of the change in score over time for each of the twelve subjects. This emphasises that the overall trend appeared to be that subjects made small-scale improvements over time.

CHANGES IN SCORES OVER TIME FOR THE TWELVE SUBJECTS



Note that of the three subjoects who showed nochange in score, one had a score of 0.

Figure 3

DISCUSSION

This report describes a small and rather select group of patients. However they are possibly fairly representative of many severely brain-injured adults who enter rehabilitation facilities at a later stage, typically with more pronounced and/or longstanding physical disabilities. With such a small group one must obviously be careful as to the conclusions that are drawn. However their progress during treatment did suggest that further motor recovery was (often) feasible, with nine out of twelve subjects showing progress even after more than six months had elapsed. These subjects were of course (presumably) admitted for treatment because they were seen to have the potential for further recovery. In this respect it is therefore difficult to know how representative they are of the general severely brain injured population. Nonetheless a number of tentative conclusions can be drawn through analysis of the data.

Figure 2 clearly indicates that most subjects were being treated somewhere between 6+ and 70 months post-injury, but with a subgroup (two subjects) being seen much later. It may be that typically, subjects judged as suitable for later stage rehabilitation will be admitted for treatment at somewhere between one and five years post-injury. Additionally however, admission after ten or more years have elapsed is not unknown.

Figure 3 suggested some related findings. If this group is typical of later stage patients for whom further

CHANGE IN MOTOR SCORES BETWEEN FIRST AND SECOND ASSESSMENTS

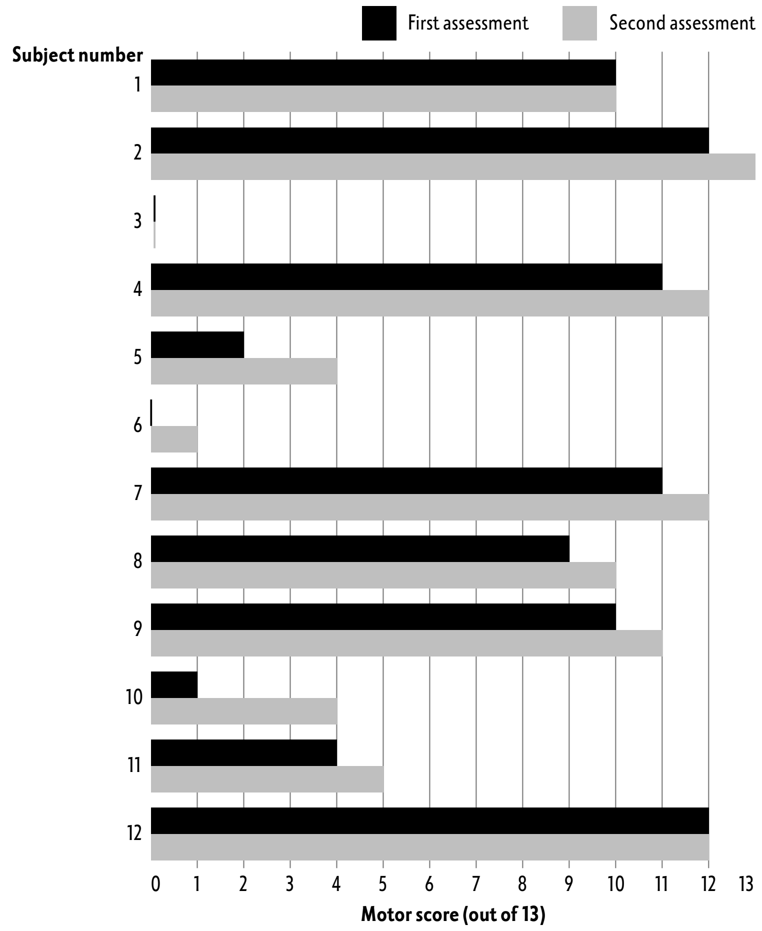


Figure 4

progress is feasible, then there are possibly two types of subjects. Firstly, there are those who start with a relatively low level of functional performance. These subjects may nonetheless go on to make further changes, sometimes of several steps. However, despite making progress, their motor performance still remains at lower levels. Then secondly there are higher performing patients. This second group appear also to be able to make further improvements in function, albeit on a smaller scale. The corollary to this is that there were no subjects making changes in score across the mid-range of performance; ie there were no subjects making relatively large jumps in performance from lower to higher levels of function. This may indeed be the 'lot' of the later stage patient.

CONCLUSION

Despite the limited nature of the data that are described, tentative conclusions of a useful kind could be arrived at. There was fairly clear evidence that severely brain injured adults *were* making further motor recovery after more than six months post-injury. These were in most instances small but clinically significant incremental changes in functional outcome. Additionally, within this (admittedly small) sample of subjects, there seemed to be specific groups, each potentially with their own recovery profiles. Firstly, there were 'earlier' and 'later' stage patients. Secondly, there also appeared to be lower performing and higher performing groups. It should also be said that this report does not provide conclusive proof that physiotherapy was responsible for the changes in performance. However, with growing evidence for the effectiveness of therapy in this clinical area (Tolfts and Stiller 1997, Watson 2001), then it seems feasible to assume that treatment was having some effect.

Data that can address specific research questions probably exist and are readily available (via simple review) within many departmental records. With regard to the specific question of continued potential for recovery, the authors would like to encourage colleagues to conduct similar simple reviews of their therapy records. In this way a better consensus of the likely recovery profiles of later stage patients can hopefully be developed.

ACKNOWLEDGEMENTS

Thanks go to Di Tydeman for help with initial analysis of the data, as well as to the patients whose anonymous data formed the basis of this review. This report formed part of the presentation *Motor recovery in adults following severe traumatic brain injury* presented by the first author at the CSP Annual Congress and Exhibition (ACPIN programme), Birmingham, 11-13 October 2002.

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Guidance for use of a treadmill

with bodyweight support for neurological patients at St George's Hospital, London

In 2001 the increasing clinical interest in the use of treadmill training in neurophysiotherapy and our own frequent use of the treadmill in the out patient gymnasium led to an equipment bid for a treadmill to be used in the neurology gym. The proposal which was submitted, included an introduction outlining the amount of time spent in rehabilitation on gait retraining and the recovery rates of walking ability with some patient groups. In addition a review of some of the relevant literature, cost, possible benefits of being able to provide this intervention and how use of the treadmill would be implemented with timescales. The proposal was accepted and a period of time was then spent researching the equipment available on the market. The treadmill we chose is a Woodway (Slat Bed Treadmill) with a lifting platform (ELS 1-10-5), harness and weight relieving system.

The treadmill was delivered in May 2002. Once in situ we were keen to ensure the treadmill was not used in an ad hoc manner so a working party was set up to develop treatment protocols for use with patients to assist clinical evaluation of intervention. The working party consisted of members of the neurophysiotherapy team throughout the St George's Heathcare Trust, and in the neighbouring South West Thames Community Trust. The resultant document has recently been completed and provides guidance for staff on the use of the treadmill and recommendations of treatment parameters. An audit of the parameters used clinically is planned for six months time. Patients' comments about the use of the treadmill as part of their rehabilitation are also being collected. An outline of the document can be seen below. We would be very interested in any comments people have and would be interested to hear from anyone who has developed anything similar.

INTRODUCTION

Following a stroke or other neurological event many patients state that one of their major goals in therapy is to regain or maintain their ability to walk. Patients with stroke regard improvement of walking function as their principal goal (Bohannon et al 1991). The relatively recent guidelines for stroke produced by the RCP and evidence in the NSF for older people, state that patients are entitled to walking retraining at all stages of their rehabilitation post stroke. The RCP guidelines suggest that Treadmill Training (TT) should be considered as an adjunct to conventional physiotherapy for patients unable to walk three months after stroke.

Recovery of walking ability following stroke does vary depending on the severity and site of lesion. Jorgensen et al 1995 state that 95% of patients recover walking ability within eleven weeks of onset, but even those who are able to ambulate continue to have limited function due to poor gait patterns and fatigue. It has also been documented that the sooner post-stroke that walking ability is regained then the higher the probability achieving independent walking.

Gait re-education and recovery of mobility takes up a large proportion of physiotherapy time, requires different techniques and often demands considerable assistance from the therapist to support patients body weight and control balance (De Cunha et al 2002). The use of treadmill training with or without body weight support (BWS) is a novel physiotherapy intervention. The current research evidence suggests that it may provide therapists with a way to enhance the effectiveness of treatments and enable gait retraining to commence earlier in the rehabilitation process. To assist evaluation of its use in the clinical setting within SGH Healthcare and gather data for possible evaluation in the future, the development of a protocol to standardize, as far as possible, the use of treadmill training with BWS was proposed. The project group formed undertook this task by undergoing the following process:

1. Aim and objectives set
2. Literature search undertaken
3. Literature reviewed
4. Clinical data collected
5. Recommendations for treatment parameters established

AIM OF PROJECT GROUP

The aim of the project group was to devise a protocol based on current evidence to assist therapists at St George's Hospital when devising a programme of Body Weight Support Treadmill Training (BWSTT) for the neurological client group, which would include CVA, MS, Parkinson's Disease and Spinal Cord Injury(SCI).

OBJECTIVES

The group set objectives and the timeframe to work from within the first meeting and identified the following:

- To investigate the available literature specific to treadmill training with body weight support for stroke, spinal cord injury and any other neurological conditions and carry out a critical appraisal of this.
- To collect data regarding the current use of the treadmill within the department at St George's Hospital: specific to conditions, aims of treatment and programme used.
- To collate this evidence and identify common themes, values on which to base our protocol.
- To have an established protocol for use of the TT with BWS with stroke within one year.

LITERATURE SEARCH

Search strategy

An electronic search was undertaken of the following databases in September – October 2002:

- Ahmed
- Cinhal
- Medline
- PEDro
- Yahoo

The terms used were stroke and treadmill, spinal cord injury and treadmill, multiple sclerosis and treadmill, Parkinson's disease and treadmill, treadmill and hemiplegia, treadmill training, treadmill and rehabilitation, CVA, treadmill and physiotherapy. The search was limited to English language journals with adult human subjects. The reference lists of all the articles obtained were also searched to try to identify further studies. The years of publication were limited to 1995 to current day, with the exception of articles providing the historic background that were published in the mid 1980's.

Identification of relevant trials

Following this relevant trials were identified, and these were then appraised by the group, following a set *proforma*. Articles that met the following inclusion criteria were included in the study:

- Were controlled trials where subjects had been assigned to one or two treatment conditions.
- That evaluated the effect of interventions on gait and/or functional ability
- Where the subjects were all adults with a neurological diagnosis.

In brief summary it was found that there was a substantial amount of literature examining the use of treadmill training. The studies reviewed varied widely with different study design, intervention, subject selection, outcomes measures and treadmill training techniques. The pathologies included a wide range of neurological conditions, the majority of which were CVA and SCI, however subjects also included those with Parkinson's disease, MS and cerebral palsy.

The timing of intervention ranged from acute, sub-acute and chronic, the majority of research being in the sub-acute and chronic stages. The quality of the research reviewed was also variable and Manning, Pomeroy (2003) discusses the limitations of this in a recent publication. As a result a strict treatment protocol could not be established so recommendations as to appropriate treatment parameters have been made.

BACKGROUND INFORMATION

History

The original idea for using the treadmill for retraining walking emerged from experimental studies using animal models. Spinalised adult cats were trained to walk on a treadmill with some hind limb support and an almost normal walking pattern was attained (Barbeau and Rossignol 1987). Some work has also been carried out with primates. Spinal macaque monkeys were able to produce stepping movements on a treadmill if the reticulospinal and vestibulospinal pathways were spared and some support was provided for the hind-limbs (Eidelberg et al 1981). Research has subsequently been carried out investigating the use of treadmill training with and without body weight support in various groups of patients with neurological deficit including spinal cord injured and stroke patients

In 1986 Finch and Barbeau introduced the idea of using PBWS in hemiplegia as an effective way to retrain gait. Their hypothesis being that using PBWS allowed the matching of the demands of walking with the patient's capabilities, thus facilitating ambulation with the appropriate effort and adequate stability. Functional improvements in walking ability with SCI patients were shown by several authors. In patients with complete SCI continuous stepping has not been reported (Behrman, Harkema 2000).

The literature includes the use of treadmill training for aerobic exercise. This has not been considered as part of this groups work and may be a further project in the future.

Neurophysiology

In humans it is believed that stepping movements are automatically executed at a spinal level by the lumbosacral Central Pattern Generator (CPG). This is then under the supraspinal control of the descending 'command systems', allowing modification of speed, starting, stopping etc.

Literature has shown that when patients with a profound incomplete cervical or thoracic spinal cord injury are suspended in a harness and assisted to step on a moving treadmill, EMG activity can be elicited in the lower limb musculature that have previously shown little or no voluntary activity. This resultant phasic muscle activity between agonists and antagonists is believed to arise from spinal locomotor pools in response to the sensory input provided during the gait cycle.

In primates intact reticulospinal motor pathways descending in the ventral section of the spinal cord are required for stepping and walking (Eidelberg 1981). Hesse (1995) suggested that these conditions are met in hemiplegic patients, so that treadmill training might stimulate the presumed spinal motor generators. In addition, intact supraspinal centres via ipsilateral descending motor pathways might be involved in observed treatment effects.

Dobkin concludes that mechanisms for spinal cord learning are likely to include the following:

- Effects of repeated sensory inputs into the lumbosacral motor neurons and interneurons during practice lead to long term potentiation
- This long term potentiation may lead to plasticity of cortical representation during skills training
- Expanded effectiveness of residual corticospinal and afferent activity after stroke and spinal cord injury on spinal cord and cortical regulation of facilitation and recruitment.
- Influence of sensory inputs from hips and feet on locomotor region of cord and to a lesser extent on the copy system of the cerebellum and higher motor centres would possibly expand cortical and sub cortical representations for locomotion.

Within the training process, as well as the possible neural effects of training there are also neuromuscular changes. These include:

- Preventing/reversing changes in muscle phenotype
- Maintaining muscle bulk
- Maintaining viscoelasticity
- Improved endurance, muscle force/activity
- Improved energy efficiency

With regard to these effects Dietz 1998 stated that

'It is unclear to what degree the effect of locomotor training could be attributed to spinal locomotor centers, as locomotor training will also affect leg muscles and tendons resulting in an improvement in locomotor performance.'

In order to bring about plastic change within the nervous system the literature suggests that this may be best accomplished with task specific practice and repetition ie motor learning. Treadmill training allows the repetitive action of complete gait cycles and practice of the whole task rather than breaking it down into smaller single components or preparatory manoeuvers at an early stage of gait re-education. The patient is actively involved and the goal meaningful. These factors support the basic requirements for motor learning.

CLINICAL DATA

As part of the project we collected data for patients using the treadmill at St George's Hospital over a six month period. An initial finding was that in the acute setting it was difficult to establish a prolonged period of treadmill training as patients were either transferred, their medical condition changed or other hospital related events prevented attendance at therapy sessions.

Full data was collected for seven patients only and it included information on their medical condition, aims of intervention, and the treadmill programme. The monitoring sheets can be found in the appendices of the original document. The results are presented in *Figure 1* below.

CONDITION OF AND AIMS FOR PATIENTS USING THE TREADMILL AT ST GEORGES

	Number selected
Condition	
Incomplete SCI	3
Multiple sclerosis	1
Stroke	3
Aims of intervention	
Improve walking pattern	3
Increase exercise tolerance	6
Walking practice	4
Access automatic movement patterns	5
Improve weight transfer whilst walking	3

Figure 1

The treadmill programmes varied:

- Frequency ranged from once every fortnight to three times weekly
- Duration ranged from two to eight weeks and time spent on the treadmill varied from 5-30 mins depending on patients level of ability
- Speed also ranged from 0.4 – 1.8 km/hr
- BWS has ranged between 20 – 40% although we had not looked to reduce the BWS as the literature suggests.

Conclusion

Collecting the data from patient use of the treadmill highlighted that patients with the same diagnosis can often present very differently and so treatment needs to be tailored accordingly. Considering this alongside the literature it was decided to set acceptable ranges for the treatment parameters rather than setting definitive values. This has resulted in producing a set of guidelines for treating patients using the treadmill and so giving therapists the flexibility to devise a programme specific to the patients level of ability and the problems identified.

TREATMENT PARAMETERS

Number of treatments

Range: three to five per week

In Nilsson's study in 2001, using treadmill training, acute stroke patients received treadmill training five times weekly whereas Miller in 2001 advocated the use of the treadmill three times per week. Many other studies have also recommended the use of a treadmill at least three times weekly, preferably daily, but a service induced time constraints need to be taken into account.

Recommendation: A minimum of twice a week

Duration of training

Range: two to eight weeks

The treatment sessions ranged in the literature from between 2 – 8 weeks (Kendrick 2001, Hesse et al 1995, Miller 2001, Da Cunha 2002). Whilst it is recommended that that treatment duration is within this range, it should also be considered that the duration of treatment is matched to the treatment aims ie the time taken to achieve the goals rather than just a fixed amount of time. The clinical reasoning should be clearly documented within POMR.

Recommendation: 2-8 weeks

Speed

The parameters of normal walking speed are between 1.2 -1.4 meters per second, the speed believed to be necessary to cross a pedestrian crossing. In a review by Dobkin in 1999 he states that following stroke household ambulators walk at a mean of 0.58 m/s whilst limited community walkers walk at a mean speed of 0.68 m/s. A study by Hesse in 2001 looked at the effect of differing walking speeds by measuring energy cost, calculating heart rate and lacate levels. In conclusion they found that patients walked with greater efficiency at higher speeds. They demonstrated increased stride length and cadence without deterioration in symmetry. An article by Pohl in 2002 also states that structured speed dependant treadmill training will have a direct effect on over ground walking speed superior to that achieved by conventional therapies.

The speed of walking varied widely in the literature and it was recommended that the speed is comfortable for that person, but it is generally felt that the fastest walking speed is better. (Miller 2001, Hesse 1994)

Recommendation: Set at the fastest speed the patient can comfortably maintain without detrimental effect on best walking pattern

Body weight support

Range: 0% to 40%, although one article was 45%

Hesse in 1999 carried out a study examining the effect of body weight support on the gait pattern. He carried out detailed gait analysis for 0% BWS, 15% BWS 30% BWS and overground walking. He concluded that body weight support enabled the patients to:

- Initiate swing phase of the non-affected leg earlier
- Walk with more symmetry
- Have prolonged single leg stance on the affected leg
- Have less plantar flexor spasticity
- Show less co-contraction
- Have a more timely activation of the dorsi-flexors

Hesse discussed the reasoning behind reducing BWS as quickly as possible. In the animal literature the main peripheral stimulus for activation of gastrocnemius and vastus medialis is weight acceptance. BWS appears to result in less activation of these extensor muscle groups. As one of the objectives of gait retraining is to target these, the prolonged or excessive use of BWS is not recommended.

Hip extension is the other key peripheral drive for the activation of the extensor muscles and in this study patients exhibited a larger hip extension on the treadmill. This could partially compensate for the effect of BWS on extensor muscle activity.

The range of support varied within the literature from 40 -25%. (Visintin 1998, Hesse 1999, Da Cunha 2001) The average amount was 30%.

In a study by Visintin and Barbeau in 1989 looking into the effects of BWS in patients with hereditary spastic paraparesis they found that providing BWS greater that 40% resulted in a loss of heel strike.

Recommendation: BWS between 25 and 40% of patient's body weight

Time

The length of time spent on the treadmill in one session also varied depending on the patient's current level of ability. It is worth considering that, as treadmill training is skills learning then the longer time spent on the task the better. The average time per session in the literature is 10-30 minutes in one block or broken down into 10-minute blocks.

Recommendation: Up to 30 minutes per session

Indications/treatment aims

When walking training was identified as appropriate, but risk assessment has shown that due to manual handling risks it is too difficult to achieve by handling alone or it is unfeasible to handle for long enough to allow adequate practice:

- To increase speed of walking
- To improve functional walking ability
- To promote motor recovery
- To encourage gait re-education
- To reduce the energy expenditure of walking

It may used with patients with the following conditions:

- Stroke
- Multiple Sclerosis

- Parkinson's Disease
- Cerebral Palsy
- Spastic Paraparesis

In acute, sub-acute and chronic stages.

CONTRAINDICATIONS/PRECAUTIONS

Contraindications

- Medically unstable
- Uncontrolled cardiac problems
- Weight bearing contraindicated

Precautions

- Sternal wounds following cardiac surgery
- Care with severe cognitive/perceptual and sensory problems

OUTCOME MEASURES

The following measures are those taken from the literature felt to be most sensitive to change:

- Timed walking tests ten metres, six minutes
- Modified Rivermead Mobility Index (MRMI)
- Functional Ambulation Category (FAC)
- Berg Balance Score
- Patients subjective marker
- Goal attainment scaling
- Physiological Cost Index (PCI)

But it is important to remember that the outcome measure chosen should be related to the treatment aim and therefore there should be careful consideration when selecting this.

PROTOCOL FOR USE OF TREADMILL TRAINING WITH STROKE PATIENTS

1. Ensure medical devices procedure has been completed
2. Discuss with senior member of staff whether TT is appropriate with reference to current treatment aims and goals
3. Establish treatment regime using recommendations
4. Select appropriate outcome measure
5. Record in POMR in usual manner

SUMMARY OF RECOMMENDED TREATMENT PARAMETERS

- Number of treatments: minimum of twice a week
- Duration of training: two to eight weeks
- Speed: as fast as patient can comfortably manage
- BWS: 25 to 40%
- Time: 10 to 30 minutes

SUMMARY

Throughout the course of this project we have continued to collect clinical data and the intention is to continue to do so for every patient who uses the treadmill in therapy. The group plan to audit the guidance for treatment parameters in six months time and the data will be used for this purpose.

Future plans include the completion of an undergraduate physiotherapy project at St George's School of Physiotherapy looking at patients opinions regarding treadmill use, and possibly the further development of this project as guidance for treating other neurological conditions.

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- Gilbertson L et al, *Consulting Service Users: the Stroke Association Home Therapy Project* pp255-262.

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Brigadier Michael Koe OBE, Chief Executive, The PSP association

Dr Dominic Paviour
Neurologist

FOCUS ON

Progressive Supranuclear Palsy

Effects of the condition and support association

Some of you may have had, or have today, a client with a diagnosis of Progressive Supranuclear Palsy (PSP), and needed or need additional information about this brain disease, in provision of therapeutic services for the family. This article is written both to help in this need and to explain our role, as our association approaches its tenth anniversary.

What is PSP?

Progressive Supranuclear Palsy (PSP) is a neurodegenerative disease. Many areas of the brain and brainstem are affected by the deposition of abnormally phosphorylated Tau protein. Tau is a microtubule associated protein (MAP) and as such is involved in axonal transport in healthy neurons.

The areas of the central nervous system most affected in PSP are the midbrain structures and the basal ganglia. Damage to the neuronal pathways in these areas that lead to the devastating problems with eye movement and eyelid opening (blepharospasm) as well as the problems with balance, which are a particular feature of PSP in the early stages. The basal ganglia are involved in the planning and execution of motor function and therefore, in PSP, patients also have problems with limb movement and positioning. Dystonia (a sustained muscle contraction resulting in an abnormal posture or limb position), which can be painful, is also often seen and may result in retrocollis (abnormal neck extension). It is now recognised, that as well as the extensive sub-cortical pathology, the cerebral hemispheres and particularly the frontal regions are affected in PSP. This can result in limb apraxia as well as marked behavioural change with emotional lability. Patients are most affected in the early stages by problems with mobility related to balance, and because of the erect posture and neck extension, falls are often backwards. Ill-defined concerns about vision, including problems with bright lights, painful eyes and difficulties in opening and closing the eyelids are another early symptom. Because of this and from the fixed stare of patients, PSP is sometimes known as the Mona Lisa disease.

Progressive problems in speech and in some cases the complete loss of speech, and deterioration of handwriting which becomes small and cramped, another symptom of the disease – means communication can become very difficult or even impossible. Amplifiers and computer-assisted speech can help, but the inexorable progress of the disease limits the 'window' of opportunity for such assistance.

In the later stages, increasing difficulty in swallowing at all can mean a decision on a gastrostomy (a simple operation to insert a tube in the wall of the stomach) and tube feeding to ensure sufficient calorific intake. Although the intellect of a PSP patient remains largely intact, there can be behavioural changes such as emotional lability or greater aggressiveness.

Sara Koe

PSP is however, a very individual disease and varies in speed of progress from patient to patient. Some remain on a plateau for many years. There is still no effective treatment and no cure for this disease. Average life expectancy from onset is some seven years, the last two of which are often in a wheelchair or bed bound requiring full care 24 hours per day, seven days per week.

PSP and Parkinson's Disease

PSP can mimic Parkinson's Disease (PD) in its early stages, and historically has been closely linked with it. Indeed some 30% of those PSP diagnosed patients joining the PSP Association have initially been diagnosed as having PD. Even today, PSP is still often misnamed as 'Parkinson's Plus' or as 'Atypical Parkinsonism'. PSP is no more Parkinson's Plus than PD is PSP Minus! Clinically, biologically and pathologically these two diseases are quite distinct and different. Microscopic examination of tissue of a PSP afflicted brain reveals the characteristic neuro fibrillary tangles of Tau (very similar to those seen in Alzheimer's, but in a different area of the brain) as opposed to the Lewy bodies seen in PD. Levadopa drugs, which can be very helpful in PD, are much less so in PSP and indeed can often be counter productive.

Prevalence of PSP

Recent research has shown PSP to be much more common than previously believed, with a prevalence of at least six per 100,000 per population in the UK – Schrag A (1999), Nath U (2001). This makes it at least as common and, many neurologists would agree, at least as nasty as its far, far better known cousin, Motor Neurone Disease.

Treatment and cure of PSP

Although there is no effective treatment today for PSP, there is now some light at the end of the research tunnel for many neurodegenerative diseases, including PSP, in which earlier and more accurate clinical diagnosis is the first key goal. Until suitable drugs are available to treat the disease, improved quality of life of PSP patients and carers remain the key therapeutic role.

About the PSP Association

The Establishment of the Association

In October 1992, my young looking, attractive, energetic and intelligent wife Sara, was diagnosed as having PSP. After two terrible years, during which the disease progressed apace, we had become so appalled by the apparent lack of knowledge about and interest in PSP (which appeared to be regarded as a sort of PD within the medical profession) that in April 1994, with the help of some good and influential friends, we registered and set up our Association.

The Old Rectory, Wappenham, where the PSP Association was first formed in 1994.

Devastatingly for her family, but as a merciful release for her, Sara died from aspiration pneumonia, a common complication of PSP, in January 1995, but not before the new association, based at the Old Rectory in Wappenham, had started rapidly to grow. It has come a long way since then. To give it its full title, we called it the 'Progressive Supranuclear Palsy (PSP-Europe) Association', to indicate its European dimension.

The objectives of the Association

The Association has three main objectives, to:

- promote and sponsor research world-wide into the cause, effective treatment and eventual cure of PSP
- provide information and support to afflicted families across Europe
- engender awareness of this disease and our Association, particularly amongst the relevant medical profession, mainly in the UK.

Achievements of the association

In the research field, we have sponsored some six research fellows and three research assistants in London, Cambridge and Newcastle. We have also sponsored and helped establish the Sara Koe PSP Research Centre – the first ever such centre in the world – within the Institute of Neurology in London. We have organised and run three International Medical Workshops for PSP and are holding our fourth at Stowe School in Buckinghamshire in July this year.

The Sara Koe Research Centre within the Institute of Neurology in London.

In support, we have established 16 local support groups across the UK and helped set up PSP France and other support groups across Europe. We run a telephone counselling service – available to anyone across Europe – manned 24/7 by trained PSP Nurse Specialists. We provide information packs, including our *Layman's Guide on PSP* for our subscribers and have supported over 1,000 PSP afflicted families, since we were established.

In awareness, we have, with the help of Dudley Moore, who sadly died from PSP last year, seriously raised the profile of this disease and our association, both within the relevant medical profession and amongst the general public. We are currently focusing on politicians and decision makers, but there is still a long way to go before awareness of this disease matches its prevalence and nastiness.

Role of physiotherapists in PSP

Physiotherapists play an important role here in assisting patients to continue to walk (aided as necessary with a 'Walker' frame) and move around – keeping them 'limber' and helping deal with stiffness and pains in joints. Rigid neck muscles with the head arched backwards are a typical PSP symptom that can be helped by physiotherapy. Physiotherapists can also provide helpful advice on safety and prevention of falls. Not least in importance, too, is the boost to a patient's confidence that someone is there and doing something to help.

The PSP Association is anxious to cooperate with and support physiotherapists in looking after PSP patients and accordingly would be happy for you to contact us at any time, should you wish to do so. We have provided copies of our information packs, including our Layman's Guide, to ACPIN so that physiotherapists have available access to this information, through them. We normally only provide these when subscribers join our association. Should you wish to join, most hospital trusts cover the cost of your subscription. Once joined, you have ready access to all our support facilities including our telephone counselling service. For further details, please contact:

The PSP Association
The Old Rectory,
Wappenham
Nr Towcester
NN12 8SQ
Telephone: 01327 860299/860342
Fax: 01327 861007
Email: psp.eur@virgin.net
www.pspeur.org

or one of our Nurse Specialists:

NORTH
Maggie Rose RGN, RSCN
Telephone: 01939 270889

SOUTH
Tess Astbury RGN
Telephone: 01604 844825

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ACPIN news

ACPIN GOES TO PRAGUE

Cherry Kilbride
Honorary ACPIN Secretary

Earlier this year in April, I was asked to join a CSP delegation to Prague for a two-day seminar. The visit was part of an ongoing twinning project with UNIFY, the Czech equivalent of the CSP.

My remit in the group was to share my experiences of having been a clinical specialist and now being a manager and an active member of a special interest group. The trip was enormously rewarding but extremely hard work. I came away from the two-day workshop feeling a mixture of humility and pride.

I was humbled by the sheer will and enthusiasm of a group of pro-active physiotherapists who are trying to shake off the history of communism. The following quote from a Czech colleague illustrates the huge leap they are trying to make, not only in professional terms but also personally, 'We are not used to being allowed to think for ourselves and make choices; it used to be done for us'.

My feeling of pride arose from the realisation of just how far we in the UK have come with our profession. For many of us, myself included, we have no experience of not being part of an autonomous profession. The laws giving us professional autonomy were changed sometime in the early 1970s and therefore we have no real idea of what it was really like prior to that. Imagine not being able to do such things as make decisions about treatment!

With regard to neurology, Bobath was the approach most widely spoke of by our UNIFY colleagues, along with a couple of other concepts, which I have to say were new to me then and, due to my lack of Czech, still are!

ACPIN has recently taken the decision to offer an honorary overseas subscription to UNIFY and I will certainly be keeping in touch with friends I made whilst there. Let us hope that with the likely advent of the Czech Republic to the EEC that they have a speedy road forward to full autonomy, and thus demonstrating the benefits of physiotherapy to the wider audience.

ARC REPORT

Annabelle Cooper (Oxford)
Christopher Manning (Manchester)
Kathryn Bamforth (West Midlands)
Sorcha Maguire (Northern Ireland)

ARC 2003 took place at The Holiday Inn, Birmingham, from 15th to 17th May 2003. The 180 attendees debated many hot topics, and CSP members will be able to read about every motion debated in *Frontline* as reports are published throughout the rest of the year. Disappointingly, attendance as a whole was lower than usual. ACPIN was one of the best-represented Clinical Interest Groups (CIGs), sending our maximum of four delegates, but on the whole, representation by delegates from the CIGs was sparse. One CIG were forced to withdraw their motion because they couldn't find any delegates to attend! Unfortunately, this can restrict the ability of the CIGs to recruit majority support for motions related to clinical issues and clinical groups. Generally, the CSP stewards and health and safety reps form the majority of delegates and they attend ARC to represent slightly different aspects of working life than the CIG reps. ACPIN and the other CIGs should try to make sure they are as fully represented as possible next year. We would all encourage anybody with the slightest interest to go.

Attending ARC does involve some supported preparation, and admittedly it is a little nerve-wracking thinking about presenting or speaking on a motion. However, in reality it is actually a very enjoyable experience and getting up to get involved in a debate is actually surprisingly catching, even for the least likely of delegates! Those of us who hadn't been before certainly learnt a lot about the workings of the CSP as a professional body and also its important role as a trade union too. This year, the value of debating social issues at ARC was raised for particular discussion. Views varied vastly and certainly got your synapses firing trying to fathom out both your personal opinion and that of the ACPIN members you were representing! It was also rewarding to hear the Right Honourable Sir John Hutton, (Minister for Health), talking about The Government's commitment to the NHS. He emphasised their ongoing plan to increase the numbers of AHPs, develop more consultant physiotherapist posts, to improve CPD and to deveop the forum for prescribing rights.

ACPIN had two motions accepted for ARC this year. Motion 7 was that

'ACPIN demands that the CSP should immediately lobby trust executives to provide sufficient resources or appropriate seating for all patients with neurological impairments, in light of the serious personal and economic implications of inadequate seating for this patient group'.

The motion was opposed by several delegates, who felt that this was an issue that should be dealt with locally by service users rather than the CSP. Others felt the motion should have incorporated a wider client band, and others felt it should have requested a wider band of executives and providers were lobbied. Support was received from several other groups and the end result was successful, with the motion being carried.

Our second motion, was that

'This conference requests that the CSP should, alongside partner organisations, use the media to facilitate improvement in public awareness of cerebro-vascular disease with respect to primary and secondary prevention, outcomes and potential for positive rehabilitation via physiotherapy, since public awareness of stroke as a cerebral event remains poor'.

This was supported and carried unanimously with no debate!

So as the delegates from 2003, we now urge ACPIN members to support the work of the CSP as it carries out the requests of these motions through future months, and encourage any hesitant people to put themselves forward to attend next year.

BACKCLASS FEEDBACK

Louise Rogerson

I was asked to represent ACPIN at a forum to discuss how non-specific low back pain might best be sub-classified. This was held in Manchester with Dr Chris McCarthy at the Centre for Rehabilitation Science. The idea was to gain a consensus of opinion from a wide range of physiotherapists about the main discriminatory features of NSLBP. The first half of the day was dedicated to identifying these discriminatory features through group discussion. The afternoon was then aimed at prioritising these features and establishing sub-categories that would fit under the various headings. The information gathered on the day will be collated, and a Delphi study will be carried out to further develop the classification. There is a website, *www.backclass.man.ac.uk*, which has all the up to date information on, and at which you can register to be involved with the study and receive regular updates.

NATIONAL CLINICAL GUIDELINES FOR REHABILITATION FOLLOWING ACQUIRED BRAIN INJURY

Annie Meharg on behalf of ACPIN
Clinical Specialist Physiotherapist, Neurosciences, Royal Free Hampstead NHS Trust. Working Party member

In 2002, the British Society of Rehabilitation and Medicine (BSRM) set up a multi-disciplinary working party to develop guidelines to cover the rehabilitation and continued support of patients with acquired brain injury and their families/carers and ACPIN have been involved in the consultation process. The guidelines were designed to complement the current NICE *Guidelines for Head Injury* which focus on early management during the first 48 hours but do not address the need for rehabilitation and longer-term care. The NICE guidelines also do not encompass non-traumatic forms of acquired brain injury, a group which are included in the rehabilitation guidelines.

The guideline development group comprised of a wide range of professionals involved in the rehabilitation and long-term care of people with acquired brain injury. The group also included direct representation of users and carers as well as the organisations which represent them.

The aim of the guidelines is to improve the clinical care and continued support delivered by health and other statutory services to adults with acquired brain injury and their families and carers. The guidelines offer specific guidance on the clinical aspects of care and focus mainly on rehabilitation and community integration in the post- acute period during the early years following brain injury The target audience for the guidelines are primarily professionals who work in health and social services. It is hoped that these guidelines will be published in time to inform the NSF for Long Term Conditions.

CLINICAL INTEREST GROUP LIAISON COMMITTEE REPORT

Louise Gilbert

The Clinical Interest Group Liaison Committee (CIGLC) meets quarterly and comprises one member from each of the recognised clinical interest groups (CIG). The Chair of Professional Practice Committee (PPC) and the Chair or Vice Chair also attend the meeting. Recognition of the CIG offers the ability to have formal links with the CSP Council and other decision-making structures within the organisation such as the Professional Practice Committee (PPC) and member networks and relations (MN&R) (*Figure 1*, right, identifies these links).

The aims of the CIGLC are to:

- Contribute a clinical perspective to CSP policy and development.
- Provide a forum through which the CIGs/OGs can debate and influence changes which affect professional practice and service delivery.
- Facilitate and enhance two way communication between all CIGs/OGs and the CSP.
- Facilitate and enhance communication between the CIGs /OGs and all other CSP subgroups.
- Provide elected members to relevant CSP committees as required, including the election of four representatives to the Professional Practice Committee (PPC). Issues raised at the PPC are discussed at the CIGLC and specific topics are discussed and recommendations made. This year topics have included prescribing for physiotherapists, guidance for developing junior and senior II rotations in settings outside the acute hospital sector and the national scheme for the accreditation of clinical educators.

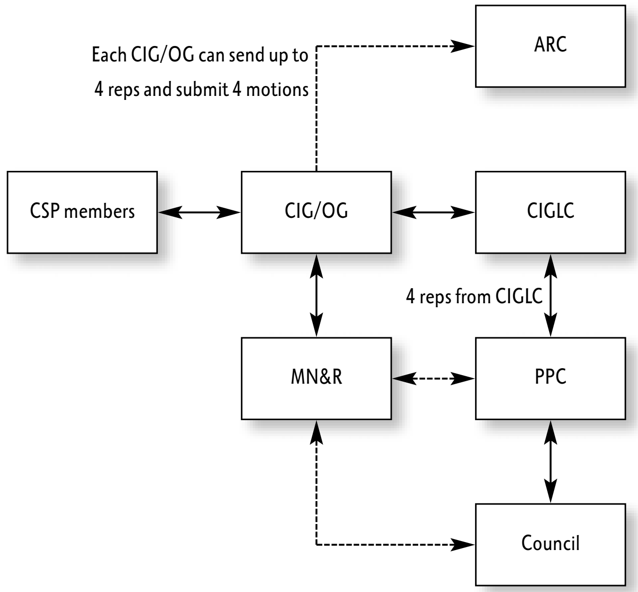

Figure 1

Prescribing for Physiotherapists

Articles updating information for members have been published in *Frontline* the latest of which was on June 18th 2003. An information paper and position statement is being drafted by the CSP steering group and will be published later this year.

NICE Guidelines

The National Institute for Clinical Excellence have recently announced the new programme of guidelines. Topics include falls, Parkinson's Disease and tumours of the brain and central nervous system. The CSP are actively seeking the assistance of members to be involved in the process. If you have an interest in any of the above topics and would like to help the Society with consultation on these guidelines please contact Ralph Hammond at the CSP (telephone 0207 306 6632 or email Ralph at whittakerh@csp.org.uk)

CIG/OG Conference 2003

There is a yearly conference, which is to be held in Kenilworth in November 2003. This year it is aimed at developing the skills of executive committee members, facilitating the potential of CIGs/OGs and the ability to raise their profile. Workshops include 'scope of practice', engaging CIG/OGs in influencing policy and endorsement of courses.

A summary of the CIGLC meetings is fed back to all regional representatives via national meetings and any specific issues are considered. For example this year there has been discussion about the potential need expressed by CSP members for redevelopment of speciality standards. This resulted from members contacting the CSP for guidance on speciality issues such as staffing levels, skill mix and marketing that are not met by the new CSP core standards. A workshop held at the CSP suggested that there was generally not a need for speciality standards but that there needed to be better signposting of information available. The CSP Research and Clinical Effectiveness Unit, The Communications and Marketing Department and the Professional Practice Committee will now consider the areas for development raised.

If you have any clinical or professional issues you wish to be raised please develop discussion in your regional groups for regional representatives to feedback at the national meetings of ACPIN or contact me directly. This way we can ensure that we improve two way communication with the CSP on issues that affect practice and service delivery.

PRESCRIBING RIGHTS FOR PHYSIOTHERAPISTS WHAT ARE WE DOING?

Davina Richardson
Currently working as Team Leader of a Community Assessment and Rehabilitation Team in the Primary Care Trust of Hammersmith and Fulham. She has set up the first MDT assessment clinic in the Trust which is supported by three agencies. She is a member of the Prescribing Rights Steering Committee for the CSP.

The purpose of this short article is to inform readers of the issue of Prescribing Rights for Physiotherapists. It is not intended to be a large information document. The CSP is currently producing a comprehensive paper on the topic, which will be available later in the year.

In daily practice we are constantly liaising with our medical colleagues about individuals responses to medicines, we often initiate a change in medication or cessation of one type and trial of another. Medicines are part of the overall treatment and can enhance the outcome of therapeutic interventions, for example pain killers and antispasmodics, bladder management therapeutics and antidepressants to name but a few. Part of The Government plans for the New NHS involves utilising staff in the most effective and efficient manner to provide the best care to the patients. There is, therefore, a role for the physiotherapist to develop their knowledge and expertise so that they can improve the management and care of the patients.

Competencies to perform certain duties are being explored. Following reports in the publication of *Primary Care: Delivering the Future*, published by the DoH in 1996 The Government organised a review of the arrangements for 'prescribing, supplying and administering medications'. The recommendations were published as *The Crown Report* in 1999. This followed up on an earlier piece of work by Dr June Crown in 1989, The Cumberlege Report, that was a report on Community Nursing, which lead to an Advisory Group on Nurse Prescribing. A major recommendation of *The Crown Report* was that Patient Group Protocols be renamed to Patient Group Directions to ensure that the name matched the wording in *The Medicines Act* of 1968. Thus any Group Protocols were illegal, Group Directions were not.

Since these initial reviews The Government has continued to promote nurses prescribing and are now realising that Allied Health Professionals can also be involved in prescribing where it will benefit their patients directly and improve service delivery and patient care and outcome.

At this moment in time physiotherapists can be involved in the administration and supply of medicine only. They cannot prescribe medicines. For this to occur there has to be a change in the legislation. Thus if therapists working with medicines are not practicing under a Patient Group Direction (PGD) they are not practicing legally. Unless that is, they are working under a Patient Specific Direction where they have been directed to supply or administer a medicine by a medical colleague for use with a specific patient.

All physiotherapists should be aware of the potential and limitations of working within a Patient Group Direction. The CSP will be publishing a further paper on what a PGD is and how to become involved.

It is important to note that prescribing is not going to become a compulsory part of a physiotherapist's role. It will be for individuals who wish to develop this area of their knowledge in a setting where it will improve the patient care. These individuals will have to undergo specific postgraduate training and be carefully monitored.

In order to move forward with this project the CSP needs to be aware of physiotherapists who are involved in the supply or administration of medicines. They are asking you as practising clinicians to think where it would benefit the patient and the service if you had the ability to supply, administer or prescribe medications or other prescription only products, such as dressings, orthotics, prosthetics and food supplements.

I am currently gathering information/views on behalf of the CSP on the following issues and would be grateful for any feedback from ACPIN members. If you could consider the following points:

- Which setting would be appropriate for you as a clinician to be able to prescribe/administer medicines? For example, outpatients, special clinics, the community, the ward, GP practices
- Is simply being able to administer and supply a medication or other product on prescription useful via a Patient Group Direction?
- Would being able to prescribe independently of another health care professionals improve the patient care, outcome or access?
- Whether in close collaboration you can alter or change a medication or product, known as supplementary prescribing?
- How would being able to prescribe/administer medicines benefit the patient and/ or the service?

An example of the feedback form is included to give some ideas, but all information and views will be welcomed. Thank you for taking time to read this article.

Any information can be emailed to *dlrichardson@hhnt.org*

METHOD	SETTING Acute, ward, A+E, ITU, outpatients, Special clinics, community, GP practice, home etc	WHICH MEDICAL CONDITION?	WHY IS THIS METHOD OF TREATMENT MOST APPROPRIATE?	HOW DOES THIS BENEFIT THE PATIENT AND THE NHS?
Patient Group Direction (supply and administration only).	Out-patient Clinic.	• Asthma Adults/Paediatrics • Administration and supply of pulmocort/bricanyl inhalers.	• Patients can be shown the most effective and efficient way of taking a medication that has been prescribed by a doctor. • They can have easy access to the medication.	• It shows them how to get the most from their medicine and gives them best clinical effect. • Job satisfaction.
Supplementary Prescribing (in partnership with a doctor).	Community Domicilary visits.	Neurological patients eg MS, stroke, and head injury who are suffering from increased muscle tone. This population may require pain medication or spasticity medication.	• Patients can be monitored regularly; the response to changes in medication observed, adjustment of doses to provide appropriate levels of drugs for each individual. • Initiation of medication or cessation of medications where appropriate.	• Appropriate and timely application of the right medication at the right time. • Easier access to medication review. • Less inappropriate use of medication. • Less unwanted side effects from medication. • A more responsive service. • Job satisfaction.
Independent Prescribing.	• GP Clinics • Independent Practitioner Clinics.	• Musculoskeletal conditions • Patients where physiotherapists might be first contact practitioners. • Pain relief • Anti inflammatories • Steroids • Diet supplements?	• A single practitioner can manage the patient. • Fast access to appropriate medication and treatment. • Better outcome for the therapy as combined with medication effect. • May result in less treatment required as treated at the right time. • Avoidance of secondary complications.	• Patients can have a one stop shop service, less confusing, easier to cope with, faster access, less waiting, better patient satisfaction. • Job satisfaction, improved/better staff retention and moral. • Raised profile of profession. • Less likelihood of prolonged disability from initial injury.

CLINICAL PRACTICE AND AUDIT GROUP SUMMARY SEPTEMBER 2003

Jo Tuckey
Membership Secretary

At the start of the year the clinical practice and audit group were working on a paper to support the guidance on manual handling document. The paper was intended to provide a background to risk assessment. However, once complete the group felt that it would not add a great deal to the previous work. A short summary only therefore may be published in next Spring's *Synapse*.

Currently the group is working on an article about outcome measures. National ACPIN frequently receive requests from members to provide them with information and advice on use of outcome measures appropriate to neurology. The group felt that as publications are in existence which already cover this area, and extensive advice can be sought from other agencies such as the CSP, the article would aim to inform members where they can best seek up to date relevant information.

Finally, all regional representatives have been asked to establish from their local regions what future projects may be usefully, and realistically, undertaken by the group.

PRO & COMMUNICATIONS SUB-GROUP REPORT AUTUMN 2003

Nicola Hancock PRO

Our group continues to facilitate communication within ACPIN itself and between ACPIN and other health professionals and neurological groups. We are forging closer links with many organisations this year, including the Ataxia Association and the Meningitis Trust, to name just two. Closer working on major topics with our medical colleagues is enhanced by the input and support of our President, Professor Tallis.

Following the success of the ACPIN motions for ARC congress 2002, we again prepared early and thoroughly this year. We submitted two motions (see *ARC Report* on page 20), and were delighted that both were passed decisively. We look forward to further news from the CSP on progress in these areas. ACPIN was one of the best represented groups at ARC which also ensures we maintain links with many other CIGs and Steward's groups. If members have issues that they would like raised as possible topics for debate at next year's ARC, please contact me directly to ensure that they are discussed by the National Committee as soon as possible.

We have also had some success with the national media this year, watch this space for further details of this venture!

RESEARCH SUBGROUP REPORT SEPTEMBER 2003

Mary Cramp ACPIN Research Officer

It is now six months since our last report on the activities of the Research Subgroup and time has gone quickly. Many of our tasks are regular and ongoing and include preparing and producing Research Forum – our regular feature in *Synapse*, managing the ACPIN Research Bursary and handling database requests. We regard Research Forum as our primary means of communicating research-related information as well as keeping you up-to-date with the activities of the Research Subgroup. So if you want to know more, look at this section in this latest issue of *Synapse*. We considered applications for the ACPIN Research Bursary at the beginning of July and the most recent recipient is Fiona Jones. The bursary offers up to £400 to members of two years standing to assist with their research and the next submission deadline for applications is March 31st 2004.

Finally, for those of you who completed questionnaires sent out to you in the last year, we are trying to ensure that you see some outcome for your time and effort. Reports of several of these studies will be appearing in the forthcoming issues of *Synapse*. As always, if you have any questions or comments, please contact me: Mary Cramp, School of Health and Biosciences, University of East London, Romford Road, Stratford, London E15 4LZ or email *mary.cramp@talk21.com*

RUSSIA 2003

Louise Gilbert (Senior Lecturer, University of East London)
Anthea Dendy (Clinical Specialist, St George's Medical Hospital, Tooting, London)

In April 2003 Anthea Dendy, Sarah Beeston and I visited Russia to deliver part of a postgraduate course in Physical Therapy at the Pavlov's St Petersburg City Medical University. This is the first postgraduate course in physical therapy to be offered in Russia and began in October 2002. It is a specialist course for qualified doctors and is seen as the first step towards the development of an entirely new qualification in physiotherapy, something currently not recognised or licensed in Russia. The development has been funded by the British Government through the Department for International Development (DFID) with Sarah Beeston at the University of East London as the project manager and co-ordinator for the United Kingdom working with the partner organisations in Russia.

Current medical practice does not encompass physiotherapy as a profession. This provides a major obstacle to the provision of a multidisciplinary service of rehabilitation for children and adults in both primary and secondary health care. At present although forms of rehabilitation do occur, treatment is based very much on a medical model, is often non-interactive, prescriptive and fragmented in its approach. Doctors who complete the course successfully will become physiotherapists who are able to teach students in a future undergraduate programme. Many of them already had postgraduate qualifications in physical methods of treatment and sports medicine.

The 'Physiotherapy in Neurology' module was the third module and we had two weeks in which to provide a background for neurological rehabilitation. The group was particularly keen to concentrate on stroke rehabilitation and paediatrics but other pathologies covered within the time were MS, Parkinson's Disease and spinal injury as these were the main client groups seen. We attempted to focus on concepts of treatment approaches and used a problem-centred and case-based approach to our practice. We were based both at the university and the Neurological Department at the Pavlov University Hospital. The timetable was packed with lectures, workshops and practical sessions, which included patient sessions. I experienced a massive learning curve as sessions were simultaneously translated. This is an exhausting experience at first and we realised how much jargon we tend to use in neurological practice. There was a small gym at both sites and although they were well equipped there was no luxury of up/down plinths so often we invaded the corridor and used the hospital beds. The practical sessions were particularly well received and like all physiotherapists everyone wanted to get their hands on and 'have a go'.

The Pavlov University Hospital was very fortunate to have a new stroke unit which was due to open later in May 2003. This 15 bedded unit has all the facilities of adapted bathrooms

and is designed to allow space for equipment and working areas for nursing and therapy staff. This is a major improvement on the rather cramped rooms where patients are currently cared for and everyone was very excited about its' opening.

It wasn't all work and no play, although the module ran from 2.00-7.00pm each day as the group would do their normal work in the mornings, so we did have the opportunity to visit St Petersburg. It was the 300 year celebrations of the city in May and it seemed every building was behind scaffolding being painted and 'renewed'. This didn't stop it being a beautiful city packed full of culture. If ever you get the chance to visit I recommend the Hermitage, Pushkin Palace and the Nefski Prospect for shopping.

All in all it was an intensive and exhausting two weeks but everyone was friendly and so many seemed to have a real passion and energy for the project. It was great to spend time with Sarah and Anthea, to talk about our practice, share experiences and ideas and have a few laughs. Hopefully the photos will give you some idea of our time there.

NATIONAL INSTITUTE OF CLINICAL EXCELLENCE MULTIPLE SCLEROSIS GUIDELINE *INFORMATION FOR PHYSIOTHERAPISTS*

The National Institute for Clinical Excellence is due to publish a clinical guideline on the management of multiple sclerosis. The Chartered Society of Physiotherapy (CSP) and the Royal College of Physicians, on behalf of NICE, have jointly led the development of the guideline.

The MS Society welcomes the forthcoming guideline. It will be very valuable for people affected by MS, healthcare professionals and those commissioning services. The guideline will bring together, for the first time, evidence and guidance for care and treatment for people affected by MS, which the NHS should now follow.

The MS Society is now working with the CSP and ACPIN to ensure implementation of the guideline. We will highlight key issues pertinent to physiotherapists in a document to help physiotherapists translate the guideline into working practice.

The *Information for Physiotherapists* document will summarize what NICE says, raise key questions relevant to physiotherapists, highlight key evidence based interventions, and provide direction to useful information and resources.

Working in partnership the MS Society, CSP and ACPIN are supporting physiotherapists to provide quality, evidence based services for people affected by MS. This document highlights key issues pertinent to physiotherapists within the 'National Institute of Clinical Excellence multiple sclerosis guideline'.

How was *Information for Physiotherapists* developed?
A steering group was established and a structure for the document was devised. Following this a workshop of 35 physiotherapists working with people affected by MS in England, Wales and Northern Ireland, was held at the CSP in July 2003. Participants considered key questions and highlighted information and resources in relation to each section of the NICE guideline.

Who is *Information for Physiotherapists* designed for?
This document is relevant for all physiotherapists working with people affected by MS.

When will *Information for Physiotherapists* be available?
The NICE MS guideline will be published towards the end of 2003. Information for Physiotherapists will be available from the MS Society from May 2004.

Advisory group members

- Jill Anderson MCSP
  MS Society lead and MS Society physiotherapy project manager
- Dr Jenny Freeman MCSP
  Senior Lecturer, Faculty of Health and Social Work, University of Plymouth
- Ralph Hammond MCSP
  Professional Advisor, Research and Clinical Effectiveness Unit, Chartered Society of Physiotherapy
- Dr Anna Jones MCSP
  Principal Lecturer, University of Northumbria
- Jacky Stevenson MCSP
  Project lead and team leader, Community MS Team, Newcastle
- Julia Williamson MCSP
  North of England ACPIN Representative

ACPIN MEMBERSHIP FEES

Jackie Sharp, ACPIN Honorary Treasurer

ACPIN membership fees will be increasing in 2004. This decision has been made in light of the increasing costs of running national conferences, the need to further develop our ACPIN website and to enable us to produce and publish a speciality standards document. Full membership will increase from £22.50 to £25.00 and student membership will increase from £10.00 to £12.00.

Payment by standing order
A number of members have requested the opportunity to pay their membership fees by standing order. We have considered this form of payment but unfortunately it remains unfeasible for us to manage this system within our current resources. Other clinical interest groups with standing order facilities have also reported a number of difficulties with managing standing order payments. Therefore, for the time being, ACPIN will continue to receive payments for membership by cheque only.

Other news

CHILD BRAIN INJURY TRUST NEW WEBSITE

Kate Pilgrim Morris, CBIT

The Child Brain Injury Trust (CBIT) is launching its new website: *www.cbituk.org*

Each year 20,000 children suffer an acquired brain injury (ABI) as the result of an accident or illness. ABI leads to a complex range of psychological, cognitive, and physical conditions that will impact on the quality of life for these children for the rest of their lives.

The aim of the website is to provide an easy to use, informative and practical tool for parents and professionals caring for and supporting children and young people who have an ABI.

We hope that this website will grow with the organisation and prove to be an invaluable resource offering clear and simple methods for parents and professionals to use on-line services and contact staff.

The chief executive of CBIT, Kieran Breen, said: 'We are delighted to be able to reach so many more children, young people and their families who have an acquired brain injury'.

CBIT staff are available to speak about the charity and its work, and to put you in contact with your nearest support group.

Child Brain Injury Trust
c/o The Radcliffe Infirmary
Woodstock Road,
Oxford 0X2 6HE
Telephone: 01865 552467
Email: *info@cbituk.org*

Registered charity no 1007856

CLASSIC GUILLAIN-BARRE SYNDROME (GBS) AWARENESS PRESENTATION AND WEBSITE

Classic Guillain-Barré syndrome (GBS) is an acute ascending progressive neuropathy characterised by weakness, hyporeflexia or areflexia, and paresthesias. In severe cases, patients may develop respiratory failure due to muscle weakness, and may also exhibit severe and labile autonomic dysfunction. Maximal weakness typically occurs two weeks after the initial onset of symptoms.

In 1916, Guillain, Barré and Strohl described the syndrome in two patients who spontaneously recovered from a progressive ascending motor weakness with areflexia, paresthesias, sensory loss, and an elevated level of CSF protein.

Since the polio vaccine came into widespread use, GBS has become the most common remaining cause of acute neuromuscular paralysis.

Most patients with GBS exhibit absent or profoundly delayed conduction in motor nerve fibres. This aberrant conduction results from demyelination of nerve cell axons. Peripheral nerves and spinal roots are the major site of demyelination, but cranial nerves may also be involved,

GBS is believed to result from an autoimmune response triggered by an antecedent illness or by any of a long list of medical conditions.

The autoimmune response seems to have both humoral and cell-mediated components. In most patients with GBS, symptoms result from injury to the myelin sheath, but in a subset of GBS patients, axonal damage results from a direct cellular immune attack on the axon itself.

The classic demyelinating type of GBS is termed acute inflammatory demyelinating poly (radiculo) neuropathy or AIDP. Some patients have a very similar illness, distinguished from AIDP by its longer progression. This second condition, once termed 'chronic GBS' is now known as chronic inflammatory demyelinating poly (radiculo) neuropathy or CIDP.

Both GBS and CIDP are treated with plasmapheresis or by the infusion of intravenous immunoglobulin. CIDP may be also treated with steroids or other immunosuppressive drugs. In most cases of GBS, treatment reduces recovery times but to be effective, it is important that it is administered within the first few days.

Prompt diagnosis of GBS is therefore vital to ensure that patients are closely monitored for breathing and related difficulties and that patients receive the correct treatment swiftly.

The treatment of CIDP with plasmapheresis or immunoglobulin continues to be effective during the course of the illness and will very likely need to be repeated. Though CIDP is not as potentially catastrophic as GBS, the gradual and insidious degeneration that it presents results in other problems. Symptoms are frequently overlooked and the condition misdiagnosed. Patients may be accused of malingering or even diagnosed with hysteria.

So for very different reasons, good awareness of GBS and CIDP is of prime importance, To promote such awareness, the GBS Support Group has produced this programme which it offers to all members of the medical profession.

To find out more about GBS or CIDP, contact us for an Information Pack. Alternatively, visit our website at *www.gbs.org.uk* to view our literature and find links to other related sites.

About the Support Group?
Call the *GBS Helpline* on 0800 374 803.

Is it possible to arrange a hospital visit by a recovered patient?
Yes. Contact us by email, letter or ring the GBS Helpline. There can be nothing more helpful to a patient's morale than to receive a visit from someone who has made his or her own recovery from the illness.

Is there a charge for the above information or services?
No. The Group is a national charity and its services are entirely free. Many who contact the Group subsequently become members but this is entirely optional.

Information
The Group's 'normal' information booklets together with an extra booklet called *Guillain-Barré Syndrome – Guidelines for Doctors and Other Health Professionals* are available as an information pack that we will mail to any health professional or student in the UK or the Republic of Ireland. Whilst our 'normal' booklets are available to be viewed and downloaded on the website, we regret the guidelines cannot be seen for copyright reasons.

We suggest you order some of our *Quick Guide* leaflets for distribution to patients, families etc which have details about our free helpline, how to obtain copies of our information booklets, and how we can offer support.

Awareness Presentations
We give awareness presentations free of charge throughout the United Kingdom and Ireland in an effort to raise the profile of this condition amongst the medical professionals and the public at large.

The presentations, which incorporate a video, run for 60-90 minutes but can be tailored to your requirements. They are available on request. Information packs of the Support Group's literature will be supplied. You will be asked to provide a venue, VHS video equipment, and an appropriate audience.

Check the website *www.gbs.org.uk* or contact GBS on 01529 304615

RESCUE PROJECT WEBSITE

The Rescue Project are delighted to announce the launch of their website: *www.rescueproject.org*

This dynamic site complements their recently commenced randomised control trial, and affords a superb opportunity for practitioners, people with Parkinson's disease, carers, and the general public to interact with this important Parkinson's disease research project.

Features include a project overview, team profiles, a timeline of key events, latest news, a reports area where you can download copies of abstracts and deliverables, and a press pack. An interactive question and answer area will be available shortly.

Rescue looks forward to your visit. Please update your records accordingly and link from your websites as appropriate. Queries can be sent to: *pr@rescueproject.org*

The Rescue Project is investigating a physiotherapy rehabilitation programme to improve mobility for people with Parkinson's disease. It is backed by 1.6 million Euros funding from the European Commission Framework 5 Programme.
Rescue is a collaboration between Northumbria University, the Katholieke Universiteit Leuven, and VUMC Amsterdam. The randomised control trial is a unique international multi-centred trial that will involve 150 people with Parkinson's disease across the three project centres.

The dynamic data driven website is developed using Dreamweaver, Fireworks, PHP and MySql.

ACPIN draft revised constitution

Revised from previous constitution dated 17th July, 1996

Following the AGM 2003 the Executive Committee have reviewed the existing Constitution for ACPIN. I would welcome your comments by 28th February 2004 in readiness for the AGM in March 2004 where the constitution will be formally ratified. Please email your comments to me at : *linziebassett@talk21.com*

1. TITLE

1.1 This Clinical Interest Group shall be known as the 'Association of Chartered Physiotherapists Interested in Neurology'. Herein referred to as ACPIN, or 'The Group'.

2. TERMS OF REFERENCE

2.1 To encourage, promote and facilitate the exchange of ideas between ACPIN members within clinical and educational areas.

2.2 To promote the educational development of ACPIN members by encouraging the use of evidence-based practice and continuing professional development.

2.3 To encourage members to participate in research activities and the dissemination of information.

2.4 To develop and maintain a reciprocal communication process with the Chartered Society of Physiotherapy on all issues related to neurology.

2.5 To promote networking with related organisations and professional groups and improve the public's perception of neurological physiotherapy.

2.6 Any other objective not in conflict with 2.1 to 2.5 above which appears to be appropriate to the needs and interests of the members of ACPIN.

3. ACPIN shall not take any action or express any view which in any way affects or concerns the general policy of the Chartered Society of Physiotherapy (CSP) without the express agreement of the Council of the Chartered Society.

4. MEMBERSHIP

Membership shall be available upon completion of an application form and payment of the appropriate subscription in the following terms:

4.1 **Full members** shall be registered Chartered Physiotherapists in good standing with the CSP. This is the only group entitled to full voting rights.

4.2 **Associate members** shall have a professional interest in neurology and thus, in the opinion of the Executive Committee are suitable to become members of ACPIN. Associate members will not have the right to vote in any ACPIN election, nor to hold any elected post within ACPIN. Assistants whose names appear on the register maintained by the Chartered Society of Physiotherapy shall be eligible for associate membership.

4.3 **Overseas members** shall be qualified physiotherapists who are members of any professional body which is recognised by the CSP and who are in good standing with that body.

4.4 **Student members** shall be undergraduate physiotherapists who are currently students on a physiotherapy course which is recognised by the Chartered Society of Physiotherapy.

5. REGIONAL STRUCTURE

5.1 **Application procedure**

Applications for full, associate and student membership shall be submitted in the first instance to the Database Co-ordinator. A new member will be allocated to one Regional Group, according to the location of his or her place of work or residence in accordance with the map annexed hereto*. A member who works or lives close to the boundary of any region may elect to join an adjacent region.

5.2 **Capitation**

Regional Groups shall be entitled to receive a proportion of the annual subscription paid by each member allocated at a level determined by the National Committee.

It shall be open to the National Committee to set different levels of local subscription allocations among Regional Groups.

5.3 **Regional constitutions**

Each regional group shall adopt a written constitution in accordance with guidelines at Appendix 1 of this constitution. A Regional Group may not amend its own constitution without prior agreement of the National Committee, signed by a resolution passed by a majority of committee members present.

6. EXECUTIVE COMMITTEE

Shall comprise of:

6.1 Nine honorary officers, Chair, Vice Chair, Secretary, Treasurer, Membership Secretary, Research Officer, Public Relations Officer, Minute Secretary, Diversity Officer Post, or any others holding office in accordance with Clause 7.2 below.

6.2 Not more than four full members elected at the Annual General Meeting (AGM) who shall be entitled to serve as members of the Executive Committee for such period as shall be permitted in the case of an Honorary Officer.

6.3 The Executive Committee shall be empowered to co-opt four members to serve in addition to those elected members, should the need arise. The total number of co-opted members shall never exceed one third of the total membership of the committee. The Executive Committee hereafter referred to as Executive shall be responsible for the general management of the Group.

6.4 If any Executive Committee member fails to attend two-thirds of the yearly total of meetings without good reason, where good reason is decided at the discretion of the majority of the remaining Executive members, their term of office shall be deemed to have lapsed. The vacancy may be filled by the Executive Committee at its discretion.

7. THE HONORARY OFFICERS

7.1 Only full members shall be eligible for election as Honorary Officers. Any candidate for election as an Honorary Officer must submit a written nomination, countersigned by at least two other full members to the Chair.

7.2 The Honorary Officers, whose numbers shall not exceed nine, shall comprise Chair, Secretary, Treasurer, Membership Secretary and such other officers that the Executive consider expedient for the efficient management of the affairs of the Group.

7.3 Honorary Officers shall be elected by ballot of enfranchised members of the group at the AGM, save and except the Chair, who shall be elected by a ballot of all Executive Committee Members at the first Executive Committee Meeting to be held after the AGM in the year of the Chair's retirement.

7.4 Honorary Officers will hold office for two years, and may offer themselves for re-election for not more than three consecutive terms. (Giving a maximum of six years service). A former Honorary Officer may offer him or herself for first election not less than two years after retirement from any earlier honorary office. An Honorary Officer may transfer from one honorary office to another for the aggregate length of continuous service. An Honorary Officer shall not exceed a period of six years, as set out above. (See exception below for Chair).

7.5 The Chair Person must be on the Executive Committee for a minimum of four years prior to becoming Chair for up to a maximum of four to six years with at least one year prior to taking the Chair as Vice Chair.

7.6 In normal circumstances the Chair and Secretary shall not retire in the same year as each other.

7.7 Retiring Honorary Officers shall leave office at the AGM and newly elected replacements take office immediately, so that the Chair shall hand over office at the first National Committee Meeting following the AGM.

7.8 The Office of President shall be occupied by a person suitably qualified and distinguished who has been invited by the Executive Committee for a period not exceeding four years. The President shall be entitled to attend all meetings of the Executive, but shall not have voting rights.

7.9 Should any casual vacancy arise among the Honorary Office, except Chair, that vacancy shall be filled by co-option of a suitably qualified member of the Group, who shall hold office until the next AGM. A casual vacancy for the Chair shall be filled by vote of the National Committee as set out above. Any period of office served as a result of the appointment following a casual vacancy shall not count towards the maximum six year period of office for any member of the Executive Committee.

7.10 Committee members will hold office for two years and may offer themselves up for re-election for not more than three consecutive terms for a maximum of six years. However, a Committee Member who goes on to hold an Honorary Officer's post can remain in this Honorary post for up to six years, offering themselves up for re-election at two yearly intervals during this period. Thus maximum service on the Executive Committee can total twelve years.

8. NATIONAL COMMITTEE

8.1 The National Committee shall consist of the Executive and one Representative elected from each Region. Regional Representatives shall be full members of the Regional Group whom they represent.

9. ANNUAL GENERAL MEETING (AGM)

9.1 The AGM shall be held in the month of March at a convenient time and place, to be decided by the Executive, providing that no more than 54 weeks shall elapse between AGM's.

9.2 Notice of the date, time and place of the AGM shall be given to all members by the Chair not less than 28 clear days in advance. Such notice shall be accompanied by a provisional agenda.

9.3 The AGM shall receive reports from the Honorary Officers, consider the accounts, and appoint an Auditor for the following year, hold elections for office by means of a secret ballot and transact such other business as notified to the Secretary in writing not less than 14 days before the said AGM.

10. EXTRA-ORDINARY GENERAL MEETING (EGM)

10.1 An EGM may be called by the Secretary upon receipt of instructions from the Executive or upon written representation from not less than one third of the full membership.

10.2 Not less than 28 days clear notice of an EGM shall be given, specifying date, time and place, to all members of the Group. Such notice shall also include an agenda which comprises a full and exhaustive programme for the business which is to be considered at any such meeting.

11. VOTING

11.1 All voting at Annual General Meetings or Extraordinary General Meetings shall be by secret written ballot conducted as directed by the Secretary. The Secretary shall devise ballot papers, a means of collection of the ballot and appoint tellers to count the ballot and inform the Secretary of the result which shall then be announced.

11.2 Any full member may appoint another full member to act as his or her proxy at any Annual or Extraordinary General Meeting by giving notice in writing to the Secretary. Such notice specifying whether the said proxy is directed to vote in accordance with the wishes of the members or given discretion in the casting of any vote.

11.3 Voting at all Committee Meetings shall be by a show of hands.

11.4 An Annual General Meeting or Extraordinary Meeting shall not be deemed quorate unless at least 50 full members, or one third of the total full membership attend, whichever be the less.

11.5 Any Committee Meeting shall require a quorum of not less than one third of the membership of the Committee.

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* Map will be available for the final draft

12. WINDING UP/DISSOLUTION

The Group may be wound up by a resolution passed at an Annual or Extraordinary General Meeting supported by a simple majority of full members casting votes. In the event of a motion to wind the Group up being passed the assets of the Group shall be handed over to the Members Benevolent Fund of the Chartered Society of Physiotherapy.

13. AMENDMENT

This constitution may only be amended by a resolution passed by an Annual or Extraordinary General Meeting of the group provided:

13.1 The proposed amendment has been notified to the Secretary in writing and is supported by the signatures of not less than ten full members.

13.2 At least 14 clear days notice has been given to each full member of the proposed amendment.

13.3 The proposed amendment receives the support of at least two thirds of the votes cast at the relevant meeting.

APPENDIX

i When formulating a Constitution, Regional Groups shall have regard to the provisions of the National Constitution, and in particular shall adopt the provisions of Articles 1 to 5 thereof.

ii Regional Groups shall make provision for the election of a Regional Committee not less than one month before each Annual General Meeting of the National Group.

iii That Committee must include a Regional Representative who shall serve for two years on the National Committee. It is envisaged that each Region will also elect a Secretary and a Treasurer. The same time limits on service on a Regional Committee shall apply as in the case of the National Committee and Executive.

iv Not less than four meetings should be required to be held each year within normal circumstances.

v Quorum shall be one third of the Regional membership.

vi Amendment to the Constitution shall be at a Regional Annual General Meeting or Extraordinary General Meeting, but shall only take effect when it has been approved by Resolution of the National Executive.

vii Winding up shall be by resolution of the members, save that if full memberships falls below ten a Regional Group will be deemed to have been wound up and its remaining members shall be allocated to other convenient group(s).

viii Regional assets shall pass automatically to the National Group.

ix A copy of the Constitution of each Regional Group must be supplied to the National Honorary Secretary.

x The appropriate provisions of this Constitution may be adopted by Regional Groups by the making of amendments to meet the specific needs of such groups. It is envisaged that each Regional Group will adopt this Constitution subject to such amendments.

heads up!
Stroke & Neurological Physiotherapy

Neurological Rehab Physiotherapist
(Full-time)

heads up! is a specialist neurological physiotherapy practice expanding to cover Surrey, Sussex, Kent and South West London. We are committed to developing one of the best neurological physiotherapy practices in the country.

We already employ a team of 3+ WTE's and we have one specific vacancy for a full-time neurological physiotherapist at the moment. However, there will also be openings in the future so please feel free to approach us at any time.

We require:
- Three years' neurological clinical experience
- Postgraduate training including three week Bobath course on Adult Hemiplegia
- Enthusiasm
- Flexibility
- Ability to work well within a team
- Professional commitment
- Organisational abilities and motivation
- Willingness to work in different locations/within the community
- Car

We offer:
- In-house CPD with Anna Hamer, Bobath Tutor
- An exciting opportunity to be part of a developing team in the private sector
- Attractive remuneration and pension
- Training expenses
- Contribution towards relocation expenses
- Hydrotherapy/ Groups/FES Clinic

For an informal chat, please call Sally Watt, the Practice Manager on (01306) 888171 or email: sally@headsup.co.uk

www.headsup.co.uk

Faculty of Health and Social Care Sciences
KINGSTON UNIVERSITY • ST GEORGE'S HOSPITAL MEDICAL SCHOOL

WHOSE CONFIDENCE IS IT ANYWAY?

Enabling patients' confidence through rehabilitation

Tuesday 30 March 2004, 9am – 4pm
at St George's Hospital Medical School, London, SW17

Our aim is to promote 'Confidence in performing essential functional tasks and meaningful activities' as the main goal of patient-focused rehabilitation

We shall provide participants with information and ideas about ways to enable such confidence among patients undergoing rehabilitation, using psychological theory and practical examples from stroke rehabilitation, management of chronic pain and management of anxiety about falling

Participants will be encouraged to develop a plan for implementing these practices within their own specialist clinical area and reflect on methods of monitoring progress and success with these interventions

ORGANISERS

Fiona Jones Senior Lecturer School of Physiotherapy, Kingston University and St George's Hospital Medical School, London

Janet Simpson Hon Senior Lecturer, Centre for Rehabilitation and Ageing, Division of Geriatric Medicine, St George's Hospital Medical School, London

Vicki Harding Research and Superintendent Physiotherapist, INPUT, St Thomas's Hospital, London; Chair Physiotherapy Pain Association

This conference would be of interest to physiotherapists, occupational therapists and their colleagues working in acute and community settings. It will include both specialist presentations and interactive workshops

Fee: £80.00 which includes refreshments, lunch and delegate pack

For further details and advanced registrations please contact: The Marketing Services Unit, Faculty of Health and Social Care Sciences, Kingston University and St George's Hospital Medical School, Cranmer Terrace, London SW17 0RE. Tel (020) 8725 0220

KINGSTON UNIVERSITY
St George's Hospital Medical School
UNIVERSITY OF LONDON

Research forum

Mary Cramp
ACPIN Honorary Research Officer

Do you want to research? Are you unsure what to do or how to get started? Many members face this dilemma and in this issue, two of our members give a personal perspective of how they have tackled some of the barriers that they have faced. We also have details of the Research Questionnaire 2003 exercise and our regular features.

News, News, News

The second ACPIN Research Bursary has been awarded. The recipient is Fiona Jones who is looking at 'The Influence of a Self-Management Workbook on Confidence and activity following Stroke' as part of her PhD studies. The next submission deadline is the 31st March 2004. Details can be obtained from Mary Cramp, School of Health and Biosciences, University of East London, Romford Road, Stratford, London E15 4LZ or email *mary.cramp@talk21.com*

In case you missed it in *Frontline*, two physiotherapists working in the neurological field have received major research awards recently: Jon Marsden has been awarded a MRC clinical scientist fellowship exploring the rehabilitation of balance and gait following neurological dysfunction and Cath Sackley has been awarded PPP grant funding to conduct a randomised trial of Occupational Therapy and Physiotherapy invention, to enhance mobility and activity in a nursing/residential home setting.

1010101010101010101010 **STATS NOTE** 1010101010101010101010

MORE ON MEANS…

$$\frac{\Sigma(x)}{n}$$

Just looking at formulae, like the one above to calculate the arithmetic mean, is enough to put some people off statistics. What does it 'mean' !

The literal translation of the formula above is add up all the individual values (represented by x) you want to get the mean of to obtain their sum (Σ) and divide by the number of individual values (n) you have added up. It is easy to calculate either by hand or using a computer spreadsheet programme.

The mean is a useful and commonly-used descriptive statistic that gives an indication of the centre of distribution of a set of values. One of its main advantages is that it is fairly stable from one sample of a population to another. For example, if you measure walking velocity from two sample groups of stroke survivors fulfilling the same inclusion/exclusion criteria, you can expect the means of the two groups to be similar. However, there are some other things to consider when using means.

- Means should mainly be used with numerical values – if you are using a scale where subjects rate a item from 1 to 5, it may not be appropriate to calculate the mean score.
- Means are distorted by extreme values (outliers). They are most useful and stable if data is distributed symmetrically.
- By itself, a mean value does not give you a full picture about a sample – you need to have some idea of the spread of the values, which you get from standard deviation, or standard error of the mean values.

Do you want to research?

Feedback from neurological clinicians suggests that increasing clinical workloads leave very little time in an average clinician's day to devote to research activity. Therefore, it is difficult to move into the research field. Research is becoming increasingly important for our profession as we look for evidence to support our clinical practice. The ACPIN research subgroup has therefore asked two physiotherapists currently involved in research to provide some insight into their personal experiences of research, to try and help other neurological therapists who are looking to expand into this field. Louise Rogerson has worked in research in the clinical setting and has recently started her part time MPhil in Manchester. Alex Morley completed her part time modular MSc. Physiotherapy Practice in Neurology at the University of East London (UEL) in 1997 and is now working as a lecturer at Sheffield Hallam University with one day a week devoted to research.

Louise's experiences of entering the research field

'As part of my junior and senior II rotations, I was expected to carry out small audits or research projects. These projects were carried out with the support of my seniors and my peers. The projects were very small scale initially, but as my experience grew I felt more able to tackle slightly bigger topics. I tended to stick to audits in the early stages, but as a senior II at a regional neurorehabilitation unit, I felt inspired to tackle a research topic.

I carried out a study looking at the relationship between standing balance (measured on the Balance Performance Monitor) and function (measured with the Functional Independence Measure). The idea was simple enough with regular measurements throughout the rehabilitation process and then the use of descriptive statistics to look at any trends (anything more than that was beyond me!). The first thing I learned – as soon as you start a study, all the patients disappear! My planned four patients were soon reduced to three, then two and finally one – a single case presentation. My enthusiasm waned as time went on, but I eventually finished the project and presented the findings as part of the in-service training programme. There was no obvious link between the two measures in my study, but with only one patient, it was impossible to establish if this was by chance or if it was a genuine result. Despite this poor result, I found the research process challenging, and learned a lot about the need for establishing a simple straightforward question, and not allowing my attention to wander from that question.

When I moved from London to Manchester, I concentrated on my new role as a senior I physiotherapist and enjoyed the challenges of developing a service. However, the increasing need to use evidence based practice caused me to question my practice and in turn, question the efficacy of what I was doing on a daily basis. One persistent factor in any physiotherapy guidelines or standards is the lack of literature and evidence in the area, and this became increasingly frustrating as a practitioner. Research questions would pop into my head on a regular basis, but I did not have the time, resources, or knowledge to follow up these ideas.

As a senior I, I found that several of my peers were doing their Masters. I was tempted to follow this route but getting the funding and the time to do so was proving difficult as the service was undergoing drastic changes at the time. Looking around at the courses available, I also wondered if a Masters was for me as my only real interest was to research and not in the taught modules that go along with an MSc. I became involved in a local research project, assisting with subject identification and recruitment. The team doing the research presented their project to us, and the project seemed very practical and straightforward. One of the data collectors was a clinical physiotherapist, and this opened my eyes to the possibility of doing research as a part time post, not having to start a project myself, but getting involved in the intervention arm or data collection parts of a study.

In December 2002, I left my trust post and started working two days a week at a private clinic. As luck would have it a research post came up for two days a week and the main focus of the post would be subject recruitment and carrying out group exercises for the intervention arm of a trial. As luck wouldn't have it, I did not get the post. But as one door closes, another one opens. The opportunity to work two days a week at another NHS hospital came as a relief to my bank balance and even better, the trust agreed to fund my Masters as an incentive. Sarah Tyson based at the Centre for Rehabilitation Science, University of Manchester introduced me to the idea of doing an MPhil. This option allows me to do a relatively large research project under her supervision, whilst only having two taught modules on research methodologies. I am now six months into my course with Sarah, and I am thoroughly enjoying it. Ethics is a nightmare, but being in a research environment one day a week really helps to keep things in perspective, and having a supervisor pointing out the pitfalls, has helped a great deal. I am sure there will be moments when I will hate this game, but for now I am enjoying the thought that I might make a difference. I find working in the NHS a real challenge. I am constantly trying to change and improve services at grass roots level but in reality there is a lot beyond my control. In my research post, I can make a difference to practice beyond my trust and my region. I hope that doing this MPhil will show me how to initiate, start, carry out, and eventually finish a research project. I may or may not do any further research, but I am enjoying having the time to look at one area very closely, and analyse one aspect of physiotherapy practice.

I have been incredibly lucky in the way things have worked out, and I appreciate that MPhils and funding will not land in everyone's lap like they did in mine. However, I think that there are many physiotherapists out there who have great research ideas but do not have the support or knowledge to do anything about it. My advice would be to look around, get local knowledge of who is doing research and get to know them. I got an idea of clinical research from the study carried out at my hospital. Volunteer your department – it is usually a very small time commitment, but the rewards are great.

Every Thursday, I sit in a room with two post-doctorates, and they are keen to help me with the most basic tasks – even creating tick boxes on my computer! There is always help on hand, and they appear to have nothing but praise for fellow physiotherapists trying to develop research projects. I am still a clinician most of the time, but I am dipping my toe into the scary world of research, and it isn't that scary after all.'

Alex's experiences of entering the research field

'When commencing my MSc. in 1994, I had worked for two years as a senior II therapist on neurological rotations and I wanted to increase my depth of knowledge around neurological rehabilitation, beyond what I could learn on shorter courses. This course taught me valuable skills that I now know are essential to an effective researcher eg:

- good critical appraisal skills
- how to develop a research question
- research design
- issues of reliability and validity in research
- how to evaluate outcome measures.

The different modules also required that I studied at a higher level than I had done in the past. I found this a little daunting initially, but with tutor support I found myself developing better analytical and evaluative skills. The course also gave me the incentive to sit down and study on the end of a long working day.

My MSc. was completed with a dissertation. I enjoyed this research as it was a study topic of interest to me. It allowed investigation of the research process practically, on a small-scale project, in the safe environment of knowing I had tutor support at the end of the phone if I was unsure of what to do. I also had a manager who was supportive of my studies, who was willing to provide me with a little time to collect data and allowed me to recruit subjects from the physiotherapy department.

A couple of issues I found difficult to over come during this time were;

- Organising equipment, as my home base was Sheffield and I was not near the University of East London
- Finding local statistical support that was consistent.

I think some people did have problems with ethics but I didn't and with support from the university and the research office in my trust, my project went through without a hitch.

Having completed my MSc, I worked clinically for two more years, and then I moved into a university setting where I planned to teach and further develop my research profile. I felt my MSc was a good foundation for learning basic research skills with support from university tutors. I feel this support was invaluable in the early stages of research. It is important to identify someone who is approachable and willing/able to give the support required. They should have some knowledge of the research subject and a good knowledge of the research process. Being on a MSc did this for me formally anyway.

Completing my MSc provided me with the ability to develop new research ideas and write research proposals so that I could look at applying for funding. From experience, I would say large funding is not easy to get unless you have links with an active research group, although there are usually smaller grants available to get people started. There are several funding bodies which are specific to physiotherapy projects ie CSP research funding, the Physiotherapy Research Foundation, and there are increasing amounts of government funding set aside for nurses and allied health professions (See the Department of Health web site). Partnerships with other disciplines and between clinical and academic institutions are encouraged by some funding bodies. I recently received funding from the Physiotherapy Research Foundation to fund a project looking at muscle

WEBSOURCE

INFORMATION SOURCES

- **National Electronic Library for Health**
  www.nelh.nhs.uk
  An evidence based resource for the NHS
- **National Institute for Clinical Excellence**
  www.nice.org.uk
  National guidance on NHS treatment and care
- **Cochrane Library**
  www.update-software.com/clibng/cliblogon.htm
  For access to the Cochrane Database of Systematic Review

architectural measures in Traumatic Brain Injury (TBI) sufferers. This takes me out of lecturing one day a week for twelve months and provides me with money for my research equipment and supervision.

I think the most important lessons I have learnt so far by undertaking research have been to:

- seek out local resources eg local research groups/individuals, your trust research office, any statistical support, library facilities and computer facilities. Your trust medical physics department may have equipment or be able to advise you on it.
- make sure you have a good mentor for the project who has research experience and knowledge of your research subject
- be prepared to put in the time, as it is not provided for you.

I have really enjoyed the research I have done so far. I have to say it is hard work but with good support it certainly is possible.'

Research Questionnaire 2003 update

Research Subgroup

Once again, a big 'thank you' to members for completing the Research Questionnaire 2003. There was an increase in the number of questionnaires returned this year and they are still coming in! We plan to continue with this activity in 2004 to give us a better opportunity to look at trends within the membership. The 2004 form is enclosed with this issue of *Synapse* so we hope you will fill it in and return it with your membership form.

To date, 355 questionnaires have been returned. 55% of respondents completed components of Section 1, which explored research subjects, areas and methodology for those previously and currently involved in research. 35 members planning to get involved in research also completed this section and are included in the analysis. The top three subject groups for research were: stroke (45%), MS (14%) and other (14%). This year, a wide range of 'other' subjects was listed but there was no reoccurring group. The top three research areas were: intervention/treatment (40%), outcome measures (23%) and service delivery (19%). In relation to research methodology, the majority of methodologies listed were used with an occurrence rate of between 10% and 17%. One exception was systematic review, a methodology used by only 5% of respondents. Similar to last year, stroke remains the top group of research subjects and intervention/treatment, the top research area.

Section 2 looked at funding and post-graduate training of those currently involved in research. 147 (41%) of respondents completed Section 2. 46 people also completed Section 3 (intending to get involved). 70% of those currently involved in research were employed in the NHS and 58% were funded. Ten non-funded researchers were seeking funding. Of the funded researchers, 34% received their funding from charity groups; 27% were funded by their employer and the remainder were funded by NHS regional funds, research councils or other sources. 58% indicated that they had applied for the funding. In 2002, the equivalent response was 13%. However, the wording of this question was amended in 2003 for clarification so we need to be cautious about interpretation of these values.

Table 1 (above) shows the postgraduate qualifications of those involved in either funded or unfunded research. Included in this table are the figures from the 2002 survey. The most notable changes are in the qualifications of those receiving funding in 2003. The majority of funded researchers do not have formal postgraduate qualifications but in 2003 the number of funded researcher with an MSc or PhD qualification has increased.

POSTGRADUATE QUALIFICATIONS OF CURRENTLY ACTIVE RESEARCHERS

		Funded Research		Non-funded research	
		2003	2002	2003	2002
Registered for a further degree (n=79)	No	67%	60%	64%	55%
	MSc	15%	23%	31%	33%
	PhD	18%	16%	5%	5%
Hold a further degree (n=86)	No	57%	73%	73%	72%
	MSc	31%	18%	23%	22%
	PhD	12%	6%	4%	3%

Table 1

Section 3 asked those intending to get involved in research about timing, funding and general reason for their research. 147 individuals registered that there were intending to get involved in research. Responses were similar to last year. 28% had intentions to be active within six months, 26% within six to twelve months but 46% did not have a known schedule for their research. For 33%, their research would be funded but the majority would be non-funded. The majority envisaged that they would do their research as part of work with 33% planning to do their research as part of an educational course.

In section 4 (a new section in 2003), we asked members to comment about their involvement in research in 2002. In summary 35% were currently involved in research, 36% were planning to be, 27% were previously involved, and non-members in 2002 accounted for the remainder. The majority (67%) felt they had achieved their research ambitions for 2002 but many individuals commented on restrictions to research and/or ways they thought ACPIN could help. The main restrictions described by members were funding and time but many commented that there was little ACPIN could do to help. In relation to funding, the ACPIN Research Bursary provides a small sum of money to assist members with their research (see under *News, News, News* on page 32 for further details). Lack of time is a difficult issue to tackle but the information we are collecting through the annual Research Questionnaire exercise will help us to highlight this issue.

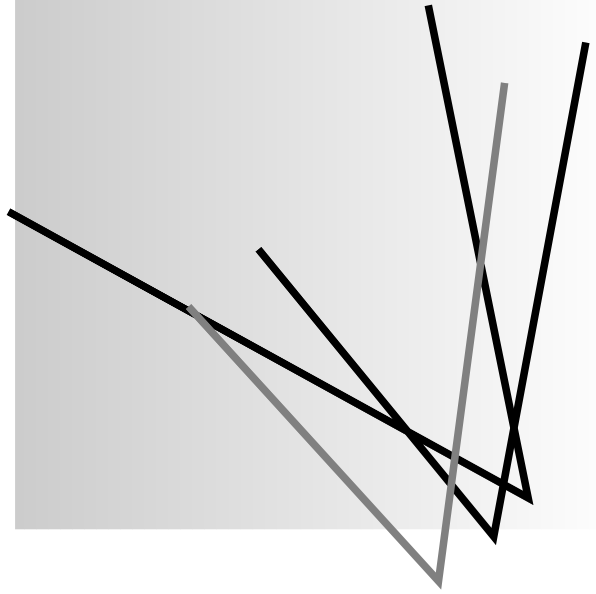
The key needs that were identified were related to access to information about planned and current research, establishing networks for support/participation in research and dissemination of accessible research information. The CSP maintains a database of research – but as anyone who has used the database will know there are problems with the scope and currency of the information available. Maintaining a useful database depends on individuals providing the required information and having the resources to regularly update the information! The National ACPIN Committee is considering other possibilities for improving communication such as extending the capacity of the ACPIN website (*www.acpin.net*) and it may be possible to include a regularly updated research noticeboard to aid networking. *Synapse* continues to be an essential source of information and means of communication. If you are not getting what you need in *Synapse*, you should get in touch with your Regional Representative and let them know what you want! One final comment – please remember that the success of any ACPIN activity is dependent on the contribution of its members. A big thank you for your contribution to the Research Questionnaire 2003. Keep up the good work!

ACPIN @
The Chartered Society of Physiotherapy
Annual Congress and exhibition

defining practice

Friday October 17 –
Sunday October 19 2003
International
Convention Centre,
Birmingham

Abstracts of lectures and biographies of speakers from ACPIN's programme at the 2003 CSP Annual Congress.



LECTURE 1

Why treat patients with progressive neurological disorders – where is the potential?

Diane Playford, Consultant Neurologist, National Hospital for Neurology and Neurosurgery

Treating people with progressive neurological disorders presents a number of challenges. The immediate and obvious concern is that, while clinicians are trying to prevent disability, the disease itself is leading to a deterioration in function, and so there is only very limited potential. If the emphasis is moved from treatment to management, from clinician to patient, and from disability to participation, then the potential for change becomes apparent. This session identified some areas where these shifts in emphasis could be incorporated into daily practice.

BIOGRAPHY

Diane Playford is Consultant Neurologist based in the Neurological Rehabilitation Service of the National Hospital for Neurology and Neurosurgery. Her research interests include the recovery of postural control following stroke, and assessing rehabilitation processes, with particular interests in care pathways and goal setting.

LECTURE 2

Evaluating treatment in patients with progressive neurological disability

Dr Derick T Wade, Professor of Neurological Disability, Oxford Centre for Enablement

Evaluating treatment in patients with progressive neurological disorder is no different from evaluating treatments in any neurological disorder, or indeed evaluating any treatment in any disorder.

The logical conclusions that can be drawn from any set of observations or data are determined by the logic of the study design. The accuracy of those conclusions is determined by the appropriateness and accuracy of the data collected, which in turn depends upon the nature of the data collection tool(s) used.

The major challenge posed by progressive neurological conditions is for professional staff, patients, families, health care purchasers and research funding agencies that need to understand and accept that treatment can be effective and worthwhile.

The remaining major challenges are identical to those faced in any rehabilitation research.

Conclusions on treatment depend upon:

- Control for as many aspects of the non-specific components of the treatment as possible. The treatment needs to be contrasted with an alternative.
- Reduction of bias which is achieved in two ways:
  - Blinding of those collecting the data, and patients if possible
  - Randomisation of as many aspects of choice as possible
- Accuracy of measurement of the expected effect, achieved by

choosing a data collection tool that maximises the signal-noise ratio, through collecting

- Data from the whole possible range
- No data from outside the possible range
- Enough separate data items to detect the effect

BIOGRAPHY

Dr Derick T Wade trained in General Medicine and Neurology before starting a research post in Bristol in 1980, investigating domiciliary rehabilitation for people after stroke. He started work as a consultant in 1986 at Rivermead Rehabilitation Centre and has been in Oxford since. Dr Wade is interested in all aspects of neurological rehabilitation in any condition and has designed and undertaken eight randomised controlled trials. He has investigated and written about many measures of outcome. He is also interested in research into detailed aspects of neurology, such as FMRI changes or neglect after stroke. His current interests are in the benefits of cannabis for people with MS, how to organise and fund delivery of equipment to people, and how best to assess people balancing detail against efficiency. Other areas of interest include the Permanent Vegetative State, and the nature, philosophy and ethics of rehabilitation.

LECTURE 3

Ethical dilemmas in end of life decisions about patients with progressive neurological disorders

Professor Raymond Tallis, Professor of Geriatric Medicine at the University of Manchester

The talk focussed on the case of a patient with an extremely severe stroke in whom the issues arise about aggressive treatment (such as cardiopulmonary resuscitation), ordinary medical treatment (such as antibiotics for chest infection) and continuing fluids by artificial means.

The talk examined the role of the principles of biomedical ethics in decision- making and their limitations, the inherent insolubility of many ethical problems and the need for trust and dialogue in order to ensure that patients are not denied beneficial treatment while at the same time not subjected to burdensome, futile and intrusive medical procedures.

The talk aimed not to provide any answers but provoke discussion.

BIOGRAPHY

Professor Raymond Tallis is Professor of Geriatric Medicine at the University of Manchester and a consultant physician in health care of the elderly at Hope Hospital, Salford.

He has had many roles nationally within both the Department of Health (for example, as the Advisor on Health Care of the Elderly to the Chief Medical Officer), on NICE and in the Royal College of Physicians where he is currently Chairman of the Committee on Ethics in Medicine.

His main research area is in rehabilitation and epilepsy, and for this he was elected a Fellow of the Academy of Medical Sciences.

He has written extensively about philosophy and has published fiction and poetry and has received two honorary degrees for his non medical writing. Most important of all, he is President of ACPIN!

LECTURE 4

Media hype or genuine hope – is cannabis effective in the management of MS?

David Francis, Senior Lecturer in Neurology at the University of Birmingham

Cannabis has a long history of medicinal use from the ancient Chinese remedies of over 2000 years ago to 19th Century Western medical textbooks. The resurgence of interest in its therapeutic effects began in the 1960's and have increased significantly over the last decade with the discovery of cannabinoid receptors present throughout the body.

Multiple Sclerosis (MS) is an immune-mediated disease of the Central Nervous System (CNS) that shows a wide range of clinical features: typically tremor, ataxia, spasticity, pain and bladder dysfunction. Many anecdotal accounts by MS sufferers reporting beneficial effects on these symptoms promoted a number of small scale scientific studies in each of these areas which appeared to support their findings. It is only recently that much larger, double-blinded, randomized, placebo controlled trials have challenged these subjective results.

This presentation included the results of the largest study, on the efficacy of cannabis as a symptomatic treatment for MS to date; the MRC sponsored Cannabinoids in MS (CAMS) trial which reports its findings this summer.

BIOGRAPHY

David Francis has been a Senior Lecturer in Neurology at the University of Birmingham and Honorary Consultant Neurologist to the Queen Elizabeth Hospital in Birmingham since 1990.

He trained in Neurology at the National Hospital for Nervous Diseases, Queen Square and Guy's Hospital between 1983 and 1990 developing a major research interest in the Immunogenetics of MS with Prof Ian McDonald at the Institute of Neurology, London.

He has been a principle investigator in numerous therapeutic trials in MS for the Interferons, Copaxone, Immunoglobulin and Cannabis and has served on several advisory committees for MS education in the UK, the Drugs and Therapeutics Boards, the MS Society Grant Committees and Trial Safety Committees. He is currently involved in co-ordinating the introduction of disease modifying treatment for MS as part of the DOH Risk-Sharing Scheme in the West Midlands; which covers an MS population of 7,500 with over a 1000 patients on the Birmingham MS database.

LECTURE 5

Physiotherapy management in MS

Jenny Freeman MCSP PhD, Senior lecturer, University of Plymouth

Multiple Sclerosis is the most common cause of chronic neurological disability among adults in the UK, affecting approximately 85,000 people. It is characterised by a multiplicity of symptoms that interact in a variety of ways to create a wide range of often complex physical, psychological and cognitive problems. Furthermore the disease course is characteristically unpredictable and variable, although generally progressive, evolving over decades. These characteristics make effective ongoing assessment and intervention particularly important and extremely challenging.

Knowledge of the effectiveness of rehabilitation interventions, and for the purposes of this talk, more specifically physiotherapy interventions, is of utmost importance in formulating an effective management plan. Of equal importance is knowledge about factors that impact on the ability of individuals to self-manage their condition, including adherence to home programmes and to advice given. This presentation reviewed the evidence available that investigates these issues. It discussed some of the recent initiatives that aim to improve the healthcare management of people with MS including the National Clinical Guidelines for MS, and the Physiotherapy Development Programme of the MS Society.

BIOGRAPHY

Jenny Freeman is a senior lecturer at the Faculty of Health and Social Work, University of Plymouth, Devon and Honorary Lecturer at the Institute of Neurology, Queen Square, London. A graduate of Curtin University, Western Australia in 1983, she specialised in adult neurology, working at the National Hospital for Neurology and Neurosurgery, Queen Square from 1988-1998. She completed her PhD in 1997. Her research interests and publications are in the areas of rehabilitation in people with Multiple Sclerosis, the evaluation of outcome measurement instruments, and issues relating to quality of life in people with MS. She is the Physiotherapy Advisor to the MS Society and led the recent development of the *MS Healthcare Standards* document.

LECTURE 6

Recent Advances in the Rehabilitation of Patients with MS

Dr Rosie Jones. Principal Clinical Scientist, United Bristol Healthcare Trust. Coordinator, Research and Development Support Unit, Bristol Royal Infirmary.

MS is a disabling progressive disorder frequently diagnosed in young adults. It is characterised in most of those affected by an early phase of relapses and remissions (relapse/remitting phase) sometimes leading to sudden and unpredictable changes in functional ability. It is common for the number of relapses to abate over a period of several years but for disability to continue to progress (secondary progressive MS). In a small proportion (usually given as around 5 to 10% of patients) a progressive from onset form of MS is seen. In this form of MS, relapses may or may not occur but steady progression of disability is typical. Pathological changes occurring in patches throughout the CNS include inflammation, myelin damage, axonal impairment and axonal loss. The degree and nature of disability reflects the sites affected, the extent of CNS damage, the cellular nature of the damage and the phase of disease.

Given the complex and unpredictable nature of MS and its long term impact on the affected individuals it is little wonder that approaches to management of the condition are wide ranging and span virtually every aspect of medical and social care. Until recently 'medical models' of management (diagnosis, pharmaceutical treatment strategies etc.) have been seen as separate and poorly integrated with rehabilitation. More recently however the need to manage the condition in an integrated way based on sound research-supported evidence and practice has been seen as essential although provision for this approach is still patchy. Some models for achieving integrated approaches were presented.

New developments in rehabilitation address some of the most frequent MS symptoms – spasticity, fatigue, mobility and balance problems and continence. Less frequent but highly debilitating symptoms such as intention tremor, cognitive deficit and pain are also the subject of much research aimed at improving upon present treatments. Examples of newly developing treatments and the evidence for their effectiveness to date was discussed. Finally an overview of the implementation of new treatment strategies, their integration and evaluation was given.

BIOGRAPHY

Dr Jones qualified as a neuromuscular physiologist in 1970 and studied the effects of neuromuscular stimulation on the properties and development of skeletal and smooth muscle at the University of Birmingham and at University College London.

In 1980 she joined a team studying multiple sclerosis at the Department of Academic Neurosciences at Charing Cross Hospital London and while still collaborating with London research groups moved to the University of Bristol. In 1993 she established the Bristol MS Research unit studying the impact of MS on mobility and neuromuscular performance and developing advanced neuromuscular measurement and stimulation devices in collaboration with engineering colleagues in Bristol, Eire, Italy and Belgium. The Bristol MS Unit promotes the importance of multidisciplinary research teams and relies heavily on physiotherapy clinical expertise in all its programmes. Current work includes studies on intention tremor, fatigue and the evaluation of evidence in MS.

LECTURE 7

Posture: 'Normal' and impaired and the implications for people with neurological disorders

Wendy Murphy, Therapy Education Co-ordinator at the Nuffield Orthopaedic Centre

For many reasons, the number of survivors who have complex, profound disability is rising. Many people with such neurological impairment are, or become, non-ambulant and have significant posture deficit. Posture deficit can be both cause and consequence of a paucity of independent mobility and function. It is vitally important to address the posture needs of neurologically impaired people who have little or no independent mobility. Indeed, arguably, posture management is the most wide ranging and influential facet of intervention for this client group. Appropriate body positioning throughout every 24 hours is the foundation upon which any therapeutic intervention is built. The issues pertaining to posture are complex. Inappropriate posture management can lead to secondary complications, which may include deformity, tissue damage and pain, whilst appropriate management can facilitate mobility and function and promote comfort. Posture is defined as 'the constant struggle to remain erect against the forces of gravity' and 'a series of positions that we use from which to function' and, for this client group, the definition is extended to say that 'posture is about balance and stability as a requirement for functional activity'. To facilitate remediation of the particular problems that arise from aberrant posture relating to the neurologically impaired individual, it is necessary first to have knowledge and understanding of the fundamental principles applied to the normal model. The presentation outlined the basic theory pertaining to posture as demonstrated first in the normal model and then to the neurologically impaired model. The problems associated with aberrant posture were illustrated. Finally, some strategies for addressing particular posture deficits were presented.

BIOGRAPHY

Wendy Murphy is a State Registered Physiotherapist, has a Master of Science Degree in Evidence Based Health Care at the University of Oxford and a Post Graduate Certificate in Teaching in Higher Education. She is a member of ACPIN, APCP and MLAP. Wendy Murphy is Therapy Education Co-ordinator at the Nuffield Orthopaedic Centre NHS Trust and the course organiser at the Oxford Centre for Enablement. She has extensive experience of working as part of a team of professionals involved in the care of neurologically impaired adults and children, having particular expertise in posture management of this client group. She is co-leader of the validated Master's Certificate in Posture Management, which takes place at OCE, in collaboration with Oxford Brookes University, teaching senior therapists about issues pertaining to disabled individuals and their families, including comprehensive assessment, treatment, prescription and provision of equipment and supervision of their management.

LECTURE 8

A coordinated approach to the management of MND

Dr Martin Turner MA MB BS MRCP, King's Motor Nerve Clinic

Motor Neuron Disease (MND), also known as Amyotrophic Lateral Sclerosis (ALS), is the rapidly progressive condition characterised by degeneration of spinal and cranial motor neurons, brain stem motor nerve nuclei and corticospinal tracts. Lower motor neuronal degeneration leads to muscle wasting and weakness, whilst upper motor neuron involvement causes spasticity. This affects the musculature of the limbs, speech/swallowing and, in the advanced stages, also that of respiration. There is significant variation in the way the disease presents and to some extent its progression, although there is currently no cure.

The patient with MND and their carer therefore have enormous needs, and a co-ordinated, multi-disciplinary approach to care is vital if quality of life is to be maximised in this otherwise devastating illness.

In this presentation he explained the nature of MND, its diagnosis and epidemiology. He also briefly mentioned some of the current thinking about pathogenesis and research, and highlighted the King's MND clinic model of care, including the various teams involved, focusing particularly on the role of the physiotherapist.

BIOGRAPHY

Dr Turner graduated in Medicine from the University of Cambridge and St George's Hospital Medical School in 1995. After general professional training he worked for nine months at the National Hospital for Neurology, Queen Square, London which included three months working solely in neuro-rehabilitation with Professor Alan Thompson. Since November 1999 he has been in full-time research at King's College London under the supervision of Professor Nigel Leigh, studying pathogenic mechanisms in sporadic and familial cases of Motor Neuron Disease (MND). This research involves the use of positron emission tomography and transcranial magnetic stimulation, and includes the study of a Swedish group of MND patients with a unique genetic mutation and prolonged survival. He has also been involved in the conduct of two clinical drug trials within the department.

LECTURE 8

Evidence based treatment for Parkinson's Disease

Professor Ann Ashburn, University of Southampton

Parkinson's Disease (PD) is a severe progressive neurodegenerative disorder in which motor impairments reflect basal ganglia imbalance. The cardinal signs are tremor, rigidity, bradykinesia and postural instability. Since 1960 the treatment for PD has been dominated by drug therapy. The possibility of optimising drug therapy (the benefits of which are known to wane over time) may come from the inclusion of physiotherapy in the management of individuals. Non-pharmacological interventions though are contentious because of the lack of evidence of effectiveness.

The Cochrane systematic reviews of physiotherapy for people with PD[1] found insufficient evidence to support or refute the efficacy of physiotherapy compared to no physiotherapy or one form of physiotherapy over another. De Goede and colleagues[2], using different inclusion criteria, concluded from their systematic review that there was some evidence of effect. Both systematic reviews highlighted methodological weaknesses as possible reasons for equivocal results. In addition to randomised controlled trials, small exploratory studies have shown that the use of general exercises, in addition to medical therapy, can increase levels of muscle strength, mobility and physical fitness in PD. Short-term benefits of visual and auditory cueing on gait and freezing have been demonstrated.

In conclusion there is patchy evidence of the effectiveness of physiotherapy.

REFERENCES

1. Deane KHO, Jones D, Clarke CE, Playford D, Ben-Shlomo Y *Physiotherapy for Parkinson's disease* Movement Disorders 2000; 15 (suppl 3): 171.

2. De Goede C, Keus S, Kwakkel G, Wagenaar RC *The effects of physical therapy in Parkinson's disease: a research synthesis* Archives of Physical Medicine and Rehabilitation 2001; 82: 509-515.

BIOGRAPHY

I am a physiotherapist and a Professor of Rehabilitation at the University of Southampton with a special interest in the movement disorders of people with neurological conditions such as stroke, Parkinson's Disease and MS. Instability and falls form a focus of my research.

Delegate report

Sarah Davidson, Scotland

Once again it is time to reflect upon a very successful CSP Congress. I have been 'volunteered' to provide a summary of the weekends proceedings and hope I can encourage others to attend future conferences.

It was held again in the International Convention Centre in Birmingham and it did not fail to achieve every expectation. The large trade exhibition was a great success with a variety of locum agencies, book stalls, equipment demonstrations etc and many goodie bags! It was also an excellent opportunity to network with colleagues at the special interest stands, which were packed with lots of interesting papers and books not to mention application forms for 2004, or to join new ones. I was delighted to find that the catering was much improved with plenty of refreshments and a hot lunch provided on Saturday. The poster presentations are displayed within the trade exhibition and make very interesting and enlightening reading for all aspects of physiotherapy.

As always, ACPIN had a full and busy programme covering a variety of topics. Friday concentrated on progressive neurological conditions while MS was the topic of the day on Saturday. The weekend ended with some excellent presentations on posture management, MND and Parkinson's Disease. Linzie Bassett opened the proceedings and welcomed Professor R Tallis to a full auditorium. As always Professor Tallis gave his full support to ACPIN as President and contributed some very entertaining yet informative presentations. Diane Playford introduced the afternoon's topic of progressive neurological conditions by asking 'Where is the potential?' She proposed that the emphasis should be moved from treatment to management with a greater responsibility placed on the patient. Professor D Wade then followed on by evaluating treatments. Rather than looking at actual treatment advances he concentrated upon study designs and data collection. He encouraged use of single case study designs as well as RCT – so lets get started! Professor Tallis concluded the afternoon in his unique style on the ethical dilemmas in 'end of life' decisions. A serious and often emotional topic was made quite memorable by his wit and humour.

Saturday began with an inspiring lecture by the keynote speaker – Tanni Grey-Thompson. Her positive attitude and amazing sense of humour has seen her tackle the low and high points of her life and career – an excellent start to the day. The programme then revolved around the topic of MS. D A Francis started by discussing the use of cannabis in the treatment of MS. Unfortunately he was not allowed to divulge the results of the large CAMS trial (which will be available by the time *Synapse* is published). Jenny Freeman followed on looking at physiotherapy management in MS while Rosie Jones took us through some recent advances in the treatment of MS.

One aspect not to miss is the free paper sessions, which were all of a very high standard. Presentations included: the setting up of local guidelines for physiotherapy practice in stroke care; effectiveness of the Ashworth scale; use of robot mediated therapy and use of cues for Parkinson's Disease (Rescue Project). These were all very well received and but I feel needed more time for discussion, a subject the CSP may like to take up. Certainly topics to keep a look out for in clinical practice. The afternoon concluded with the popular ACPIN fringe meeting held in conjunction with AGILE. This year's topic was intermediate care, which as you can guess, was full of active debate. I'm sure we could have talked all night!

Sunday saw some excellent presentations on posture management (Wendy Murphy), treatment of MND and Parkinson's disease. It was refreshing when Martin Turner concluded his presentation with what research he would like physiotherapists to be doing into MND. Ann Ashburn echoed this in the treatment of PD.

In summary, once again it was a very successful conference, and I would urge everyone to attend. Although it provides some answers it also poses questions, thoughts and ideas for contemplation. Personally, I enjoyed the whole event; lectures; networking and socialising which makes it a most enjoyable weekend. Although tired, I go back to work with new enthusiasm, optimism and new friends. My hat goes off to all involved in the organisation and I look forward to 2005.

ACPIN fringe – from strength to strength!

Ann Holland and **Catherine Cornall**

This years successful meeting was co-hosted with AGILE and once again attracted a large audience. It addressed the topical issue of intermediate care (IC) asking 'Will IC destroy or enhance rehabilitation prospects?'. An initial vote suggested 50% of the audience were for IC enhancing rehabilitation prospects, 18% against and 32% were sitting on the fence. With such a large percentage of floating voters there was plenty to fight for! President of ACPIN Professor Ray Tallis proposed the argument for IC destroying rehabilitation prospects, Professor John Young from Bradford provided the counter argument.

Professor Tallis reported IC as being a mixture of old, new and unevaluated ideas which had serious resource implications and introduced a new tier into the healthcare system based on myths regarding older people's health care needs. These myths implied old age was less complex, requiring non-specific management, with patients preferring to be treated closer to home. He stressed that the increased human resources required to meet the needs of IC would be met by a reduction in staffing of acute facilities.

Professor Young then proceeded to reassure the audience that IC was not the 'scary monster' suggested by his counterpart but a rational response to meet the needs of frail elderly people. He proposed that IC was about responding to or averting a crisis, as well as providing rehabilitation following an acute stay or where long term care was being considered. He suggested that in some geographical areas community care was fragmented, unable to meet the demands placed upon it, more caring than enabling with individuals subject to multiple assessments and waiting lists. Worryingly he highlighted that in a cohort of 821 frail elderly people three months post discharge from hospital less than 3% were receiving rehabilitation and the most frequent contact with a healthcare professional was with a chiropodist.

The floor was opened to the audience and debate pursued. This centered on funding, conflicts of interest, lack of clarity re the definition of IC and access to specialist medical intervention, with supporters of IC giving examples of where it is operating successfully. Once again time was short and no firm conclusion or consensus was reached. The debate continues!

Reviews
articles, books, courses

Reviews of research articles, books and courses in Synapse are offered by Regional ACPIN groups or individuals in response to requests from the ACPIN committee. In the spirit of an extension of the ERA (Evaluating research articles) project they are offered as information for members and as an opportunity for some members to hone their reviewing skills. Editing is kept to a minimum and the reviews reflect the opinions of the authors only. We give the authors of the original book or paper the opportunity to respond. We hope these reviews will encourage members to read the original article and not simply take the views of the reviewers at face value.

A RELIABILITY & MEASUREMENTS OBTAINED WITH THE TIMED 'UP AND GO' TEST IN PEOPLE WITH PARKINSON'S

Morris S, Morris M E & Iansek R (2001)
Physical Therapy Vol 81 (2) pp810-818

Article reviewed by **Gill Agar** & **Bhanu Ramaswamy**

Overview A research report by well known Australian authors in the field of Parkinson's Disease (PD) looking at assessment as an outcome measure for people with Parkinson's (PWP). The tool is commonly used in the elderly and this article is trying to validate it for PD, which it has not been used systematically for before. The discussion section of this paper considers this study to be a pilot study, which is not indicated in the title.

CRITICAL REVIEW

Abstract The background and reason for the study was clearly stated, with the method, results, discussion and conclusion being well detailed.

Introduction The authors used good supportive literature, including available literature to support the 'Timed Up and Go' (TUG) test. They highlighted the need for goal directed reliable and valid measurements in PD to justify their research on the TUG for this patient group. They justified why they used the TUG, looking into its background and comparing it to other commonly used tests. In this study, the test was described as requiring the subject to stand from a chair, walk three metres, turn around, walk back to the chair and sit down again.

Aims The aims of the research were twofold:

1. To quantify the reliability of measurements obtained with the TUG.
2. To examine whether the measure could be used to detect differences in motor performance across the PD medication cycle.

Method This blinded clinical trial was conducted in a Gait Laboratory. The rationale for inclusion and exclusion criteria was explained. 24 subjects were included – twelve with idiopathic PD over the age of 50, taken from a sample of convenience of recruits from a Movement Disorder Clinic, and twelve matched control subjects.

The apparatus, procedure and methodology was described in full and was deemed to be repeatable. It was not made clear why a chair was used, the height of which differed to those used in the original TUG test study. All other alterations from the original study were explained.

All the PD subjects performed the five trials twice; once twelve hours after their last dose of PD medication and then again one hour post-dose. Transfer of training might be a possibility in the PD group as the PWP essentially had ten trials compared to five trials of the control subjects.

These trials were timed by the two blinded raters, and also videotaped in the Gait Lab for the evidence to be viewed separately by six independent reviewers (three experienced physiotherapists and three newly qualified nurses) to investigate inter-rater reliability of the TUG scores.

Results The data was well presented in tables that were easy to follow.

The authors used the Bonferroni method of correcting for a type 1 error. Although it is a well established test, it was unfamiliar to the reviewers. Also the equations and abbreviations in the text made this section of the article difficult to read – especially when examining the relationship between scores recorded by the experienced and inexperienced raters.

Discussion The discussion was good and the authors justified the need (or not) for physiotherapy intervention during certain times during the medication cycle for PWP. The authors noted that due to the small numbers and sample of convenience the research can only be seen as a pilot study, and further research is warranted

Conclusions The authors concluded by arguing that the TUG was useful for the measurement of mobility of people with mild to moderate PD because it provided a quick, easy and reliable clinical measure that can be used in a hospital or community setting. They also suggested that it may be well suited for the disorders with poor sequencing of well-learned motor skills, as seen in PD.

In summary, the article is worth reading as it maintains interest and is clinically relevant for physiotherapists assessing and treating PWP. Due to the small numbers allowed from the inclusion criteria inference to clinical practice is difficult, and further research is indicated.

RESPONSE FROM THE AUTHORS

Susie Morris

Thank you for the opportunity to respond to the commentary provided by Agar and Ramaswamy. Several points were raised by the reviewers and I will clarify these issues below.

1. The chair height used for the TUG in our study did differ to that described by Podsiadlo and Richardson. The chair used for the study was taken from the ward where the patient sample was recruited. Whilst it was convenient, it seemed appropriate to use the same chair that would be used for future testing on the ward.
2. It is fair comment that whilst we indicated that the study was a pilot trial in the discussion, this was not reflected in the title of the project.

C PHYSIOTHERAPY MANAGEMENT OF THE NEUROLOGICAL SHOULDER

24th May 2003, Woodend Hospital, Aberdeen
Tutors: Wendy Shepherd (lecturer at Robert Gordon University), Mark Smith (clinical specialist, Edinburgh Royal Infirmary), Brian Durward (Dean, Health & Social Care, Glasgow Caledonian University)

Course review by **Sarah Davidson** MCSP, Inverurie and **Fiona Douglas** MCSP, Woodend, Aberdeen

This Scottish ACPIN run course was held as a result of a member's questionnaire last year. Wendy kindly volunteered her services and a full day course was the result.

Wendy began the morning discussing the validation of the assessment of post stroke shoulder pain (the subject of her MSc). She discussed the causes of shoulder pain and the variety of measurement tools available in this area. Her work evaluated the reliability of expert physiotherapist's judgement of post stroke shoulder pain. Discussions on the use of vertical or horizontal VAS proved interesting and she got us thinking about what we are truly measuring.

Following on from this, Mark summarised the anatomy of the shoulder complex, which is always a useful exercise. He then discussed the use and effectiveness of subjective and objective measurements for severity of HSP including the use of the modified Ritchie Articular Index. This complemented the lecture by Brian Durward on outcome measures in human movement. Student days were once again relived as Brian took us through intra/inter-rater reliability, ordinal scales and statistical significance.

Mark led the afternoon and began with an insight into his research on thermal sensory perception in stroke, which is the basis for his PhD. Not only did this show some interesting results, it gave us a behind the scenes account of the practicalities of research. One of the most useful parts of the day was the practical workshop which followed. Mark looked at issues around positioning, shoulder strapping, treatment techniques and sensory testing. Everyone had something to offer and it was nice to be able to share ideas and best practice.

In conclusion, a very interesting theoretical based morning was followed by an enjoyable afternoon of practical and discussion. It was good to have the course based in Aberdeen and we hope to have more there in the future.

C REPORT FROM THE FIRST SCIENTIFIC CONFERENCE OF THE APPDE

Physiotherapy andParkinson's Disease: Research To Practice

Review by **Bhanu Ramaswamy**

This excellent conference was the culmination of two years work of the committee of a new clinical interest group of physiotherapists with an interest in Parkinson's Disease (PD) – the Association of Physiotherapists in Parkinson's Disease: Europe (APPDE). All the 'names' in recent PD research were invited to the study day in the presence of Mary Baker, the former Chief Executive of the PD Society, and now the President of the European PD Association. It was Mary who was instrumental nine years ago in fighting for, and securing funds to promote research into physiotherapy and PD, and with it, better care.

The day was kicked off with a keynote from Meg Morris, an Australian researcher who talked about gait and balance disorders in PD and the role of the basal ganglia (BG). Although the motor and postural control mechanisms that regulate gait and balance predominantly comprise brainstem, vestibular and spinal circuits, the BG have output projections to these regions. They play a key role in the regulation of well-learned, complex motor skills, such as walking, writing, speaking and dressing by controlling movement automaticity. When the BG are dysfunctional, as in PD, movements are performed slowly with reduced amplitude. Most noticeable is a short-stepped, forward stooped, reduced arm swing, slow gait pattern, as well as a failure to respond to uncontrolled perturbations to standing balance. Complex movements have to be performed under conscious control, rather than automatically. Physiotherapy plays a key role in conjunction with anti-parkinsonian medication, by teaching people with Parkinson's (pwp) strategies to cope with their movement disorders, and activity and participation limitations.

Meg divided gait disorders into three types, explaining each and discussing the therapy intervention that might best be used as treatment. A patient could display all these problems in one day:

- *Hypokinesia* – previously known as bradykinesia. Demonstrated by decrease in speed and amplitude, and tested with rapidly alternating movement. This is the most frequent of the gait disorders, affecting 78% of pwp. Suggested treatment is to teach an overriding strategy, but not to the stage where it becomes automatic, otherwise the strategy becomes 'lost' in the inaccessible BG circuitry
- *Akinesia* – comprised of ignition, freezing and termination problems, with different pathogenesis to hypokinesia. Physiotherapists tend to work on the first two problems, and need to also work on teaching termination strategies. People need to be taught strategies to plan in advance eg to help termination. They also perform well if cortical areas override normal environmental strategies eg use of a metronome to dictate step timing
- *Dyskinesias* – seen in the later stages of the disease with choreiform type movements and often with tics. They are the opposite of hypokinesia as dyskinesias are recognised by their large amplitude, uncontrolled movements. It is unclear if the problem is related to the pathology of the disease or to medication. Suggested strategies are pressing hands together in front or behind the body when walking, pressing down on the lap or chair arms in sitting. Prolonged stretching eg to calves and wrists seems to also work for a short time.

The rest of the morning was comprised of lectures about the three European arms of the RESCUE (Rehabilitation in PD: Strategies for Cueing) project. Cues can be triggered externally (using visual, auditory or somatosensory mechanisms), or internally (using cognitive strategies). Cues can provide spatial information e.g visual stripes to improve stride length, or temporal information eg auditory metronome cue to influence step timing.

First, the research done by Alice Nieuwboer's team in Belgium about the effects of different auditory cueing frequencies on gait was presented. Their work looked at whether freezers respond differently to auditory cueing than non-freezers (but not looking at the effect of cues on actual freezing), and tracking the changes in baseline gait under five different cuing frequencies. The pilot results indicated that auditory rhythmic cues modulated speed by adapting the step timing, with differential effects of raising and lowering the frequency about baseline in pwp (measuring baseline with a stopwatch at their preferred speed over a determined distance).

In non-freezers the goal is to improve gait speed and the best frequency to try would be about +10% of baseline that was measured. In freezers the goal is to improve stride length, and a slower frequency of about -10% of baseline could be tried in order to achieve the necessary stride length. Alice stressed that these were only guidelines and needed to be tested in an RCT.

Next to speak was Lynn Rochester who presented the work of the UK arm of the RESCUE Project (see page 27 for details) looking at factors which influence gait, functional activity and cue use in the home. It has been suggested that pwp may have an over reliance on cortically mediated attentional mechanisms when executing movements due to defective BG functioning accounting for difficulties performing two tasks at once. The discussions and clinical implications from the pilot are as follows:

- Assessment should evaluate gait in a functional setting and compare simple and complex tasks.
- Safety is a consideration where severe interference with gait is found.
- People with cognitive difficulties may benefit from a predictable approach to rehabilitation.
- A complex functional task with dual and multiple components should have tasks split into component parts.

Gert Kwakkel presented the third and last part of the RESCUE project. His team in the Netherlands investigated visual cueing using a treadmill protocol. Gert also presented an outline of the RCT of cueing which forms the next stage of the project.

Emma Stack started the afternoon by talking about turning problems and PD and the development of a video-based standing-start 180˚ turn (SS-180). She reminded us that walking straight is easier than turning as you have the same visual target and the legs are doing the same movement alternately. During a turn, visual targets alter continually, rhythm alters and the legs are crossing over each other altering the plane of balance from forward during walking to backwards or sideways when turning.

Emma defines 'dysfunctional turning' as the loss of stability and/or movement control when attempting to turn. Pwp differed from those without in the SS-180 test, as did fallers and non-fallers. She suggested the following therapeutic strategies:

- Balance retraining as strong correlation between balance, turning and falls.
- Increase axial rotation.
- Devise cognitive strategies.
- Utilise directional asymmetry ie make them aware that they may turn more safely to one direction.

The rest of the day was spent hearing about future trials and research:

- Prof. Ann Ashburn on an exercise trial for repeat fallers with PD.
- Marten Munneke on the Dutch Guidelines for managing mobility deficits in PD.
- Dr Bastiaan Bloem on the Netherland's half and Ann Ashburn on the English half of the PROMISE (Parkinson's Rehabilitation Outcome, Multicentre International Study in Europe) to evaluate best physiotherapy practiceon pwp.

The next meeting will be held on 6th May 2004 in Lisbon, Portugal. If any one is interested in finding out more about the association, they can visit the APPDE website on: *www.appde.unn.ac.uk*

Regional reports

■ EAST ANGLIA

Sesa Ishaya
Regional representative

The East Anglian Branch has had another busy year. Our membership has increased and so has the number of private practitioners using the ACPIN referral list.

Our committee meets four times a year at different hospitals throughout the region. We take this opportunity to discus developments within our departments as well as national issues. We are kept abreast of national issues as one of our committee members sits on the ACPIN Executive Committee.

We have also focused on bringing a variety of courses to our region. Sue Edwards presented a three day splinting course in Stowmarket. Ipswich held a one day course on outcome measures by Martin Watson, and the FES course presented by the Salisbury Trust. Dr Liz Warburton discussing her work on Thrombolysis supported our AGM at Addenbrookes Hospital.

Looking ahead, Ipswich is hosting a Swiss Ball Course in October, and Addenbrookes are holding a course on respiratory implications with neurological patients as well as treatment of facial palsy.

Overall we have had very active and well attended meetings. Many thanks to the Committee for their hard work in organising this year's events.

Contact names and details for further information can be found on the ACPIN website.

■ KENT

Lisa White
Regional representative

In May of this year a study day on 'The Neurophysiology of Movement Control' led by Professor John Rothwell was held at the Historic Dockyard, Chatham. This fascinating day was well attended and everyone came away with their heads buzzing!

The AGM for 2002-2003 was held during this study day as due to problems with Committee members the AGM in March had been cancelled.

Our aims for the forthcoming year are to improve the networking of the neurophysiotherapists in the region and to support the professional development of our members by providing informative and thought provoking meetings and study days.

This year we have a new Regional Representative, Lisa White as Janice Champion has completed her term of office. We are always looking for interested members to join the Committee and help us to plan future meetings – any volunteers? This year's programme is still in the planning stage but another study day will hopefully take place later in the year.

For further information contact Kent Regional representative, Lisa White at Medway Maritime Hospital Telephone: 01634 833959.

■ LONDON

Sandy Chambers
Regional Representative

2003 has been an active and interesting year for the London region. Evening lectures and weekend courses have been stimulating and largely well attended. Membership of the London region is increased to 238. The London Committee has seen an increased membership as well with enthusiastic links across the region.

Evening lectures included: 'Epilepsy management and implications for treatment', Nursing staff at NHNN; 'The effect of general training on the effort of walking in clients with MS', Philippa Carter; 'Brain Tumours', Dr Jeremy Rees; 'PTAs and their role in neurorehab', Sue Skewis; 'Neurosurgery', Neil Dorward; 'Management of contractures', Prof Rushton; 'Disease modifying drugs in MS', Dr Giovanni; 'Acupuncture and its role in clients with neurological disorders', Valerie Hopwood; 'Neurogenic pain', Dr Nandir.

Weekend study half-days included: 'FES and the upper limb', Jane Burridge; 'Diagnostic testing and rehabilitation in clients with vestibular problems,' Jane Harrison and John Marsden.

Programme for 2004

- 13 January (pm) *Neoparaplastic syndrome* Dr Jeremy Rees (The National Hospital for Neurology & Neurosurgery)
- 7 February (1 day) *Research Opportunities* Fiona Jones and others (St George's Hospital)
- 9 March (pm) *AGM & Neurodiagnostics* Dr Paul Holmes (St Thomas' Hospital)
- 13 April (pm) *GBS Support Group* (The National Hospital for Neurology & Neurosurgery)
- 11 May (pm) *Orthotics* Richard Sealy and Paul Charlton (St George's Hospital)
- 8 June (pm) *Connect – The Communication Disability Network* Carol Pound (St Thomas' Hospital)
- 12 September (1 day) *Conversion Disorder* Rachel King and others (The National Hospital for Neurology & Neurosurgery)
- 12 October (pm) *Cervical Dystonia* Gita Ramdharry and Professor Lees (The National Hospital for Neurology & Neurosurgery)
- 9 November (pm) *The role of physiotherapy in maintenance of MS patients* Speaker TBA (St Thomas' Hospital)

NB: Please consult *Frontline* ahead of prospective dates of events to check for last minute changes.

■ MANCHESTER

Regional representative - post vacant

The last six months have seen some changes in the Manchester committee. Tim Walton has taken over as lecture secretary, Nina Smith has become a committee member, and the posts of treasurer and board member have become vacant. We would like to take this opportunity to thank Gill Dean-Lofthouse and Jane Leicester (retiring lecture secretary and treasurer) for all their hard work and dedication over their long term of office. Both Jane and Gill continue to play an important role as committee members. We would like to thank Chris Manning (who is sadly leaving us) for all his valuable contributions to the committee and for his excellent lectures. In July Louise Rogerson was co-opted onto the executive committee, and so a new regional representative is required.

With all this change it is clear why no courses have been arranged this year, although the topics of 'Anatomy In Action' and 'Neuromuscular Update' are in the pipeline for 2004. The lecture programme is yet to be finalised, however it will hopefully include patient workshops, legal issues, and MSc feedback. Manchester ACPIN is keen to recognise the depth of local knowledge from our 92 members, and is actively encouraging local members to use ACPIN as a forum to share their experience. We are also looking to include poster presentations along side our evening lectures to promote discussion and increase awareness of local activities.

Thank you to all the speakers from 2003 for their interesting and well presented lectures. The evaluation forms have shown very positive feedback for all the lectures so far, with only a few grumbles about venues that have been taken on board for next year.

■ MERSEYSIDE

Jo Jones
Regional representative

Merseyside committee continues to grow from strength to strength, the recent addition of Lyn Roxburgh bringing our number to twelve. Jenny Thain stood down as Chairperson, the post being taken on by Emily Gerrans – sincere thanks to Jenny for her tireless efforts on our behalf and every success to Emily!

Our AGM in April was well attended and was combined with a very informative lecture on constraint induced therapy by Jo Howarth. In June we were pleased to host an excellent study day on vestibular rehabilitation given by Pam Mulholland – such was the demand for this course that we are hoping to include it again at some point in our 2004 programme, possibly Autumn, watch this space! In September Sharon Williams led a thought-provoking workshop, which, as always, was well attended – as ever, we are indebted to Sharon for her continued support. Our 2003 programme closes in November (11th) with a half study day on spasticity, topics covered include pathophysiolgy, baclofen pumps, botulin toxin, and therapy related to both spasticity and bo-tox.

Provisional 2004 programme:

- 29 January *Presentation by Carole Griffiths on her Masters Research Project* (More details will be available via *Frontline* and flyers nearer to the date)
- March *AGM and workshop* facilitated by Sharon Williams
- 4th/5th June *Ataxia course* by Lyn Fletcher

Other suggested topics include splinting, movement science and a seating study day but we are always pleased to receive your requests/suggestions that can be passed on to any of our committee members.

NORTH TRENT

Alex Morley

Regional representative

North Trent branch of ACPIN have a healthy membership of 54 physiotherapists from private, NHS and educational settings. The committee is made up of eight members who have had two meetings over the last twelve months including the AGM. The committee meetings have not been well attended and this issue is being addressed for next year. There have been three successful evening lectures in 2003 and one successful and very well attended day course led by Dr Jon Marsden. There are two courses left to run in 2003, including a day course led by Dr Mary Cramp on 'Understanding electrophysiological measures of neural function' and an evening workshop postponed from earlier in the year on the 'Use of Pilates for Neurological Patients' led by Karen Cheek. The reduced number of educational events this year has partly been due to increasing work pressures resulting in less time for course organisation. The committee will be looking for more volunteers to help with running courses in 2004.

Programme in 2004 includes:

Evening lectures/workshops on:

- The use of FES in neurological patients
- Vestibular function and rehabilitation
- North Trent research and EBP update
- Local advances in stroke treatment
- Measurement of balance

Day courses including:

- Facial treatment for neurological patients

NORTHAMPTON

Sarah Littlewood

Regional representative

After a little gentle persuasion I have not only been welcomed as a committee member of Northampton ACPIN but found myself volunteering for job as regional representative! We have had some changes to the committee mainly to cover for the maternity crisis that seems to be occurring in these parts. Not sure what's in the water but congratulations to all those concerned!

After a lot of hard work we have seen a successful programme run over the past six months. So much so, that we have more than thirty members and the hope of even more with next years line-up well on the way to being finalised. We have had a good turn out for all events including a patient demonstration by Jon Graham, a talk from specialist epilepsy nurse, Mel Goodwin and an introduction to pilates, which saw most of us falling from gym balls!

Programme 2003/2004

- October/November 2003 *Neural Behavioural Conductive Study Day* (Northampton)
- 22 November 2003 *Normal Movement* Jon Graham Trainee Bobath tutor (Northampton)
- 16-17 January 2004 *Motor Re-learning* Lucy Smith (Northampton)

Also coming up cognitive screening and GBS lecture.

NORTHERN IRELAND

Siobhan Mac Auley

Regional representative

Northern Ireland ACPIN has quite a mixed last six months and there have been a lot of changes in the committee, with a few of the old faces leaving and a few newcomers thankfully coming on board. However, this has meant that the lecture programme has only been provisionally planned from now to Christmas. The committee are still busy planning the winter and spring term. The programmes will have been distributed to all departments by the time this goes to print. The meetings will be held as usual on the third Tuesday of the month in the physiotherapy gym of the Belfast City Hospital at 7.30pm.Our aims for the following year are to build up the committee again and to produce a series of interesting and informative lectures but this is only possible with the support of all the ACPIN members in attending the meetings and to offer suggestions for lecture topics. We welcome anyone interested in joining the committee or if they feel it is difficult to make a commitment to even help in any way they can. Contact details, Siobhan Mac Auley Physio Dept Belfast City hospital, 02890 263851 or preferably by email *Siobhan.macauley@bch.n-i.nhs.uk*

NORTHERN REGION

Julia Williamson

Regional representative

We have had another productive six months in the northern region. Our decision to concentrate on fewer, longer courses has paid off although we may well organise evening courses intermittently if demand arises. Single afternoon courses have proved very popular and a spasticity afternoon in July was very well attended. We were able to make use of local 'talent' as we have a physiotherapist in the region who injects botulinum as well as local medical expertise.

The next six months are slowly taking shape. By the time *Synapse* goes to press we will have held a course with Alan Bass, covering that difficult (and often neglected?) area the head and neck.

A research study day is taking shape although the exact date is yet to be confirmed. Again we are hoping to call upon the local skill base. There is a lot of research activity in the northern region (there are two universities offering physiotherapy degrees) and it will be a great achievement if we can strengthen the links between academia and clinical practice.

The programme for 2004 is still on the drawing board. We hope it will include study afternoons on MS and Parkinson's disease as well as weekends led by BBTA Therapists. We will also continue our exploration of manual techniques useful for neuro-physiotherapists. Fliers sent to trusts in the region, as usual, will advertise courses.

Membership in the region is strong. The Committee always welcomes new members, the workload becoming significantly less, the more people there are! We need at least one more person to fill one of the posts, but all will be welcome.

OXFORD

Fiona Cuthbertson

Regional representative

Oxford ACPIN has had a prosperous year, seeing attendance at evening lectures expand, a very successful day course titled 'Neurophysiology and Neuroplasticity – a clinical application for therapists' by Martine Nadler and a small increase in our regional membership levels. Our objective to serve members from the more peripheral locations appears to have been successful and we have been able to recruit two new committee members from these areas to join the committee for the coming year. The committee extends a big vote of thanks to Jo Forrest on her formal resignation as Secretary. Motherhood brings lots of new challenges to one who will not be defeated! Thanks to Liz Lewis, for officially carrying out the job over the last year. Liz is welcomed in her official appointment to the position. We also thank Sarah Mindham for her long-standing commitment as she resigns from Membership secretary. Sadly, it is also time for my own (Annabelle Cooper) resignation as Regional representative as I move away from the region. Fiona Cuthbertson takes up the position from her role as committee member.

Programme for 2003/2004

- 30 October 2003 *Memory rehabilitation and Memory aids* Professor Narinder Kapur (Consultant and Professor of Neuropsychology)(Battle Hospital, Reading)
- 26 November 2003 *Thorax and rib dysfunction – a practical review* Charlie Winward, Senior Physiotherapist (Oxford Centre for Enablement, Oxford)
- January 2004 *Equality and Disability awareness* Sue Butterworth – Dialability (Oxford Centre for Enablement, Oxford)
- February 2004 *The basics of Neurosurgery* Miss Stana Bojanic, Sp. Registrar Neurosurgeon (Oxford Centre for Enablement, Oxford)
- March – June 2004 Evening lectures are yet to be confirmed with speakers

Please refer to the branch news notice board section of *Frontline* for more up to date and accurate details of all lectures for 2004.

Thank you to all the speakers from 2002/2003. We hope the lectures for 2003/2004 will be as interesting and well attended as those this last year, and as always, we welcome your suggestions and feedback. Anybody with ideas or an interest in joining the committee should contact Claire Guy, on 01865 737375.

SCOTLAND

Paula Cowan

Regional representative

Membership here in Scotland stands at 94. I am standing as Regional representative while Cassie Gibson is travelling the world! We welcome two new members to our committee: Alison Constance and Catriona Nimmo and still have one vacancy.We continue to encourage new ideas for courses and recommended speakers. Members are reminded that they can apply for funding for courses.

Remaining 2003 programme

- 29 November *Dyspraxia* Therese Jackson (Dundee)

SOUTH TRENT

Lal Russell

Regional representative

South Trent ACPIN is looking forward to another busy six months ahead. The current membership stands at 45 with six on the committee – although we are still looking for members from those hospitals not represented to ensure equal distribution of courses/lectures. We have enjoyed a varied timetable over the last six months which has been well attended and we look forward to this continuing.

Thank you to: Tony Deakin who demonstrated a practical approach to 'Clinical Pilates' in March and April (repeated due to high demand), Andy Foxhall who provided an insight into 'The Movement Science Approach to Gait' and tackled some very contentious issues – especially bearing in mind his audience (!), and Laura Wilcox and Melissa Griffiths for their 'Introduction to Neuro – Linguistic Programming'

Remaining 2003 programme

- 22 November *The Integrated Approach to the Management of the Trunk* Karen Rowland MSc MCSP SRP and Steven Hodgson MCSP SRP
- Date TBA *Posture and Seating of the Complex Neurological Patient -* Pauline Pope

We are always open to suggestions/requests for topics for either evening lectures or day/weekend lectures as well as volunteers for the committee – feel free to contact us.

SOUTH WEST

Kirsten Cheadle

Regional representative

We have had another successful six months, starting with an excellent study day linked in with the AGM. Three committee members presented different topics as a workshop or evidence based review and this went down well with the large group who attended from all over the region. At the AGM we had a shuffle of the committee as Liz Britton, the former Chair, is expecting her first baby at the end of September. We wish her luck! Gina Sargeant is the new chair and I have taken over from her as Regional representative. John Rothwell presented an interesting overview on plasticity relating to spasticity and the talk on Muscular Dystrophy was very well attended.

Programme for 2003/4

- Saturday 25 October 2003 *Ataxia Study Day* Jon Marsden (Royal United Hospital, Bath)
- 15 November *2003 Latest developments in Trophic Stimulation, EMG and Biofeedback for Neuromuscular disease (including patient demos)* Diane Farragher (Bristol General Hospital)
- January 2004 *Gym Ball workshop* Details to be confirmed
- 13 March 2004 *AGM with Management of Challenging Behaviours – other than discharge* Dr Peter Eames

Keep an eye out in *Frontline* for further details.

SURREY & BORDERS

Sally de la Fontaine

Regional representative

Surrey & Borders ACPIN now has 50 members and needs new committee members to help us to continue to manage our group effectively and to enable us to hold evening lectures at a greater variety of venues.

We had no evening lectures over the summer but hopefully our postponed two day course on 'Orthopaedic techniques in Neurology' will prove to be a success when it is run over the first weekend in November.

Dr Drew Alcott, a clinical psychologist, gave an amusing but practical lecture in September on 'Dysexecutive Function' although the number of attendees was disappointing.

The last lecture in 2003, by Paul Keeping an Orthotist, is titled 'Orthotics for hypermobility in the lower limb' and is being held within the Physiotherapy Department, Haslemere Hospital on the 13th November 2003.

Next year we have decided to organise some 'Normal Movement Modules' with Anna Hamer and still have to confirm our full programme but will advertise all events in *Frontline* near the time.

Please do contact any of the

committee with any ideas for speakers, topics, courses you would like to be organised and suitable venues … or better still join the committee!

Programme for 2004

- 11 February AGM and *Recent and Future developments in Electrical Stimulation* Jane Burridge (Frimley Park Hospital)
- 11-12 March *Normal Movement Module* Anna Hamer (Venue to be confirmed)
- May *Pilates* Speaker and venue to be confirmed
- July *Case study* Speaker and venue to be confirmed
- 30 September & 1 October *Normal Movement Module* Anna Hamer (Venue to be confirmed)

■ WESSEX

Ros Cox

Regional representative

Year 2003 has again seen changes in the regional committee with Jo and Ros being voted onto the Executive Committee, Helen Foster returning as Regional Representative after a close ballot with Naomi Wells who will share some of the responsibilities and become a committee member. Claire Eastham has stepped into the Secretary's shoes temporarily and done a great job. I would like to thank Jo for all her hard work for ACPIN this year especially since she has also completed her MSc (congratulations) and organised her wedding this year.

We have trialled sending information to all members individually instead of through the hospital reps and this seems to be improving the dissemination of information despite being more time consuming we are very pleased with the turn out to the lectures and study days so will continue with this next year. We will hopefully be able to use email addresses next year from the membership application form so this will speed up the process.

This year's programme has been varied and informative. Thank you for all those who attended the OT and PT wine and cheese evening at the beginning of the year to discuss local neurological developments. We feel this is an important way of improving links in Wessex and hope to continue with yearly meetings. Steve Wooton gave a very interesting lecture on the energetic implications of disability and made us all realise the importance of nutrition in our patients. Jo Nisbett provided both a study day on Botox with Ipsen and a feedback lecture on her MSc, which hopefully inspired others to further study and research. Unfortunately two of our study days were cancelled due to lack of speakers. The GBS and CIDP support group gave us an informative talk from the patient's perspective and made us more aware of CIDP. Emma Stack gave another entertaining lecture on 'Falls and Parkinson's Disease' which gave us lots of useful information for treating balance and falls and also introduced the standing start 180 degrees turn test (ss – 180) which she has developed and will be publishing soon. Sue Edwards will be rounding off this years programme in November with a splinting course (dates 28,29,30 contact Jo Nisbett for places).

Next years programme has not yet been finalised but the ideas so far are:

- A posture management 3-day course
- An acute stroke management study day
- A 2-day course on ataxia
- A neuro hydrotherapy course

We would like to thank all our members who have supported ACPIN this year and hope to see you all next year. Any suggestions for lectures or study days please send to Jo Nisbett.

■ WEST MIDLANDS

Liz Cohen

Regional representative

The West Midlands branch committee remains strong with thirteen regular members although there have been a few resignations from the main roles, (relocation and pregnancy). We have welcomed a few new members recently and have a new Treasurer, Membership secretary and Regional representative. Our timetable for study days and courses is very full, booked through to late 2004 with a few courses being repeated due to the huge interest.

Courses this year have generally been well attended or over subscribed with the 'FES Course' held in March with Christine Singleton an excellent success. 'Motor relearning' with Lucy Smith was repeated in June, (over subscribed yet again!) with very good feedback. There is a possibility this course will rerun with emphasis on the upper limb.

A 'Driving Assessment' half-day was held on 27th September 2003 aimed at OTs and physiotherapists. An interesting day with the opportunity to drive an adapted vehicle, feedback will follow in the next report!

Programme for 2003/4

- 15-16 November 2003 (rescheduled) *The PNF for the Neurological Patient* Nikki Rochford (Warwick Hospital). First refusal will be given for those who applied for the February Course.
- February 2004 *Neurophysiology and relevance to Clinical Practice* Liz Mackay (Hillcrest Hospital, Birmingham) Date and venue TBC Our AGM will take place during this course.
- 24 April 2004 *Conductive Education for Parkinson's Disease* (Moseley, Birmingham) This will include a demonstration group of PD patients
- 17 July 2004 *Gym Balls* Janice Champion (Heartlands Hospital)

Full details are sent to all members. We value your support on these courses and your ideas for future events. Any queries, suggestions or interest in joining the committee please contact Liz Cohen on 01926 495321 Bleep 6110.

■ YORKSHIRE

Caroline Brown

Regional representative

Yorkshire ACPIN'S AGM was held during a successful MS Study day. This incorporated several aspects of MS management including psychological considerations, a summary of disease modifying drugs and physiotherapy case studies.

There were several changes to the committee, including Jill Fisher resigning as Chair. So I would like to take this opportunity on behalf of Yorkshire ACPIN to thank her for all her hard work over the years and generous use of her house as a meeting point. We also welcome Debbie Neal as our new Chair. The other posts have been taken by existing committee members, so there are spaces – come on you know you want to!

Another success was a 'Handling' study day on the 'Pelvis and Hip' by Linzi Meadows. This was so oversubscribed that is was repeated recently.

Programme for 2003/4

- Saturday 1 November 2003 9am - 4pm *Treatment with the Gymnastic Ball* Janice Champion (York Hospital)
- January 2004 Lecture by Alan Bass, (Leeds) TBC

Details of Yorkshire ACPIN events will be sent to each Yorkshire ACPIN member and advertised in *Frontline*.

If anyone in our region has any ideas for future lectures/courses please contact any committee member, or even better join the lively committee yourself. We look forward to hearing from you, for further information please contact Caroline Brown on 01904 725747 (w) or email *Caroline.Brown@york.nhs.uk*

Guidelines for authors

***Synapse* is the official newsletter of ACPIN. It aims to provide a channel of communication between ACPIN members, to provide a forum to inform, instruct and debate regarding all aspects of neurological physiotherapy. A number of types of articles have been identified which fulfil these aims. The types of article are:**

■ CASE REPORTS

Synapse is pleased to accept case reports from practitioners, that provide information which will encourage other practitioners to improve or make changes in their own practice or clinical reasoning of how to influence a change or plan a treatment for that condition. The maximum length is 2000 words including references. An outline is given as follows:

Introduction

State the purpose of the report and why the case is worth reading about to include in short sentences:

- The patient and the condition.
- How the case came to your attention.
- What is new or different about it.
- The main features worth reporting.

The patient

Give a concise description of the patient and condition that shows the key physiotherapeutic, biomedical and psychosocial features. The patient's perspective on the problem and priorities for treatment are important. Give the patient a name in the interests of humanity, but not the real name. Do not include any other identifying details or photographs without the patient's permission.

Intervention

Describe what you did, how the patient progressed, and the outcome. This section should cover:

- Aims of physiotherapy.
- Treatment, problems and progress.
- Outcomes, including any changes in impairment and disability.
- Justification of your choice of treatment; clinical reasoning
- The patient's level of satisfaction and the outcome and the impact on quality of life.

Method

This should clarify what intervention took place and what measurements were taken. It should include:

- Description(s) of outcome measures used and reference
- Interventions carried out (where, when, by whom if relevant)

Implications for practice

Discuss the knowledge gained, with reference to published research findings and/or evidence about clinical effectiveness. For example:

- Outcome for the patient.
- Drawbacks.
- Insights for treatment of similar patients.
- Potential for application to other conditions.

Summary

List the main lessons to be drawn from this example.

References

These should be in the Harvard style (see section on 'Measurements' below).

Further guidelines for writing case reports were published in the Spring 2001 issue of *Synapse*, page 19.

■ ABSTRACTS OF THESIS AND DISSERTATIONS

Abstracts from research projects, including those from undergraduate or postgraduate degrees, audits or presentations. They should be up to 500 words and where possible the conventional format: introduction, purpose, method, results, discussion, conclusion.

■ AUDIT REPORT

A report which contains examination of the method, results, analysis, conclusions and service developments of audit relating to neurology and physiotherapy, using any method or design. This could also include a Service Development Quality Assurance Report of changes in service delivery aimed at improving quality. These should be up to 2000 words including references.

■ REVIEW OF ARTICLES

A critical appraisal of primary source material on a specific topic related to neurology. Download the ACPIN information sheet Reviewing research articles for further guidance from the ACPIN website.

■ PRODUCT NEWS

A short appraisal of up to 500 words, used to bring new or redesigned equipment to the notice of the readers. ACPIN and *Synapse* take no responsibility for these assessments, it is not an endorsement of the equipment. If an official trial has been carried out this should be presented as a technical evaluation. This may include a description of a mechanical or technical device used in assessment, treatment, management or education to include specifications and summary evaluation.

■ REVIEW OF BOOKS, SOFTWARE AND VIDEOS

Short reviews of up to 500 words to include details of availability, price and source for purchasing.

■ LETTERS TO *SYNAPSE*

These can be about any issue pertinent to neurological physiotherapy or ACPIN. They may relate to material published in the previous issue(s) of *Synapse*.

PREPARATION OF EDITORIAL MATERIAL

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

Hard copies should be as close to journal style as possible, on one side of A4 paper with at least a 25mm margin all around, consecutively numbered.

The first page should give:

- The title of the article
- The names of the author(s)
- A complete name and address for correspondence
- Professional and academic qualifications for all authors, and their current positions
- For research papers, a brief note about each author which indicates their contribution and a summary of any funds supporting the work

All articles

- The text should be well organised and written in simple, clear correct English. The positions of tables, charts or photographs should be appropriately titled and numbered consecutively in the text.
- All abbreviations must be explained.
- Any photographs or line drawings should be in sharp focus with good contrast for best reproduction.
- References should be listed alphabetically, in the Harvard style with punctuation as follows: Bloggs A, Collins B (1998) The use of bandages in treating head injuries Physiotherapy 67,3 pp12-13.
- In the text, the reference should be quoted as the author(s) names followed by the date: Bloggs A (1994)
- Acknowledgements are listed at the end.

Measurements

As the International System of Units (SI) is not yet universal, both metric and imperial units are used in the United Kingdom in different circumstances. Depending on which units were used for the original calculations, data may be reported in imperial units followed by the SI equivalent in parentheses, or SI measurements followed by imperial measurements in parentheses. If the article mentions an outcome measure, appropriate information about it should be included, describing measurement properties and where it may be obtained.

Permissions and ethical certification

Protection of subjects: Either provide written permission from patients, parents or guardians to publish photographs of recognisable individuals, or obscure facial features. For reports of research involving people, written confirmation of informed consent is required. The use of names for patients is encouraged in case studies for clarity and humanity, but they should not be their real names.

Submission of articles

The disk and two hard copies of each article, should be sent with a covering letter from the principal author stating the type of article being submitted, releasing copyright, confirming that appropriate permissions have been obtained, or stating what reprinting permissions are needed.

For further information, please contact the *Synapse* co-ordinator:
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Note: all material submitted to the administrator is normally acknowledged within two weeks of receipt.

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