

Syn'apse

Spring/Summer 2011

- ▶ ***How does facilitation of an improved interaction between the head and trunk gain improved postural control in a functional task?***
- ▶ ***Ulnar nerve involvement and stroke***

Syn'apse

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ACPIN'S AIMS

1. To promote and facilitate collaborative interaction between ACPIN members across all fields of practice including clinical, research and education.
2. To promote evidence informed practice and continuing professional development of ACPIN members by assisting in the exchange and dissemination of knowledge and ideas within the area of neurology.
3. To provide encouragement and support for members to participate in good quality research (with a diversity of methodologies) and evaluation of practice at all levels.
4. To maintain and continue to develop a reciprocal communication process with the Chartered Society of Physiotherapy on all issues related to neurology.
5. To foster and encourage collaborative working between ACPIN, other professional groups, related organisations ie third sector, government departments and members of the public.

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FROM THE CHAIR

Welcome to the 2011 edition of Synapse!

This is the thirtieth year of ACPIN and we continue to go from strength to strength! We have a record number of members, over 2,200 and are leading the way as one of the largest special interest groups of the Chartered Society of Physiotherapy.

I have just returned from the thirtieth annual conference in Northampton, where we had a fantastic turnout and found ourselves having to turn people away as we were sold out! The feedback was extremely positive and it was great to catch up and meet with physios from all corners of the UK, many having travelled many miles to get there. The lectures were superb and for those of you who were unable to make the conference there is an opportunity to download the content from the website. Before I left I booked for next year which will be our two-day conference and we hope to have many international speakers, so put the date in your diary for 9th–10th March 2012! If there are any suggestions for the conference please email me and we will try our best to oblige! Details will follow in the autumn edition of *Synapse*.

All the details of the AGM are summarised in full on pages 22–28.

Following the advertisements in *Frontline* and on interactive CSP, the AGM provided us with the opportunity of welcoming new committee members onto the executive committee. We are delighted to welcome Jane Petty and Kate Busby onto the executive committee. Louise Dunthorne has made an extraordinary contribution to ACPIN and *Synapse* over the last ten years and will be greatly missed but we are delighted that Kate Busby has now taken on the role of *Synapse* administrator. Joanne McCumisky has also stepped down due to the arrival of baby Ava, very timely on the morning of the conference, though thankfully at home and not Northampton!

Chris Manning is busily arranging the neurology strand at the CSP congress which looks to be a very exciting programme so hopefully will see some of you in Liverpool in October.

Despite the continuing challenges in the health service, ACPIN will continue to support our members in all areas of practice, research and education to ensure the best possible patient care well into the future.

Siobhan

ACPIN apologise for the late publication of this edition of *Synapse*. This was due to unforeseen production problems.

A few words

Margaret Mayston AM FCSP PhD ACPIN President

I have no wit, philosophy or history to offer for this editorial, we are facing serious issues. I would like to make three points for this editorial.

Firstly, it is hard to believe that another year has gone by. ACPIN has a new Chairperson, and the AGM is again upon us and as usual the ACPIN committee has organised another excellent study day at Northampton – *Brain over Body* – and continues to provide high quality activities for its members. The executive, all the regional representatives and committee members are saluted for their work and I would like to sincerely thank them for all that they do on behalf of all of the membership.

Secondly, restructuring and re-branding seems to be going on everywhere despite the difficult financial climate and the CSP is no exception. It costs huge amounts of money and is often led by a business brain who perhaps does not always fully appreciate the nature of the group which seeks the new structure. Changes taking place in the CSP relating to the special interest groups present yet another challenge for the committee and the membership which will certainly require your input. Look at the CSP website and make sure you keep up with all that they are doing to re-brand physiotherapy and restate what physiotherapy is. I am not sure that hands-on has much to do with their vision of physiotherapy at the moment. Siobhan will no doubt be asking for your views so be sure to respond and give your input to this. It is one way in which we can all contribute to ACPIN and the profession.

Thirdly and finally, I am very concerned about the effects of changes in the NHS. I do not work in the NHS but have many interactions with people who do and hear many stories of cuts, long waiting lists and lack of time to treat the clients referred to us. It feels like the profession is heading towards becoming an assessment/ advisory service, which will not be satisfactory for clients or professionals. Amidst the cuts, there are also demands for physiotherapists to provide new services, such as we heard about at the national conference in Glenn Nielsen's excellent presentation of the *Physiotherapy Management of Conversion Disorders*. And yet how can this be achieved in the face of less therapy time? Job cuts make job progression and professional development difficult and for the new graduate a job becomes a dream and a far distant reality. More than ever we need to be prepared to stand up and explain what we do and why. I encourage you in all that you do to maximise your client outcomes and as you find the best ways to explain what we do whether it be through research, clinical observation and interpretation, scholarly activity or a combination of all of these. There could also be a need to be creative in the way we deliver our services.

In these troubled times of world unrest and earthquake, perhaps we can be reminded that we must try to make the best of the moments between each tick of the clock. Make it all count.

How does facilitation of an improved interaction between the head and trunk gain improved postural control in a functional task?

Nathaniel Walker BSc (Hons) Physiotherapy Senior Physiotherapist, University Hospitals of Leicester

Performing a functional task requires not only the ability to move an upper limb but 'complex activity of the whole organism' (Craik 1992) and thus relies on a body's ability to maintain postural control. Shumway-Cook & Woolacott (2007), define postural control as the ability to control the body's position in space to enable both 'stability' and 'orientation'.

Stability aims to maintain the body's centre of mass within specific boundaries related to its base of support (Horak 2006) whereas orientation aims to maintain appropriate relationships between body segments, and keep the body orientated to the environment for each task (Shumway-Cook & Woolacott 2007).

If both the postural orientation and postural stability are successful in creating and maintaining postural control in sitting, the upper limb can be freed for a functional activity (Gillen *et al* 2007).

Horak (2006) and Di Fabio & Emasithi (1997) argue strongly that postural control is significantly influenced by the position and control of the head and its alignment and interaction with the trunk, especially in upper limb functional tasks (Saavedra *et al* 2009).

This study therefore aims to investigate whether improving the interaction between the head and the trunk helps improve postural control in a functional task in a patient following an acute brain injury. A case study design was used to investigate this topic in relation to the functional task of reaching.

LITERATURE REVIEW

The ability of a body to maintain postural control relies on sensory input from receptors throughout the body such as the vestibular system, the somato-sensory system and the visual system. The

information from these sensory receptors enables the body to detect its position with respect to gravity, the support surface, visual surroundings and internal references (Horak 2006). Each individual sense can help produce a specific frame of reference for assisting postural control, but it is only through the integration of these senses and their respective frames of reference that effective postural control can be achieved (Day & Cole 2002).

When frames of reference are integrated it produces a 'body schema', which can be defined as 'a combined standard against which all subsequent changes of posture are measured' (Di Fabio & Emasithi 1997).

The development of a body schema suggests that once the 'standard' for postural control is achieved eg an upright posture in sitting, all subsequent body movement can be measured against it. In terms of a functional task, an individual's expectation of the task and prior experience provide the basis for anticipatory postural adaptations in the body (Massion & Woolacott 1996; Di Fabio & Emasithi 1997; Horak 2006; Shumway-Cook & Woolacott 2007). The sensory receptors then continue to provide *feedback* regarding the task and can update the postural responses accordingly to ensure that postural stability is maintained and the task is achieved effectively (Horak 2006).

Many of the sensory receptors used to maintain postural control, are located in the head and trunk, suggesting that these two areas play a significant role in creating and maintaining postural control during functional tasks (Massion & Woolacott 1996).

The head contains the vestibular system, which calculates head orientation with respect to gravity (Massion & Woolacott 1996). If vestibular input is lost, there is a loss of anticipatory control of head position. This loss causes a reduction in trunk and limb postural control as well reducing the quality

of feedback sensory information required by the body to monitor the functional task and correct errors (Di Fabio & Emasithi 1997).

The visual system assists in postural control by orientating the body's axis to the vertical and horizontal structure of the visual frame. (Massion & Woolacott 1996). This is important in the *feedback* element of postural control as it reports motion of the head and body with respect to the external world, and stimulates postural responses. The visual system also contributes to spatial orientation of the head and trunk through proprioceptive feedback provided by eye muscles when 'looking' at a target (Di Fabio & Emasithi 1997).

In summary, visual and vestibular inputs appear to orientate head position. However, the position of the head relative to the trunk is not fixed, therefore their influence on postural control depends on head position relative to the trunk (Massion & Woolacott 1996). This evaluation is made by neck muscle proprioceptors and links to the ability of the body to create postural stability based on internal references.

Treleaven (2007) and Armstrong *et al* (2008) both identify that neck muscles contain much higher densities of muscle spindles than in other areas of the body eg the thumb (Boyd Clark *et al* 2002) and these are often localised amongst slow twitch muscle fibres, suggesting a specific role in postural activities. Both Armstrong *et al* (2008) and Treleaven (2007) also highlight the important integration between neck proprioceptors, the vestibular system and the visual system in accurately determining the position of the head in space and head relative to the body. This interaction is used as the basis for a number of important reflexes influencing head, eye and postural stability.

The somatosensory system helps maintain head and trunk postural stability in relation to support surfaces. Peterka (2002) argues that on a firm, level surface, up to 70% of information regarding postural control is gained from the somatosensory system and through internal references and cutaneous receptors (for instance around the pelvis whilst sitting) when the body is orientated vertically (Horak 2006, Shumway-Cook & Woolacott 2007).

In conclusion, accurate postural control, particularly of the head and trunk, is a 'complex motor skill derived from the interaction of multiple sensorimotor processes' (Horak & Macpherson 1996), which rely on intact sensory motor networks. However neurologically impaired individuals exhibit damage to these systems (Basford *et al* 2003, Raine *et al* 2009). This leads to problems 'organising appropriate goal-orientated patterns of activity on a background of postural control' (Raine *et al* 2009).

HYPOTHESIS

Available evidence from the literature appears to support the view that head position (Di Fabio & Emasithi 1997, Armstrong *et al* 2008) and trunk position (Gillen 2007, Ryerson 2008) and their interaction (Massion & Woolacott 1996) can improve postural control in sitting. It is also suggested that improved postural control affects arm function (Gillen 2007). However, little evidence could be identified to link improved head *and* trunk control to improvements in functional tasks in neurologically impaired adults. I feel this warrants further investigation and therefore proposed the following hypothesis for this study:

"Facilitation of an improved interaction between the head and trunk, improves postural control during functional tasks of the upper limb."

CLINICAL CASE ANALYSIS: MR A

Mr A is a 52-year old male who was admitted to hospital with a right thalamic bleed with extension into the ventricles and early hydrocephalus.

Mr A had a history of hypertension and had experienced previous myocardial infarcts and a transient ischaemic attack. In 2007 he had also suffered a subdural haemorrhage and skull fracture following a fall from scaffolding. This had resulted in slight residual left sided weakness, preventing him from returning to work but allowing him to drive and mobilise independently.

Mr A initially presented to hospital on this admission following a dizzy spell and subsequent worsening of his left leg weakness. Following his diagnosis of a thalamic bleed, Mr A deteriorated, showing increased hydrocephalus and cerebral oedema resulting in an extra ventricular drain being inserted 23 days post bleed.



Once stable (50 days post event), Mr A was transferred for assessment at the Brian Injuries Unit. Initial physiotherapy assessment findings guided the development of the problem list (See *Table 1* overleaf) and patient centred short-term goals and achievements (See *Table 2* overleaf).

TREATMENT HYPOTHESES

The identification of short-term goals for Patient A allowed treatment hypotheses to be generated. These hypotheses and their associated treatment interventions are described with reference to the main hypothesis.

HYPOTHESIS 1

By improving neck range of movement and developing neck strength, Mr A will improve midline awareness and head stabilisation.

IMPAIRMENTS		
Head	1	Restricted eye movements with no vertical and minimal horizontal gaze (sunset eyes). (See Figure 1)
	2	Limited active neck movement – minimal neck flexion or rotation.
	3	Right side flexion of neck.
 <p>Figure 1 Sunset eyes. Sunset eyes with no vertical gaze. Note head side flexion to right and left sided gleno-humeral subluxation.</p>		
Upper Limb	4	Low tone left upper limb with no active ROM in shoulder, elbow, wrist and hand.
	5	Mild left gleno-humeral subluxation.
Trunk	6	Posteriorly tilted pelvis in sitting with no active trunk extension.
	7	'Falling' to left in sitting with compensatory fixation in right upper limb. (See Figure 2)
 <p>Figure 2 Sitting. 'Falling' to left side and fixing with right UL. Poor interaction of left UL and LL in sitting posture.</p>		
Lower Limb	8	Low tone left lower limb with no active ROM in hip, knee, ankle or foot.
	9	Decreased passive ROM in left ankle – plantargrade only on stretch.
General	10	Persistently low arousal levels – 11/15 Glasgow Coma Scale score.
	11	Aphasic with poor compensatory communication abilities.

ACTIVITIES

- 1 Dependent on two to move in bed ie rolling and lie to sit.
- 2 Unable to sit independently – moderate assistance of one required and 'falls' to left side.
- 3 Unable to stand.
- 4 Dependent on two for all PADL's and ADL's.
- 5 Limited ability to use right upper limb for tasks due to comprehension/arousal.

Table 1 Problem list

SHORT TERM (TWO WEEK) FUNCTIONAL GOALS

ACHIEVEMENTS AFTER TWO WEEKS

- | | |
|--|---|
| 1 To independently maintain upright midline head position in sitting. | 1 Able to maintain upright head position in supported sitting > 1 minute and look to left and right independently. |
| 2 To be able to independently take a drink with the right upper limb whilst maintaining independent sitting balance. | 2 Able to sit on plinth with minimal assistance of one person in midline, without right upper limb support. |
| 3 To be able to sit independently in midline on a plinth without right upper limb support. | 3 Able to reach outside base of support with right upper limb and take a drink in sitting with minimal trunk support. |

Table 2 Short term goals and achievements

Lying

- Treatment began initially in supine lying to provide a safe environment for Mr A to start exploring movement and reduce compensatory strategies.

Head and neck

- The central (trunk) key point was stabilised and treatment focussed on head and neck mobility work.
 - Mobilisation and soft tissue release techniques were used to gain improved length in neck and shoulder muscles, improving neck mobility.
 - The head and neck were facilitated into patterns of flexion and rotation.

Progression

- As Mr A gained improved head and neck control and volitional movement, independent neck rotation was encouraged to both visual and auditory stimuli.
- As volitional head and neck movement developed further, combined neck and upper trunk flexion were used to activate the abdominals to improve abdominal alignment and strength and decrease rib flaring.
- Finally, head, neck and trunk activity were incorporated into the functional task of rolling to the left which also involved the use of right arm reaching, hip activity and inter-segmental trunk activity.

HYPOTHESIS 2

By developing increased trunk and head postural control in midline and improved awareness of left side it will decrease fixation with right side.

Sitting

- The treatment was progressed from work in supine to sitting on the edge of a plinth in order to increase Mr A's postural control through:
 - Increasing the patient's arousal level,
 - Stimulating the vestibulospinal system and
 - Developing axial muscle strength (IBITA 2007).

Head

- Mr A was encouraged to align himself visually to vertical targets in midline to increase head postural control (Massion and Woolacott 1996).

Trunk

- In order to create better vertical orientation in the trunk, the left hip was 'packed' with towels to increase somatosensory input and improve the base of support (Horak 2006).
- Work on de-weighting the upper trunk and assisting Mr A with anterior and posterior pelvic tilting helped increase inter-segmental trunk control.

Limbs

- Mobilisation of the left and right foot increased somatosensory afferent input and helped improve foot-floor contact – thus providing Patient A with an improved distal frame of reference (*Figure 3*).



Figure 3 Foot Orientation Specific gastrocnemius lengthening to left and right leg improved foot-floor contact and leg orientation.



Figure 4 Realignment Once effective CHOR was achieved, forearm and upper arm were realigned. Realignment and activation of distal triceps helped gain elbow extension and improve shoulder stability and position. Progression was made towards active left scapular depression to improve thoracic extension.



Figure 5 Midline Bilateral hand placement and cutaneous stimulation of trunk extensors, coupled with an increased plinth height to gain anterior pelvic tilt improved trunk and neck extension in midline. This created better postural control.

- Specific left upper limb activation improved the Contact Hand Orientating Response (CHOR) to facilitate head stabilisation (Jeka *et al* 1994), midline orientation (Raine *et al* 2009) and glenohumeral and scapular stability (*Figure 4*).

Progression

- As midline alignment was improving, the patient's postural control could then be progressively challenged by:
 - Graded removal of the right hand from contact surfaces to reduce reliance on upper limb fixation (*Figure 5*).

HYPOTHESIS 3

By developing effective postural control in the head and trunk it will improve orientation to a task and free the upper limbs for functional use.

Sitting

- As Mr A developed improvements in his head and trunk postural control and reduced his right UL fixation, treatment continued in sitting to challenge this control further.

Trunk

- The low toned left upper limb was de-weighted and then weight transfer both laterally and anteriorly/posteriorly was facilitated to allow Patient A to explore his base of support and develop more selective trunk control (*Figure 6*).



Figure 6 Reaching Dewatering the low tone left UL improved trunk stability and left shoulder position. Reaching was facilitated to gain increased trunk extension. Objects of high motivational interest (cup) and use of wife helped with head and trunk orientation, active participation and improved weight transfer and stability over right hip.



Figure 7 Lateral weight transfer CHOR and improved head/trunk alignment improved the lateral weight transfer ability.

- The base of support was decreased further by raising the plinth height, and this helped encourage more anterior pelvic tilt, trunk extension and symmetrical leg activity.

Progression

- Visual targets of high motivational interest ie a cup of juice, were used to increase the eye, head and trunk orientation to a task and this noticeably improved participation (Ching-yi Wu *et al* 2001) (Figure 7).
- Incorporating drinking as a task improved coordination of the head and right upper limb, whilst maintaining postural control.

A 24-hour, holistic approach was utilised throughout this study to aid rehabilitation. This Included:

- Pharmacological treatments and the use of a light box were started to help improve Mr A's sleep/wake cycle, thereby increasing arousal levels during the day and allowing better participation in therapy.
- Combined work with both occupational therapists and speech therapists was initiated to provide appropriate seating and to assess swallow and language abilities.
- Positioning guidelines for nursing staff and family members were produced with appropriate education about handling and stimulation.
- Mr A had improved arousal levels when visitors were present, so positioning awareness and appropriate functional activities were very relevant when they were present.

RESULTS

The use of outcome measures is essential in determining the effectiveness of therapy interventions (CSP 2010). Outcome measures need to be relevant and meaningful to the individual being treated as well as being reliable and valid. From a review of the literature the following outcome measures were selected.

Photographs

Pre and post treatment photographs illustrated changes in postural orientation (See photographs in previous section and *Appendix 1*)

Postural Assessment Scale for Stroke (PASS)

The PASS is an ordinal scale outcome measure applicable to all stroke patients, even those with very poor postural abilities (Mao *et al* 2002). It contains 12, four point items that produce a total score from 0 (poor postural control) to 36 (good postural control). The PASS was selected for this study as it demonstrates an individual's ability to maintain or control changes in a variety of lying, sitting or standing postures (Benaim *et al* 1999). It is reported as being one of the most valid, reliable and responsive clinical assessments of postural control for patients at different stages of recovery following neurological injury (Benaim *et al* 1999, Mao *et al* 2002).

Goal Attainment Scale (GAS)

The GAS is an individualised outcome measure based on a 5-point ordinal scale. The individuals' starting level is at -1 on the scale and the expected outcome is normally set at 0. Scores of +1 and +2 show more favourable outcomes whereas -2 demonstrates a worse than expected outcome. It has been shown to be a valid, reliable and responsive measure in settings including

brain injury (Raine *et al* 2009). Rockwood & Stolee (1997) suggested it is an important supplement to other outcome measures as these can be insensitive to change, especially in brain injury patients (Joyce *et al* 1994). See *Table 3* for GAS.

+2	Mr A to be able to maintain midline head position in independent sitting and reach to an object on a table in front with right UL independently in two weeks.
+1	Mr A to be able to maintain midline head position in independent sitting without right UL fixation in two weeks.
0	Mr A to be able to maintain head position in sitting with minimal support without fixing with right UL in two weeks.
-1	Mr A to be able to maintain midline head position in supported sitting on plinth without right UL fixation in two weeks.
-2	Mr A to be unable to maintain midline head position in supported sitting with right UL fixation in two weeks.

Table 3 GAS for Mr A

DISCUSSION

The results of this study support the hypothesis that facilitation of an improved interaction between the head and trunk improves postural control during functional tasks of the upper limb.

It shows that specific facilitation of head and trunk interaction may help improve the sensory integration of the vestibular, visual and somatosensory systems in the central nervous system and create an improved 'body schema', thus generating more appropriate anticipatory postural adjustments and postural control. This may have allowed the upper limbs to be freed to participate in more functional tasks. The improved head and trunk position may also optimise the quality of sensory feedback, allowing appropriate reinforcement or adjustment of postural control.

Mr A demonstrated improvements in the outcome measures during the study.

Mr A showed a three-point improvement on the PASS, improving in his sitting and rolling abilities. This demonstrates a clear development in postural activation and control of both head and trunk. This is supported by the GAS increase to 0, which required increased postural stability and midline orientation in order to stop fixing with his right upper limb (see *Table 4*).

Mr A exhibited variable arousal levels throughout the study, which was assumed to be as a result of damage to thalamic and midbrain

Timescale	PASS score	GAS score
Beginning of Week 1	3	-1
End of Week 1	4	-1
End of Week 2	6	0

Table 4 Results of PASS and GAS for Mr A

structures (Schiff *et al* 2007). The reduced arousal presented difficulties with attention and motivation during treatment therefore activity and positioning had to be varied repeatedly to maintain attention, which limited the opportunities to work on specific tasks requiring careful repetition.

From a motivational perspective, Mr A had better arousal levels and participated more actively in tasks that were of high motivational interest such as reaching for a drink. However, not all treatment could be combined with highly motivational tasks, thus participation and arousal were, at times, diminished.

Given the nature and severity of the presenting brain injury, diminished arousal levels were not unexpected and treatment was likely to have only limited effect in the relatively short, two-week treatment period. Whilst, as highlighted, change was identified through the outcome measures, they were not as sensitive to some of the small but significant subjective improvements noted in the patient. A broader application of the Goal Attainment Scale may have helped rectify this.

The study was also limited by the inclusion of only one patient, and its case study format, which reduce its generalisation to a wider population.

CONCLUSION

This study has changed my practice, demonstrating to me the potential importance of specific head and trunk interaction in regaining postural control in functional tasks. It is impossible however, to state that improving head and trunk interaction was the sole reason behind the improvements seen. Certainly within this study, there were multiple influencing factors, including the use of distal reference points and sensory receptors all of which may have contributed to improving postural control. More high quality research, using larger numbers of participants, needs to be performed to assess the relative contributions of the head and trunk to postural control.

As such, the hypothesis can neither be proved nor disproved, however what is clear is that postural control remains a 'complex sensori-motor skill' that will require ongoing investigation.

APPENDIX 1: PHOTOGRAPH OUTCOME MEASURE



1st day

- Head control required due to poor neck extension and right side flexion of neck.
- Fixing with right UL and trunk orientated to right side.
- Poor postural control, requiring maximal assistance on trunk and left UL to maintain sitting balance.
- Poorly interactive left UL and leg.



Week 2

- Improved independent head control with better midline head orientation.
- More interactive right and left UL with no fixing.
- Improved postural control with midline orientation of trunk and no external assistance to maintain sitting balance (except left arm).
- More symmetrical and interactive lower limbs.

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Ulnar nerve involvement and stroke

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In the last three months, I have assessed two male stroke patients, approximately two months after stroke event, both in their forties and both presenting with mild non-dominant hemiparesis. No abnormalities were seen on CT. On examination they both demonstrated a clinical manifestation of sensory-motor deficit indicating ulnar nerve involvement on the hemiplegic side.

THE PATIENTS

Patient A had a stroke resulting in a mild left sided weakness and sensory deficit. Muscle strength was Grade 4 on the Oxford scale on the left side. There appeared to be some weakness and wasting of muscles supplied by the ulnar nerve in the left hand, with the beginnings of a characteristic posture of the hand, known as the 'ulnar claw hand'. His sensory deficit was greatest over the medial aspect of his left palm and the left fifth finger and medial aspect of the ring finger. He was spending many hours a day on his computer and since the stroke he had not been using his left hand on the keyboard, but holding it flexed on the computer table.

Patient B had a stroke which also resulted in a mild left sided weakness. Muscle strength was Grade 4 on the Oxford scale on the left side. He also had a sensory deficit over the area supplied by the ulnar nerve. Like Patient A, he was also spending many hours a day on his computer and since the stroke he had not been using his left hand on the keyboard, but holding it flexed on the computer table.

Neither patient had reported falling nor lying on the left side for any considerable time, both of which can lead to ulnar nerve compression.

Was this just a co-incidence? What was the likely cause? Is this a complication of stroke? Should we be looking for lower motor nerve (LMN) lesions as well as upper motor nerve (UMN) lesions?

Likely cause?

The ulnar nerve provides sensory innervation to the fifth finger and the medial half of the fourth finger and corresponding part of the palmar and dorsal aspects. It innervates flexor carpi ulnaris, flexor digitorum profundus (medial half) and most of the smaller muscles in the hand that help with fine movement. It is the largest unprotected nerve in the human body and ulnar nerve compression is the most common entrapment neuropathy after carpal tunnel syndrome. It usually occurs due to chronic compression/stretch of the ulnar nerve, which, at the elbow, occurs either at the ulnar groove formed by the medial epicondyle of the humerus and the olecranon process of the ulna or at the cubital tunnel. Bending the elbow stretches the ulnar nerve and puts pressure on it as it passes through the cubital tunnel, pressing it against the bone. Constant rubbing damages the myelin sheath or the nerve itself and disrupts conductivity.

Complication of stroke?

Lampl Y *et al* 1995, in his paper, *Strokes Mimicking Peripheral Nerve Lesions*, reported on 'seven patients with a clinical manifestation of sensory-motor deficit, imitating peripheral nerve involvement due to lacunar brain infarcts verified by brain CT. Five of the patients had an ulnar nerve-like deficit and two had a median nerve-like deficit. The infarcts were located in the thalamus and the corona radiata. No clinical or electrophysiological evidence for peripheral nerve involvement was found.'

Looking for LMN lesions?

Paolini M *et al's*, 2010 study, *Peripheral Nerve Conduction Abnormalities in Non-paretic Side of Ischaemic Stroke Patients*, looked at whether standard nerve conduction studies showed significant differences in a group of post stroke hemiplegic patients. A percentage of patients showed a slowing of ulnar and common peroneal nerve conduction suggesting that there is an

overall increased risk of neuropathies among stroke patients, even on the non-paretic side.

A study by Kabayel L *et al* 2008, of 20 severe stroke patients within the first month of the event showed, on nerve conduction studies, that seven of the 20 patients had median nerve entrapment at the wrist, five had ulnar nerve entrapment at the elbow and seven had peroneal entrapment at the fibular head in the hemiparetic side, three patients had median nerve entrapment at the wrist, one patient had ulnar nerve entrapment at the elbow and none had peroneal entrapment in the non-paretic side. The results confirmed that in severe stroke patients the entrapment neuropathies may be commonly seen, especially in the paretic extremities. Van Kuijk *et al* 2007, concluded from their study of 27 severe ischaemic stroke patients that, 'Given this strong relationship between the central and peripheral system, it is possible that UMN lesions lead to functional changes in the LMN as well. In UMN lesions the LMN may become functionally depressed or undergo transsynaptic degeneration through loss of synaptic input and lack of activation'.

In Qaisar *et al*'s 2008 study looking at, *Ulnar Nerve; Occupational Causes of Compression Across the Elbow*, they found that out of the 267 cases of ulnar nerve compression at the elbow diagnosed, 'most of the cases had left sided involvement that was contralateral to the dominant side. This reflects bad posture with sustained flexion at the elbow causing over stretching of the ulnar nerve at the elbow.' 'Regarding occupation this study showed that a large group was associated with occupational causes of ulnar nerve compression at the elbow ... Electro-physiological evaluation showed prevalence of occupational 121(45%) and traumatic 51 (21%) causes.' 'Out of 267 patients, 70 (26%) were clerks, 46 (21%) were signal/telephone operators ... and 50 (20%) were computer operators.

INTERVENTION

Qaisar *et al* 2008, concluded that, 'management of ulnar nerve compression must include a comprehensive rehabilitation programme that should focus on postural correction and workstation ergonomic modifications along with pharmacological and surgical advice.'

As well as routine stroke rehabilitation, advice was given to both patients on how to prevent and reduce ulnar nerve compression at the elbow. This included advice on positioning of the elbow, particularly when working at the computer, using a pillow to prevent pressure and also to avoid too much elbow flexion especially when sleeping. The patients were encouraged to use their left hand more when using the computer keyboard rather than leaving it to rest on the computer table.

Unfortunately Patient A failed to attend after his initial appointment.

Patient B was reassessed at his second visit. His sensory symptoms had disappeared and although his left hand lacked the last refinements of fine finger movement, he was now using his left hand on the computer keyboard and starting to play the guitar again. Hand strength now measured 5 on the Oxford Scale.

IMPLICATIONS FOR PRACTICE

Evidence from the research found suggests that:

- patients with an UMN lesion have a predisposition to develop LMN lesions,
- we should expect to see LMN lesions and
- prevention is better than cure.

Positioning (and regular changes in position avoiding excessive flexion at the elbow), early mobilisation, FES, constraint induced movement therapy, electromechanical/ robotic devices, repetitive task training and muscle strengthening exercises are all recommended treatments in SIGN 118. Could it be that these treatments have more success in outcome following stroke because they also, inadvertently, address the issue of LMN lesions by preventing the synaptic degeneration caused by loss of synaptic input and lack of activation and by maintaining body positions which prevent excessive stretch or pressure on peripheral nerves?

SUMMARY

As therapists we need to:

- be aware that stroke patients have a predisposition to LMN lesions,
- be proactive in the prevention of LMN lesions and
- be knowledgeable in how to treat LMN lesions when they occur.

There is the need for more research into LMN lesions following stroke.

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SHARING GOOD PRACTICE

Design and implementation of an internal clinic referral form to improve interdisciplinary working in splinting and posture management for people with complex disabilities

Physiotherapy Team, Holy Cross Hospital

A patient in a vegetative or minimally conscious state is considered to be in a low awareness state as defined below:

Vegetative State (VS): A patient who demonstrates a sleep-awake pattern, responding to stimuli at a reflexive level and without meaningful response to the environment (Jennett and Plum 1972).

Minimally Conscious State (MCS): A person with a severe brain injury who shows signs which are not reflex in nature and do not occur consistently enough to be used to demonstrate awareness or to communicate (Giacino et al 2002).

Advances in medical sciences and technology have resulted in increased survival for patients in Low Awareness States (Wild von *et al* 2007).

Management of this heterogeneous patient group is a complex process involving the multidisciplinary team, (Andrews 2005).

Increased muscle tone and development of contractures is a common secondary complication. Interventions to manage these include spasticity management (RCP 2009), casting and splinting (Pohl *et al* 2002, Lannin *et al* 2007) and 24-hour posture management (Pope 2006). This article describes a good practice example implemented at a specialist unit providing long term care and rehabilitation for people in Low Awareness States.

At the unit there is a strong emphasis on team working with interdisciplinary training to encourage continuing professional development. This includes tracheostomy management conducted by registered nurses and posture management conducted by physiotherapists,

Patients are admitted to the unit with a variety of diagnoses including acquired brain injuries (including hypoxia and trauma) and end stage degenerative diseases. Length of stay varies from a few months for intensive rehabilitation to many years (up to 34 years in the author's experience) for long term care.

On admission patients' posture and splinting requirements are assessed by physiotherapists and occupational therapists.

Posture management & wheelchairs

Patients' posture is assessed in sitting and lying using the Nuffield Orthopaedic Centre postural assessment form. Suitable prescriptions are finalised after discussions with the local wheelchair services or special seating services. Bed positioning equipment (rolls and wedges) are provided by the unit and specialist sleep systems provided through the patients funding authority (Primary Care Trust).

Splinting

Splints and casts are provided to assist management of muscle tone and maintain range of movement. Splints are made using thermoplastic or fibreglass material. Tolerance is built up gradually and patients wearing time varies from a few hours for splints to few days or a week for serial casts.

WHAT WAS THE DRIVING FORCE TO INITIATE CHANGE IN PRACTICE?

Step-by-step guidelines with photographic illustrations formed part of each patient's care plan on positioning in bed and wheelchair and splinting. When nurses and HCA's experienced problems related to these areas, they reported it to the ther-

apists through informal verbal handover or through telephone calls. The referrals were related to problems in three areas:

- positioning patients in bed and wheelchair,
- mechanical adjustments to wheelchairs, special seating systems and sleep systems and
- issues related to splinting.

On receiving the referrals therapists arranged appointments for patients to attend the assessment clinic along with the nurse or HCA who had submitted the form. Repairs, reviews and demonstrations were carried out in the clinics held in the therapy department or in the ward as required. The usual process of referral was telephone calls from the ward to the therapy office or informal verbal handovers between the nursing and therapy teams.

The physiotherapy team decided to introduce a system to formalise the referral process by introducing a referral form to identify common issues and to provide an audit trail.

HOW DID YOU GO ABOUT THE PROCESS OF CHANGING PRACTICE?

- A brainstorming session was organised within the therapy team to list issues raised in the three areas.
- Separate forms were developed for each area.
- A series of consultation sessions were organised with the nursing teams.
- The forms were then used for internal referral by the nursing teams over a three month period.
- An audit of forms received was undertaken to review the accuracy of completion prior to further consultation sessions.
- A collaborative decision was made to design a combined clinic referral form containing all information from the original three forms. The form was designed with tick boxes relating to 40 items for referral in the three areas.

A sample of the clinic referral form is given as *Appendix 1* overleaf.

WHAT RESOURCES DID YOU NEED?

This work was carried out within the protected continuing professional development and service development time for the physiotherapy department.

The forms were developed using information from past referrals and with information from postural assessment forms from the Oxford Centre for Enablement, Nuffield Orthopaedic Centre, Oxford.

Relevant literature related to posture management of people with complex disabilities was reviewed in journal clubs during in-service training.

WHAT DID YOU LEARN ABOUT THE PROCESS?

Protected time for continuing professional development resulted in the team looking into innovative ideas for improving practice. The number of forms completed was higher after the three forms were simplified and condensed into one.

The consultation process improved collaboration between nursing and therapy teams and acceptance of change within the teams was achieved smoothly.

HOW HAS IT CHANGED YOUR SERVICE?

The nurses and HCA's now have an accurate, auditable method of referring patients with problems relating to splinting, wheelchairs and positioning.

Implementation of this form has enhanced communication between the nursing and therapy teams thereby improved patient positioning and accurate splinting.

The audit of these clinic referral forms showed patterns of commonly occurring issues when positioning patients in wheelchairs, bed and in splinting (eg the way the head rests when Allen key banana joints were applied). The training programmes at Holy Cross (HCA Development programme, Induction training etc) were reviewed and restructured addressing these issues.

Contact

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APPENDIX 1: REFFERRAL FORMS FOR CLINICS

Patients name		Date	
Referred by			
Please tick the appropriate boxes			
Splint clinic		Wheelchair clinic	Posture management clinic
Splint broken/damaged	Brakes		Patient shows signs of distress in supine/ side lying/ sitting
Splint soiled/ dirty	Foot rest		
Splint causing redness lasting more than 30 minutes	Head rest		Difficulty positioning patient
	Tight/ loose screws/ Allen keys		Supine/ side/ sitting
Splint causing swelling	Lateral supports		Pressure areas developing
	Cushions (incl covers)		
	Tilt/ recline mechanism		Patient leaning to one side
Splint hard to put on or take off	Table/ tray		Patient sliding down the foot end
	Safety/ lap belt		
Patient in discomfort or pain	Calf support		Bed rails
	Arm rest		Brakes
Splint lost	Wheels/ castors		Coughing distorting position
Straps missing	Power pack issues		Mattress bottoming out
	Seat covers		_____ needs a clean
	_____ needs a clean		Different/ new staff team caring for patient
Care plan not up to date	Care plan not up to date		Care plan not up to date
Guideline not up to date	Guideline not up to date		Guideline not up to date
Comments or any other reason for referral (Please mention clinic referred to)			
Sling damaged		Sliding sheet damaged	
Shower sling damaged			

Splint clinic	Wheelchair clinic	Posture management clinic
Splint to be reviewed/ repaired	Needs new equipment through PCT or Holy Cross	Need to review postural support
Need to be referred to specialists	Need to be referred to wheelchair services/ special seating services	Needs new equipment through PCT or Holy Cross
Needs new equipment through PCT or Holy Cross or Family	Wheelchair needs to be reviewed or repaired by Holy Cross therapy team	Needs to be referred to special seating services or wheelchair services
Discuss with MDT regarding use of adjuncts to splinting e.g. Botulinum Toxin, Bean bags, positioning	Arrange demonstration to ward staff about positioning/ new equipment	Arrange demonstration to ward staff about positioning/ new equipment
	Refer to contractor for repair	Research availability of other equipment (e.g. Icap, Naides etc)
	Increased muscle tone needs to be addressed through _____	Increased muscle tone needs to be addressed through _____
Review land based/ water based physiotherapy treatment provided to address the issue	(discuss with MDT) Review land based/ water based physiotherapy treatment provided to address the issue	(discuss with MDT) Review land based/ water based physiotherapy treatment provided to address the issue
	Refer to w/chair cleaning team	Redo postural assessment
Guideline/ care plan to be reviewed by _____ (Name)		
Please place document in patient notes and care plan		
Date: _____ Therapist sign with name: _____		

FOCUS ON...

Community peer support for people with spinal cord injury

Jamie Rhind Spinal Injuries Association

A spinal cord injury (SCI) can have devastating consequences on a person's life. Whether sustained through accident, illness or disease, the impact of partial or total paralysis, and facing life as a wheelchair user can be overwhelming. Loss of mobility is often combined with bladder and bowel incontinence and loss of sexual function, as well as a reduced ability to regulate heart rate, blood pressure, sweating, and temperature. As a result the rehabilitation process is long and arduous as the person tries to come to terms with the huge physical and psychological impact.

England, Wales and Northern Ireland has ten specialist NHS spinal cord injuries centres, each one dedicated to the acute care and rehabilitation of patients with SCI. The multi-disciplinary teams at each centre aim to maximise neurological recovery, functional abilities and psychological adjustment, enabling each patient to return to the community as independent and productive as possible – and prepared to resume their life.

The highly specialized, experienced staff and appropriate facilities and equipment, provide each patient with the necessary tools to maximize their recovery. However, one important element of the rehabilitation process is not provided by staff members and requires no specialist equipment.

The centres each have a dedicated Peer Adviser, someone who is available to share personal experiences of life with a SCI, as well as offer practical advice on a wide range of topics. This support, early on in a patient's rehabilitation, has been shown to have a significant impact on a newly injured persons ability to come to terms with their new situation and, in turn, maximize their potential.

The presence of peer support during the long and difficult rehabilitation process cannot be underestimated. Knowing you're not alone in



coming to terms with the impact of SCI and its consequences and being able to discuss fears and concerns with someone that can empathise is invaluable. The opportunity to talk to someone who has been there and done it and come through the other side can change a newly injured persons outlook by demonstrating there is life after SCI.

In an ideal world, everyone that sustains a spinal injury, whether through traumatic or non-traumatic means, would be immediately transferred to a spinal centre to undergo rehabilitation and benefit from peer support. Unfortunately, we don't live in an ideal world, and more and more patients that sustain a SCI are waiting for long periods to be transferred to a specialist centre, never receive treatment in a specialist centre at all. Delays in transfer or non-admittance can leave patients incredibly isolated on wards, or in hospitals, where they may be the only person coming to terms with SCI.

The Spinal Injuries Association's Community Peer Support (CPS) service has been developed to offer support to patients with a SCI who are being treated in district general hospitals and rehabilitation facilities. The service gives patients the opportunity to talk to someone who understands the impact of SCI and can offer personal experiences of the key issues facing the newly injured. Whether it is a listening ear, information on bowel



above members of the Community Peer Support (CPS) team, from left to right: Peter Hutchings, Jamie Rhind and Simon Brierley.

and bladder management, advice on sexual issues or just someone to talk to about life with SCI, each officer is there to demonstrate that life needn't stop because of paralysis.

The service is led by a team of Community Peer Support Officers, all of whom have many years experience of life with SCI. Currently covering the South, Greater London, Midlands, North West and Wales, CPS Officers provide face to face support for the newly injured, their families and friends, and healthcare professionals (HCP).

Referrals to the service can come from any HCP

involved in the treatment of a spinal cord injured patient, as well as family or friends or the person themselves. Each Officer is available from the acute phase of injury, right through the rehabilitation process and beyond, all with the sole aim of maximizing the quality of life for each newly injured person moving forward.

If you are involved in the treatment of patients with SCI and would like more information on the service, or to make a referral, please contact your local SIA Community Peer Support Officer via telephone or email, their details are below.

Alternatively you can contact SIA Head Office on 0845 678 6633.

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BRAIN OVER BODY

ACPIN NATIONAL CONFERENCE & AGM 2011

SATURDAY 19 MARCH 2011

HILTON HOTEL NORTHAMPTON



Above left ACPIN President Margaret Mayson addresses the conference
right a farewell to Louise Dunthorne from Gita Ramdharry as she steps down as Synapse editor.



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From motivation to movement

Prof Jon Marsden

Professorship and Chair in Rehabilitation
School of Health Professions, University of Plymouth

GOAL DIRECTED BEHAVIOURS as opposed to habitual behaviours are driven by reinforcement expectancies, that is, the prediction that an action will have a certain positive outcome or utility. These predictions are built up through associative (classical or instrumental) learning and factors such as the probability of success, required effort and temporal difference between an action and the outcome can affect the motivation of the individual as reflected in the maintenance of a behaviour. Goal directed behaviour further requires cognitive processes, for example, to inhibit inappropriate habits, apply context specific rules and evaluate the success of an action.

Recent research has highlighted the role of circuits linking the prefrontal cortex and the basal ganglia in mediating goal directed behaviour and the importance of dopamine in learning associations between stimuli or actions and predicted outcomes. Disruption to prefrontal-basal ganglia circuits can result in apathy, a reduction in self generated, volitional behaviour that can be dissociated from symptoms of depression. Apathy is commonly seen following head injury and movement disorders such as Parkinson's Disease and progressive supranuclear palsy and it significantly impacts on functional recovery and rehabilitation. This presentation will explore the neural basis of learnt goal directed behaviour; the causes of apathy and current evidence based interventions.

Prof Jon Marsden qualified as a physiotherapist in 1991; he undertook clinical rotations at the United Bristol Healthcare Trust and the National Hospital for Neurology and Neurosurgery in London. From 1999 he worked as a post-doctoral scientist in the Sobell Department for Motor Neuroscience and Movement Disorders, UCL, investigating the pathophysiology and rehabilitation of walking and balance following peripheral and central nervous system damage. Since 2007 he has been Professor of Rehabilitation at the School of Health Professions, University of Plymouth.

Underlying mechanisms of functional disorders

and how they might fit into modern theories of how the brain works

Dr Mark Edwards

NIHR Clinician Scientist
Institute of Neurology, National Hospital for Neurology and Neurosurgery

PERHAPS THE FACT that we have so many words that are used to describe patients with functional disorders (hysteria, conversion, somatisation, psychogenic, non-organic, medically unexplained) says something about how little we know about these disorders. There is a general idea that psychological disturbance triggers unconscious manifestation of physical symptoms, but whether this is the case and how this might happen in terms of neurobiology is not understood. In this talk I will show how these symptoms are different from typical neurological symptoms, and discuss emerging theories of how these disorders might fit in to modern theories of how the brain works. With this understanding we may begin to be able to understand how best to treat patients with these disabling and perplexing symptoms.

Dr Mark Edwards is a National Institute of Health Clinician Scientist in the Sobell Department at the UCL Institute of Neurology and an Honorary Consultant Neurologist at the National Hospital for Neurology and Neurosurgery. He has a clinical and research interest in movement disorders and heads a research team in the Sobell department that uses electrophysiological techniques to explore the pathophysiology of movement disorders. He has a particular research interest in functional/psychogenic movement disorders and is developing a clinical service for such patients at the National Hospital for Neurology and Neurosurgery.

Physiotherapy approach to the management of functional disorders

Glenn Nielsen

Physiotherapist
National Hospital for Neurology and Neurosurgery

FUNCTIONAL DISORDERS are relatively common and notoriously difficult to treat. Patients experiencing medically unexplained symptoms tend to have high health care utilisation, ongoing investigations, consultations from multiple professionals and are often frustrated by contradicting information and a lack of palatable answers. Evidence for the treatment of conversion syndrome is scarce; however there seems to be a consensus amongst experts that a combined physical and psychological approach in a MDT is effective. This talk will discuss treatment strategies for some common functional neurological symptoms and address complicating factors such as acceptance of diagnosis, the presence of maintaining factors, chronic presentation, patient dissatisfaction and lack of progress. Developing skills in managing functional symptoms is important for all therapists as symptoms can mimic disease from many body systems and can be present in confirmed organic disease. An informed therapist can maximise potential progress by addressing maintaining factors, avoid reinforcing unhelpful behaviours and minimise negative client-therapist interactions. Additionally early rehabilitation could potentially minimise disability and be cost effective.

Glenn Nielsen is a band 7 physiotherapist employed at the National Hospital for Neurology and Neurosurgery. His experience in functional disorders includes overseeing the physiotherapy service on the MDT rehabilitation programme for conversion syndrome, attending clinics for suitability of admission into the programme and assessment of patients admitted for investigations of complex neurological presentations. Glenn trained and started his career in Australia in a large teaching hospital before joining the National in 2007.

The dog ate my trainers – compliance with home exercises given to people with multiple sclerosis by physiotherapists

Wendy Hendrie

Postgraduate Research Physiotherapist

THIS LECTURE REPORTS on a qualitative study which explored the experiences of 24 people with multiple sclerosis (MS) concerning their adherence to home exercise regimes prescribed by physiotherapists. Themes related to compliance and non-compliance emerged from the data. Issues arose with performing the home exercise programme and the approach of the physiotherapist. Of the participants, 79% had not performed their exercises for more than two days. Lack of support by the physiotherapist was the most mentioned factor associated with decreased compliance. The findings have implications for physiotherapists who are attempting to encourage a self-management approach to exercise in people with MS.

Wendy Hendrie qualified from The London Hospital in 1980 and did rotational posts at the Gloucester Royal Hospital. In 1986 she became Superintendent at Kelling Hospital in Norfolk and worked on a Younger Disabled Unit. After marrying she worked for the MS charity, Action and Research in Multiple Sclerosis (ARMS). In 1989 she and her GP husband built a 24 bedded, young disabled unit specialising in MS. She ran the home for 20 years providing permanent care, respite and day care to people with MS and other complex neurodisabilities. During this time she also continued to work for ARMS. She completed a masters degree in 2000 and has almost completed her PhD looking at the use of standing frames in severe MS. She is passionate about all aspects of the management of people with complex neurodisabilities, especially postural care, the promotion of self-management and education for formal and informal carers in the community. She lectures widely to MS patient groups, care staff and health professionals and recently wrote *Are You Sitting Comfortably?* an advice leaflet on good posture for the MS Trust.

Normal mechanisms of fatigue and the experience of fatigue in neuromuscular conditions

Dr Gita Ramdharry

Senior Lecturer
St George's and Kingston University's School of Rehabilitation Sciences

IN THE HEALTHY INDIVIDUAL fatigue related to activity and exertion is a normal experience involving peripheral mechanisms and central influences on continued activity. These mechanisms will be outlined with reference to research in healthy populations.

Fatigue experienced by people with neuromuscular diseases has only recently been explored in terms of its prevalence and possible causes. Evidence for possible causes will be outlined, but also the impact of fatigue will be discussed with some suggestions of interventions to support people with this problem.

Dr Gita Ramdharry qualified as a physiotherapist from UEL in 1995 and developed a love of neurology while working as a junior physiotherapist at King's College Hospital. She specialised through rotational positions as a senior 2 at St George's Hospital then a senior 1 at the National Hospital for Neurology and Neurosurgery. In 2004 she embarked on a research position at the UCL Institute of Neurology completing a PhD in 2008 on compensatory walking patterns in people with Charcot-Marie-Tooth disease.

Gita is currently a senior lecturer at St George's and Kingston University's School of Rehabilitation Sciences. In 2009 she was awarded an NIHR Clinical Lectureship which allows her to work three days a week at the MRC Centre for Neuromuscular Disease, UCL. In this role she is pursuing studies into training and rehabilitation of people with neuromuscular diseases.

Remembering personhood: supporting active participation after stroke

Dr Fiona Jones

Reader in Rehabilitation
St George's University of London and Kingston University

THIS SESSION aims to present a synthesis of current evidence and theory to help us support active participation for people after stroke. Key theory and research on behaviour change, social models of disability and personhood will be used to encourage participants to reflect on their current practice in rehabilitation. A summary of skills and actions required by both the person with stroke and physiotherapist will be presented, and ideas for future research.

Dr Fiona Jones is a Reader in Rehabilitation and the founder of Bridges stroke self-management (previously 'Stepping Out'). She has developed training programmes for clinicians on self-management and masters level modules on life after stroke and is currently programme leader for the faculty's MSc in Rehabilitation.

She originally trained as a physiotherapist and has worked in all areas of neurorehabilitation. She became interested in self-management after completing her MSc and working in a new community stroke rehabilitation team. She completed her PhD in 2005 and has published several articles on self-management and self-efficacy and is currently editor of the journal *Physiotherapy Research International*. She is a co-applicant on a number of research projects in stroke and currently supervises six PhD students.

She is involved in a number of committees including the UK stroke forum and pan-London stroke groups. In 2009 she received the UK Stroke Association's 'Excellence in Stroke Care' award and in 2010 she was made a Fellow of the Chartered Society of Physiotherapy.

ACPIN AGM 2011

AGM minutes

Opened at 12.15pm

1. Present

Margaret Mayston, Siobhan MacAuley, Gita Ramdharry, Anne Roger, Sandy Chambers, Emma Procter, Chris Manning, Adine Adonis, Lorraine Azam, Jacko Brouwers, Lisa Knight, Julia Williamson, Nicki Guck, Kate Busby, Louise Dunthorne

2. Apologies

Jane Petty
Jane McCumisky

3. Minutes of AGM 2010

Accepted as an accurate account:
Proposed: Adine Adonis
Seconded: Chris Manning

4. Presidents address

Margaret Mayston

5. Chairs address

Siobhan Macauley

6. Treasurers address

Jo Kileff
The decision to retain the current accountant for 2011/2012 was made, majority vote

7. Re-election of current executive committee members

Treasurer: Jo Kileff
proposed: Lisa Knight
seconded: Gita Ramdharry

Research Officer: Julia Williamson
proposed: Sandy Chambers
seconded: Jacko Brouwers

Secretary: Anne Rogers
proposed: Margaret Mayston
seconded: Lorraine Azam

Minutes Secretary: Emma Procter
proposed: Louise Rogerson
seconded: Jacko Brouwers

Diversity Officer: Lorraine Azam
proposed: Adine Adonis
seconded: Anne Rogers

8. Election of new members to executive committee

Committee member: Kate Busby voted in by a majority
Committee member: Jane Petty voted in by a majority

9. AOB

Scotland's regional representative raised an issue regarding the logistical and financial difficulties of the mandatory attendance of regional representatives to conference. This is especially difficult for Scotland at present as their committee is struggling for members. This issue will be taken further at the next Executive and National ACPIN meetings

Meeting closed at 12.45.

Chair's address

Siobhan MacAuley

Welcome to the AGM of 2011!

2011 is the 30th birthday of ACPIN, one of the largest and most successful clinical interest groups of the CSP, and as Chair I am delighted to be able to inform you of all the successes over the past year. Whilst I am the one delivering the address, there is a large team of executive/regional rep members behind me doing the work.

Membership

Our membership has gone from strength to strength and we now have over 2100 members. Our membership database has been updated and modernised, a mammoth task started by Mary Cramp and Jo Tuckey and completed this year by Sandy Chambers. Interest in ACPIN regions has grown so much that Wales have recently established a new subgroup.

Splinting guidelines

I feel that this has been a topic during all my time on the committee! At long last progress has been made. Brunel University in conjunction with Cherry Kilbride, Jo Tuckey and the neuro OT clinical interest group have received funding from ACPIN and the work has started!

Congress

ACPIN provided the neurology strand at the CSP congress. This was very successful and well attended. There were two days of interesting and high calibre speakers and a very interactive and thought provoking debate on the Bobath concept. So thank you to Chris Manning and we are already looking forward to congress 2011.

CSP

ACPIN also liaised with the CSP on many issues:

- Baroness Gardener raised a motion at the House of Lords on the "Role of the AHP's in long term conditions". We provided quite a lot of information for use in the motion. The Hansard report can be found on the website.
- We provided a speaker for the recent health and well-being conference in Birmingham NEC and also provided comments for many frontline articles relating to neurological conditions over the year.
- We are also working closely with the CSP on the formation of the new alliance groups, which will be streamlining the previous clinical interest groups. This is in the early stages but we will be asking for membership feedback at various stages so keep an eye on ICSP and please do respond to ensure that our membership is heard.

Financially

I think we are the only organisation beating the fiscal trend and making a profit-despite our best attempts to spend money. Thanks to Jo Kileff for her treasury skills and further details will be in the treasurers report.

Facilitating links

One of the key roles and successes of ACPIN is making the voice of neurology physios heard and we are grateful to Fiona Jones, Cherry Kilbride, Adrian Capp, Bhanu Ramaswamy for maintaining those links with other organisations, and all our members in their daily work.

Thank you and congratulations to Lorraine Azam who despite having a baby only six months ago organised all the delegates arrangements for this conference, and to all the committee members for their role in

making today a success.

Joanne McCumisky is stepping down from the committee and we thank her for the last five years work. She can't be with us today, but she has a great excuse and I am delighted to tell you that Ava Kate McCumisky arrived safe and sound this morning at 6.15!

And that brings me lastly to *Synapse*! *Synapse* continues to develop and progress, the quality and content of article improving with every issue. Louise Dunthorne has managed incredibly to coordinate and edit *Synapse* on top of all her other commitments. She quietly and tirelessly works away and even when we miss our set deadlines, the real deadline, the final deadline and "I'm sending this off to the printers tomorrow" deadline, she never flaps but just nicely reminds us and cajoles the article from us! However all good things must come to an end and after many years Louise is stepping down, so it is with a heavy heart I want to wish her a very big thank you from us all for all her hard work on *Synapse* and the executive committee over the past decade.

So here's to the next 30 years of ACPIN and many happy returns!

Treasurer's report

Jo Kileff

I will now present a summary of the financial accounts for National ACPIN for the year end 31st December 2010.

Income

The total income (Figure 1) was £96,283. This was an increase on last year's income and was mainly due to an increase in income from the March conference, which was very well attended. It was also due to a substantial increase in our membership which has also led to an increase in capitation. Bank interest remains low and we have sourced a higher interest savings account to put the monies in whilst waiting to be spent!

Expenditure

Expenditure (Figure 2) for 2010 was up by £6,005 compared to 2009. This happened for a variety of reasons. Conference was subsidised to reinvest some money into the membership, our *Synapse* costs increased and we have invested in more research bursaries. Other expenses have stayed much the same.

INCOME	2010 £	2009 £
Course fees	34,526	17,430
Congress	324	2,129
Membership	53,146	42,510
Capitation	7,393	5,554
<i>Synapse</i>	60	200
Database	784	883
Bank Interest	50	59
Total	96,283	68,765

Figure 1 Income

EXPENDITURE	2010 £	2009 £
Courses	26,830	20,825
<i>Synapse</i>	12,187	6,854
Travel	10,430	10,036
Administration	3,858	3,554
Capitation	7,393	5,168
Research bursary	2,288	1,000
Computer costs	2,103	1,980
UK Stroke Forum/ Stroke guidelines	76	681
Accounts, bank, sundry	2,188	1,542
Total	67,353	51,640

Figure 2 Expenditure

Courses 2010	Income £	Expenditure £
March conference	34,850	26,202
Congress	324	628

Figure 3 Courses

Reserves	£
Reserves brought forward	95,675
Surplus/deficit	24,723
Reserves carried forward	120,398

Figure 4 Reserves

Courses

Figure 3 divides the course income and expenditure up for the courses that ACPIN held this year. The March conference was planned to run at a loss, with low course fees in order to put some money back into the membership. A large turn out meant that our income still exceeded our expenditure. Congress expenses were largely organised by the CSP and hence there were minimal costs incurred.

Reserves

The balance sheet (Figure 4) on the 31st December 2010 showed a profit of £24,723 and we carry forward reserves of £120,398 into 2011. We have explored ways of feeding this money back into the membership. We are supporting the writing of splinting guidelines at a cost of £10,000. We have increased capitation to £5 per person despite no increase in capitation from the CSP as a way of directly influencing regions' income. We are heavily subsidising this course and will continue to run our courses at a very low rate. We are investigating other ideas to allow regions to benefit. If you have any additional ideas, do speak to one of the committee.

Copies of Accounts 2010

Full copies of the ACPIN accounts for 2010 are available on request

Vote for Accountants

Vote to retain the current accountants for 2011:

Langers
8 – 10 Gatley Road
Cheadle
Cheshire
SK8 1PY

Delegate report

Nic Hills

Senior Physiotherapist, Ipswich Hospital NHS Trust

THE NATIONAL ACPIN CONFERENCE AND AGM seems to be an annual event in my diary, ACPIN always puts on a packed, thought provoking programme covering a variety of 'hot' topics for neuro-physiotherapists. This year's conference entitled *Brain Over Body* certainly lived up to expectation.

The conference kicked off with Professor Jon Marsden's lecture entitled *From motivation to movement*. He explored the difference between goal directed behaviour and habits, and discussed physiology of goal directed behaviour from a motor, cognitive and affective perspective. Finally, he examined apathy, perhaps an overlooked symptom of neurological disease and a real cause of lack of compliance with therapy. As ever, Professor Marsden was a pleasure to listen to, his simple explanations and sense of humour make application of complex physiology easy to relate within a clinical context.

Professor Marsden was followed by Dr Mark Edwards who discussed functional neurological disorders. Illustrated by exceptional video clips of case examples, he presented research data on functional patient's behaviour, decision making and movement traits (eg over-reliance on visual system for movement, demonstration of excellent balance when appearing to 'fall' over). Explaining that these patients demonstrate many traits similar to schizophrenics, helped understanding that functional patients are not malingering and that input from physiotherapists could break the cycle of abnormal movement patterns.

Next were lectures from Glen Neilson, who discussed his work as a senior physiotherapist on Hughling Jackson's ward at the National, he explained the role of the physiotherapist in the management of functional disorders and handy tips for treatment and



Above Wendy Hendrie delivering her talk on compliance with home exercises with MS patients.

assessment for this client group. Wendy Hendrie, lectured on reasons for lack compliance with exercises for MS patients. Dr Gita Ramdharry explored the differences between central and peripheral fatigue in neuromuscular conditions. This led to discussion on tailoring treatment approaches based on the fatigue mechanism.

The conference was concluded by Dr Fiona Jones, her lecture entitled *Remembering Personhood: Supporting active participation after stroke* explained that perhaps therapists perceive that disability is a loss and tragedy and our approach to rehabilitation is limited by this. Alluding that rehabilitation is often dominated by professional values and beliefs, she discussed the importance of listening to the stroke survivor's story and working towards their personal goals. She stated that physiotherapist's management of emotional difficulties post stroke is an increasingly important part of our role. Finally, she asked us to reflect on our understanding of disability and rehabilitation approaches.

Threading through all lectures were themes of motivation, goal setting and adherence to therapy. How can we use our expertise to gain active participation in rehabilitation enabling our client group to get the most benefit out of our increasingly pressured time?

Thank you ACPIN, see you again next year.

The UK Forum for Stroke Training (UKFST)

The UK Forum for Stroke Training (UKFST) launched successfully at the UKSF Conference in December. UKFST is a new UK-wide initiative, designed to improve the quality of stroke care for all. The aim of the initiative is to support the development of quality, benchmarked stroke-specific training and education as well as developing a coordinated approach to workforce development.

Endorsement of training and education carries great benefits and is encouraged by the Department of Health. Endorsed courses and events feature on UKFST's database of stroke-specific training, searchable by potential attendees. Organisations can apply to endorse all training and education – from postgraduate courses to conferences. All applications are submitted through our website where you can also find a wealth of publicly available information about the project. Reviews are conducted through assessment against the Stroke-Specific Education Framework (SSEF) which makes recommendations about knowledge and skills required by staff across the stroke care pathway from awareness-raising to return to work.

The UKFST is now welcoming the submission of conferences and symposia for endorsement. Specially tailored guidance notes are available on the website. By endorsing your event you will ensure it is featured on the UKFST e-bulletin and the UKFST database, further raising awareness and boosting attendance.

To find out how the training or education provided by your organisation can benefit from endorsement, visit www.ukstrokeforum.org and until 7 March take advantage of a special discount period when you apply for endorsement. 📄

CSP Congress 2011

Chris Manning
ACPIN executive

CSP Congress will be held on Friday 7th and Saturday 6th October 2011 at the BT Convention Centre Liverpool.

Congress has four themes:

- Cardiorespiratory
- Musculoskeletal
- Neurology
- Public health, management and clinical leadership

The strapline for congress is 'Physiotherapy works ... for you, for us, for all' and each session will be linked to these three areas.

For you How can you improve your physiotherapist patient interaction, treatment and assessment skills, efficiency, and maintain your CPD activity?

For us How will the profession develop and survive the recession? How can physiotherapy protect its position as a vital element of health-care? How can you improve your service design and delivery?

For all How can we continue to strive for excellence in care levels, benefit society by preventing ill-health, keeping people fit for work, and provide value for money healthcare?

The keynote speaker for the neurology theme will be Professor Mark Rogers PT, from the University of Maryland. He will be talking on *Balance strategies and training*. Mark is the recipient of several large grants for research in this area. Other topics include; telemedicine in MS clinics, service user involvement to build capacity in neurological services, David Butler on motor imagery for neuropathic pain and Professor John Rothwell with an update on neuroplasticity. The programme will have been finalised by the time you read this and up to date information can be seen at www.cspcongress.co.uk

Comments from last year that

demonstrated how delegates found Congress useful are:

- "I have improved understanding of current NHS picture and changes."
- "It gave me ideas for improved, more effective communication with patients to improve assessment."
- "Greater knowledge of information available and how to access it."
- "I will look into research trials in stroke patients."
- "May help with commissioning of neuro services."
- "Encourage more of my patients to self manage and importance of exercise."
- "I feel confident to liaise with researchers to make changes to our practice."

The strength of Congress is the variety of topics covered that you don't acquire from disease specific conferences. It is a chance to gain knowledge from different areas and make links.

We don't all have time to trawl the

literature every day, so when someone summarises the evidence on a topic, you don't just get the snap shot of that one study and you have the opportunity to ask questions.

The breakout sessions provide opportunity to catch up with old friends, find out what is happening in other practice areas and visit the exhibitor's stands to see and try the latest technology.

Liverpool is a wonderful location. The Convention Centre is close to the City Centre and the Albert Docks with its shops, galleries and hotels. Cheap rail fares are available if booked in advance.

If you haven't been before or if you haven't been for a while come and see what is new. These are challenging times for the profession and our strength is in the diversity of fields and sectors in which we work. Congress is your opportunity to make this work for you. 📄

Interactive CSP update

Chris Manning, iCSP link moderator for neurology.

The neurology network has 9251 registered users out of 32198 for the whole of iCSP. There are currently 1912 discussions on the network so search the network to check if there is already a discussion on a topic and remember only use the email members option if an urgent reply is needed.

The discussion of the Very Early Mobilization after Stroke (AVERT) trial has stimulated debate about the pragmatics of this approach.

The assessment and demonstration of competency at various levels is becoming of increasing importance and there are several posts relating to this. For example Bournemouth and Christchurch Hospitals have published their splinting guidelines and competencies in the document section and there are also competencies for injection of Botulinum toxin for spasticity produced by Lancashire Teaching Hospitals. There are several discussions seeking information about competencies in stroke and competencies for assistant practitioners.

Have a look at the Skills for Health website (www.skillsforhealth.org.uk) where there are national occupational standards for *Stroke*, *Long term Conditions Neurology Care* and the *Stroke Core Competencies* website (www.strokecorecompetencies.org) for *Stroke Training and awareness Resources* (STARS). 📄

Bridges stroke self-management – goals achieved and things to do

Fiona Jones PhD MSc FCSF
Reader in Rehabilitation
St George's University of London &
Kingston University

Bridges stroke self-management is based in the Faculty of Health and Social Care at St George's University of London. Although the programme had been running since 2008 as *Stepping Out*, we felt a name change and the publication of the 4th version of our stroke workbook was a good excuse to celebrate. In April 2010 we held our first Bridges symposium attended by over 150 stroke survivors, carers, professionals, commissioners and academics. This event helped to launch our new name, finally saying good-bye to *Stepping Out*, and introducing our new stroke workbook.

Bridges training has evolved considerably since 2008 and now consists of a two-stage workshop for professionals working through the stroke pathway to learn the skills required to support self-management. Participants learn how to use structured one-to-one sessions to support an individual to set goals, record progress, and plan activities. Our stroke workbook is used to facilitate a personal record of goals, progress and self-management strategies. It is now our belief that a self-management programme such as Bridges can be embedded into stroke rehabilitation, and the principles of self-management can be introduced throughout the stroke pathway.

Since receiving an ACPIN grant in 2004 to help develop the first stroke workbook, we have come a long way. Bridges/Stepping Out workshops have now been delivered to 44 stroke teams across the UK, and we have trained in the region of 600 health and social care professionals. We have also carried out a detailed analysis of case reflections which participants carry out as part of their training. This has helped us to respond and adapt the workbook and training, and understand some of the barriers (and successes!) of implementing a self-management programme. The results of this work are currently being pre-

pared for publication but preliminary findings were reported at the UK Stroke Forum in 2009¹. Bridges has also been named as a case study on self-management in the recent *Life after Stroke Commissioning Guide* (2010) and was selected as one of the *National Stroke Improvement Plan's* priority projects in 2009.

As with any complex intervention such as a self-management programme we are carrying out a staged approach to research. A proof of concept study with ten single case studies was completed and published in 2009, demonstrating that an individualised stroke self-management programme such as Bridges can change self-efficacy². The research has now been extended to a pilot randomised controlled trial which has just been completed. The trial led by Dr Sheila Lennon and funded by the Northern Ireland Chest Heart and Stroke Association, aimed to explore the feasibility of using the Bridges programme to enhance self-management skills for stroke survivors in conjunction with ongoing rehabilitation delivered by a community stroke team. The objectives also included exploring the acceptability of Bridges to all stakeholders (patients, carers and professionals). In addition, sensitivity of outcome measures were tested by comparing the differential outcomes between the Bridges group and the control groups to identify the effect of the Bridges programme on self-efficacy, quality of life and mood in people living at home after stroke.

The results of the pilot RCT in Belfast suggest that when comparing the differential outcomes between the Bridges and the control group there are positive trends in favour of the Bridges group. The intervention positively impacts self-efficacy as intended during the intervention period, but has also resulted in what seems to be a protective effect on participant's quality of life during the follow-up period. These positive trends are supported by the findings that suggest the intervention was found to be feasible to implement and acceptable to stakeholders

involved. Feedback from patients was supportive of the impact that Bridges has with regard to individual behaviour change and the way they manage their progress and professionals felt the programme provided a structure for their practice to become more patient centred.

A great deal has been learned from this pilot RCT, but we also know that Bridges was provided in addition to usual rehabilitation which is a limitation. Our next question is to investigate the feasibility of embedding the Bridges programme in to usual practice, so that a dosage response can be discounted.

I am glad to say that Bridges is no longer just a one woman show. There are three other trainers supporting delivery of the workshops who have helped to develop the content and direction of the training, and we have graduate physiotherapists providing administrative and research support. Our multiprofessional advisory group which has been in existence since 2008 now includes more stroke survivors and carers which help to oversee the programme and contribute to its development. Eileen and David who are stroke survivors on our advisory group are also on a research group and helped to prepare a grant application for the next stage of research. We continue to have a number of goals, hopefully not unrealistic. We want the Bridges programme to be accredited by the UK Stroke Forum for Training, an application is already underway, and we want to develop further support for carers as well as continuing our research programme—we still have lots to do!

For more information about Bridges go to www.bridges-stroke.org.uk

UK Stroke Forum

December arrives and not only is Christmas shopping on the agenda but also the UK stroke forum, Glasgow was the venue for the 4th outing of this increasingly prestigious event. Unfortunately it was looking very festive as the country was also blanketed with snow which made travelling up North somewhat challenging. Despite this, attendance remained high and there were few casualties due to the weather. One of the casualties was the courier transporting the ACPIN literature for our stand—apologies again for this, as we were not as well represented as we could have been.

As usual the UK stroke forum had a huge range of topics and I found the biggest challenge choosing between clashing sessions. The Tuesday training day included sessions on psychogenic stroke-like symptoms, vascular cognitive impairment, environmental enrichment and a fascinating session on whether head position in acute stroke affected cerebral blood flow, which was followed by an interesting discussion between the speakers about how early patients should get up.

The conference started fully on the Wednesday and as expected there was an extensive program on medical management of stroke, which may put some physiotherapists off, however the sessions I attended which included how BP should be managed after an acute stroke, can BP predict a stroke and what should be monitored after an acute stroke I found extremely accessible and useful. It will certainly improve my understanding of acute stroke management. There are without a doubt sessions that have too greater a medical bias to be relevant to therapists but there is always something else going on. For Example, the British Orthoptist Society put together a fascinating session on eye movement disorders following stroke, how it affects people and most importantly how it can be managed.

ACPIN organised and chaired many sessions, often jointly with the college of OTs specialist section in neurological practice and out thanks must go out to Dr Fiona Jones for tak-

1. Jones F and Lennon S (2009) *A new stroke self-management programme: preliminary analysis of training for practitioners* International Journal of Stroke 4(s2) pp23.
2. Jones F, Mandy A and Partridge C (2009) *Changing self-efficacy in individuals following first stroke: preliminary study of a novel self-management intervention* Clinical Rehabilitation 23(6) pp522–533.



ing the lead on that on behalf of ACPIN. There was a session on goal setting, its effectiveness and how to effectively implement it in the clinical setting. The session on innovation on stroke rehabilitation showed us what the future may bring in terms of robot assisted therapy and the use of technology in supporting self management. I found the session on intensity and motivation one of the most useful covering why a patient may be de-motivated and what we can do to we change it.

For me the Princess Margaret Memorial Lecture was arguably the most important, Robert McCrum, a stroke survivor, spoke of his experience of having a stroke, rehabilitation and getting back to life. I think it was important that we remember why we do this and what we must improve.

The final night included the dinner and caledh which I have to say the Sassenachs (English) entered into with a great deal of spirit if not a lot of skill but coped well with help from the locals. Although one could describe the Scottish country dancing as carnage – a great deal of fun was had by all.

On the final day there was an impressive program that included, psychological adjustments post stroke, improving the patient journey after acute stroke and whether stem cells could be used in stroke recovery. Sadly the snow was falling fast and there was a sense of people drifting away with worried looks at the weather as delegates started to wander if they would make it home. The most tortuous route home I subsequently heard about was Glasgow to Sheffield via Bristol!

As always the greatest asset of the UK stroke forum is its multi disciplinary nature – it gives you the opportunity to dip into areas out of your own expertise and the opportunity to network with other professional within the same speciality and to sell our profession. The sessions are for the most part applicable to day to day practice and are not purely theoretical. I thoroughly recommend it to anyone with an interest in stroke. It is well worth the trip and of course as an ACPIN member you receive a significant discount. 🍷

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REVIEWS ARTICLES BOOKS COURSES EQUIPMENT

Reviews of research articles, books, courses and equipment 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.

COURSES

Balance rehabilitation: translating research into clinical practice

ACPIN London Study Day

6th November 2010

Course presenter: **Anne Shumway-Cook**, Professor Emeritus, Department of Rehabilitation Medicine, University of Washington, Seattle, WA

Review by **Ulrike Hammerbeck**, ACPIN London committee member.

The study day was fully subscribed and attended by ACPIN members from London and much further afield as well as multi-disciplinary non-members.

Anne Shumway-Cook presented a very inspiring study day about balance rehabilitation. She highlighted the prevalence of balance impairments and the consequence of these on activity and participation levels of individuals. Balance was divided into different types depending on the demands placed on the system. The types consist of steady-state balance, reactive balance, to a perturbation, or proactive balance during anticipated movement. The day was structured as theoretical lectures consistently interspersed by interactive workbook sessions, applying the theory to videos of two case studies presenting with balance impairments.

The morning session was divided into three sessions discussing the main systems interacting to achieve balance, namely the motor, sensory and cognitive system. The role of each system was analysed and the relevance of each system to varying requirements of different types of balance. The videos of the two case studies were consistently incorporated into an interactive workshop which increased participation. Available evidence for improving the performance of the different systems was reviewed.

The afternoon focussed on balance assessment and treatment. Available outcome measures were discussed and how they assess the motor, sensory and cognitive systems required for balance as well as which type of balance was assessed by the specific outcome measure. The importance of addressing the specific primary risk factor for balance loss in the treatment was emphasised as well as providing sufficient intensity of training. Evidence for effectiveness of training was reviewed and the assessment and treatment session were again linked to the case studies and workshop sessions.

The feedback for the study day was overwhelmingly positive and highlighted the ability of the presenter as well as the excellent content and structure of the course. The consensus of the comments was that this course would alter the clinical practice of participants.

ACPIN London would like to thank Anne Shumway-Cook for a very successful study day. 📄

Surrey and Borders neuro-oncology study day

Review by **Michelle Green**

In October 2010 we held a neuro-oncology study day. Lectures covered topics including: symptom presentation and treatment options, the role of the clinical nurse specialist and palliative care, insight into a patient's experience, physiotherapy within a hospice setting and recommendations for future service development. Diz Hackman from the Royal Marsden Hospital also presented the findings from her recent work into the purpose of physiotherapy for patients with primary brain tumour.

This study day proved popular on a

national level and attracted physiotherapists from a range of clinical backgrounds: neurology, elderly care, community, oncology and palliative care. This gave an excellent opportunity for networking and created thought provoking discussion throughout the lectures. It is recognised that oncology services have improved significantly over the years but as always, there is always more that can and needs to be done to further improve service provision!

The day highlighted how invaluable therapeutic involvement within oncology services is and how the dedication of those working within this speciality contributes to this. 📄

Getting research into practice – Constraint Induced Movement Therapy (CIMT) for arm recovery and function for stroke survivors

8th–11th March 2011

The University of Ulster

Course facilitator: **Dr David Morris**, Associate Professor, University of Alabama (Division of Physical Therapy) and Training Coordinator for the UAB CIMT Research Programme

Review by **Giaran Daly**, senior physiotherapist, Erne Hospital, Enniskillen, Northern Ireland

Constraint-induced movement therapy (CIMT) is an innovative treatment approach aimed at improving functional use of the affected arm following a stroke. Patients using CIMT have reported marked improvements in the use of their stroke arm even many years after their stroke. Delegates from across Europe came to UU to attend the internationally renowned training course normally only offered at the University of Alabama by the CI Therapy Research Group led by Professor Taub who has been devel-

oping this technique since the 1970s.

Dr David Morris, an Associate Professor in the University of Alabama (Division of Physical Therapy) and Training Coordinator for the UAB CIMT Research Programme was the key facilitator of the course. Professor Gert Kwakkel from the VU University Medical Centre in Amsterdam, and the Rudolf Magnus Institute in Utrecht discussed the evidence base underlying stroke rehabilitation for arm recovery and function post stroke.

Course participants heard firsthand about the experience of a stroke survivor who had used CIMT. The therapists' view on the practicalities of delivering CIMT was presented by Heather Glenn and Laura Wheatley-Smith, expert clinicians from the Regional Acquired Brain Injury Unit (RABIU) in Belfast. They have been involved in the ongoing research trial based at RABIU led by the Neurorehabilitation for Health hub at UU. In collaboration with Dr Morris, Katy Pedlow, a doctoral student supervised by Dr Sheila Lennon from the Health and Rehabilitation Research Institute at UU, and Dr Colin Wilson from RABIU are currently comparing CIMT to an equally intensive conventional upper limb therapy delivered as

part of routine clinical practice. Twenty patients have been recruited; the results from this feasibility RCT should be available in October 2011.

I had initially come across CIMT while reading an article around three years ago. I then attended a study day/workshop in RABUI which was organised by Dr Sheila Lennon (UU). I found the concept of CIMT extremely interesting as treatment of neurological deficits, particularly in the post acute phase, can become difficult. After completing the study day I carried out a small pilot study using the concept of CIMT on a small number of patients (I contacted Katie Pedlow from UU for some guidance). The results were positive but I was not confident as to how accurately I was applying the concept. I then attended the UU CIMT Module which took place from 8th–11th March 2011 at UU.

On completion of the module I feel a lot more confident on the application of the CIMT concept to patients. I feel that I have a greater appreciation of the detailed subjective questioning, application of treatment, the transfer package and the outcome measures used. The course lecturers and organisers were excellent in their presentation of CIMT. They were very

approachable and provided excellent knowledge of the research to indicate that CIMT is a very effective upper limb and lower limb treatment approach. Several studies were debated during the module eg Excite trial and this provided therapists with a good evidence base to promote CIMT into our clinical work. I appreciate the opportunity to have attended this module as I feel it will improve my skills as a therapist. I feel that the CIMT approach is a very effective treatment to integrate into patient care and may lead to improved outcomes. After carrying out a small pilot study prior to attending this module where the results were positive I feel that on proper application of the CIMT approach after excellent tuition on this module future results will only benefit patient care.

The organisation of this module and the selection of lecturers by Sheila Lennon and her staff were excellent. The module also provided therapists from Northern Ireland with a great opportunity to share ideas and experiences from therapists from other European countries who also attended. 🌍

WEBSITES OF INTEREST

This new feature is aimed to be a useful resource for members by recommending some of the multitude of web-sites available to help in our practice. Thank you to the regional representatives who have contributed suggestions this time. If you use or know of any websites that you think may be of interest to others please send them to Kate Busby at ksmoff@hotmail.com

www.your-turn.org.uk

This is a campaigning group to reduce pressure ulcers in vulnerable people. It has been running for three years and also aims to highlight risks for the general public to identify. They provide leaflets and cards and could be an adjunct to your Trust's campaigns to reduce pressure ulcers.

www.evidence.nhs.uk

This website allows professionals to view very recent evidence which helps us to keep delivering quality of care for our clients. They have very recent journals or information about a wide variety of health conditions.

www.londonstroke-directory.org.uk

This website is user friendly and can be used by both professionals and general public. It serves as a guide to show the support available across London to help patients/carers get on with their lives post stroke. For example you can put in your post code and it will show you the types of stroke services for that area. It provides a wide range of information. For example: advice and advocacy, practical help, communication, stroke clubs and family/carer support.

www.neurosymbols.org

Written by a neurologist and aimed at patients diagnosed with functional neurological syndromes, this has a very good explanation of what a functional syndrome is, and guides the user through symptoms, causes and treatment available. There is a section on physiotherapy, fatigue and graded exercise. There is also a collection of patient's personal experiences of functional problems. The links section includes other useful websites, patient videos and information leaflets, useful for both patients and therapists.

www.wiihabilitation.co.uk

This site has been developed by a British physiotherapist and is useful for therapists using the Nintendo Wii in any area of practice. Wiihabilitation gives an overview of conditions that the Nintendo Wii can be used with, and a review of specific games and which area they will work on ie balance, upper limb, general fitness etc. There are blogs covering games, research, news and general updates, the research blog includes published articles and has links to the website containing the abstract/full text where available.

www.neural.org.uk

A helpful neurology website for getting the bigger picture

<http://neuroscience.uth.tmc.edu>

Neuroscience Online is a website that a fair few of us have used to further develop our understanding of neuro anatomy. The website is an interactive resource enabling the user to explore neuroanatomy at their own pace. The website incorporates diagrams and illustrative pictures that can be used to support the text. The diagrams are animated at points to further explain, for example the sensory and motor tract pathways are traced. The website is free to use and, certainly as a teaching aid, we have found it very useful.

www.mssociety.org.uk

This site offers:

- Library services, book loans, article requests.
- Professional network – link to join – gives access to further advice on current research, service audit and development.
- Patient information.

www.southernstrokeforum.org

On offer here are:

- A range of stroke competencies templates for a range of staff involved.
- Educational videos accessible online, covering all topics within stroke care – suitable to use with carers, care homes and staff.
- Links to all relevant stroke guidelines.

www.parkinsons.org.uk

Look on this site for:

- Details and contacts for local PD groups.
- Ordering for leaflets including exercises booklet and *Parkinsons and you* booklet for patients.
- Fact sheets for additional information eg lewy body dementia.

www.sign.ac.uk

The Scottish Intercollegiate Guidelines Network (SIGN) develops evidence based clinical practice guidelines for the National Health Service (NHS) in Scotland. SIGN guidelines are derived from a systematic review of the scientific literature and are designed as a vehicle for accelerating the translation of new knowledge into action aiming to reduce variations in practice and improving patient outcomes.

Range of topics eg stroke – diagnosis and acute management through to rehab and discharge planning, diabetes, heart disease, pain in cancer, early head injury, bipolar disorders, DVT etc.

Easy to read with clear explanation and clinical guidance, ongoing process of updating and review. Many are multidisciplinary. Available in large text, in format for patient and carers and in different languages.

Can access on the web, download or request paper copies

www.physiotherapyexercises.com

A useful resource for spinal injuries.

REGIONAL REPORTS

East Anglia

Nic Hills

East Anglia ACPIN membership numbers have remained very high and our 2010 course programme (a mix of evening lectures and study days) was well supported by the members. Much of our 2010/11 course programme has been subsidised by East Anglia ACPIN meaning they have been very accessible for our members.

Our 2011 course programme is now underway, and kicked off with an East Anglia ACPIN subsidised Parkinson's Disease study day, led by Emma Stack (Parkinson's Disease researcher) in Newmarket. Other forthcoming events include:

- July 2011 *Neuro-pilates study day* Ipswich Hospital
- 15th October 2011 *Pusher Syndrome study day* at Ipswich Hospital

An up to date course programme is available on the ACPIN website (www.acpin.net/eastanglia), please email me if you are interested in attending any of our courses.

As ever we would like to run courses that the members would like to attend and we are always looking for ideas for future courses from the membership, so please contact me if you have any innovative ideas. We hope to see you at our courses throughout the year.

Kent

Nikki Guck

We have had another very successful year with our numbers remaining high and a strong committee which has been led by Cathy Kelly Jones. We must send our gratitude to Cathy for her commitment as this is her last year standing as our chair, but thankfully for us she is remaining on the committee.

Our programme in 2010/11 continued with two really successful study days. The first was in June, a lower

limb study reviewing the evidence and adjuncts to treatment, such as the *Wii Fit*, outcome measures, and the ever popular orthotics with a brilliant talk from Paul Charlton. Our thanks must be sent to Paul and the local clinical specialist physiotherapists in the region for offering their support and services.

The second study day was hosted at Darent Valley Hospital in November, it looked at the use of the Vibrosphere/G4CE plate. It was very well attended and thoroughly enjoyed by all and our thanks must be extended to Eva Leach for a really exciting course, well recommended to other regions.

On the 22nd March we will host our AGM at The Wisdom Hospice, Rochester, with a talk from Dr David Oliver on *End of life care in long term neurological conditions*. Dr Oliver has recently presented at The International Symposium for MND/ALS in Orlando USA, so the committee are really excited that he has agreed to assist in developing our skills in this important area.

Future courses in the planning are infections in the central nervous system and implications of neurophysiotherapy in immunology, and an MS study in collaboration with the MS Trust.

As the region covers a large geographical area, we as a committee are always keen to hear from members that wish to join us. It is very sociable as well as being a good time to network and discuss changes that are occurring in the NHS and private sectors. We are always also looking for members to send us ideas for future courses and evening lectures. Please do not hesitate to contact either myself or anyone on the committee on kentacpin@yahoo.co.uk, we look forward to hearing from you.

London

Andrea Stennett

We had a very successful 2010 with both growth in membership and finances. The latter has allowed us greater flexibility in providing a range of high quality lectures by dynamic speakers from the UK as well as overseas.

We started 2011 with our annual general meeting and study morning entitled *Life after a Neurological event: Evidence and Practical Applications* on the 12th February. We received presentations from Dr Fiona Jones (*Self Management: Bridges into the Future*) and Nicole Walmsley and Amy Williamson, Occupational therapists working at National Hospital Neurology and Neurosurgery (*Vocational Rehabilitation*). We would like to express our sincere gratitude to our speakers for such an informative morning.

The committee as you know it has undergone some changes. We said farewell to Christopher Manning who served as chair person for the past four years. Chris will however continue to serve as a committee member. Thank you Chris for all your hard work, laughter and of course dedication over the years. We also said farewell to Kerry Hellier and wish her all the best with future endeavours. Helle Sampson was appointed as the new committee chair, and Lesley Mill as treasurer. Leanna Dennis and Victoria Conway were elected as new committee members. Trudy-Ann Sinclair will continue in her role as secretary and I will continue to serve in the capacity of your regional representative. Other committee members are Sandra Chambers, Megan Campbell, Bethanie Goodfellow, Ulrike Hammerbeck, Maria Garcia and Andrea Shipley.

Due to the successful study events last year, you will notice that this year we have greatly subsidised the cost of our study events without

compromising the quality. This decision was taken by the committee to recognise your ongoing and invaluable support.

On the 21st of May we hosted an extended study morning entitled *The Cerebellum and motor control* with exciting lectures from Amy Bastian from the United States of America. Amy has been doing amazing, groundbreaking research into rehabilitation for ataxia – mostly cerebellar ataxia. She is specifically interested in motor control and how patients with cerebellar ataxia learn.

We have an exciting programme lined up for the remainder of the year. Our annual wine and cheese event and evening lecture will be on the 9th June. This will be in the form of a panel discussion with therapists who have volunteered abroad sharing their experiences. On September 17th we will host a joint event with ACPVR which will take the form of a full study day entitled *Vestibular Rehabilitation*. On the 12th November 2011 we have brought back by popular demand a study morning showcasing neurophysiotherapy research. This is to give our members who are involved in research an opportunity to share their current work.

All our lectures this year will be held at the Clinical Neuroscience Centre at 33 Queen Square. If there are any changes we will let you know in advance.

Please keep checking *frontline* and the ACPIN website (www.acpin.net/london) for any changes to our schedule.

If you find that you have not been receiving our emails please let me know. You can send your queries directly to my email: andstennett@yahoo.com or to londonacpin@googlemail.com

Merseyside

Laura Phillips

Merseyside ACPIN has enjoyed another successful few months of courses and evening lectures including a vision and balance course with Nikki Adams, the second time we have ran this course due to its success and popularity. We also had very good attendance at both the evening lecture on cauda equina and bladder and bowel dysfunction as well as the gym ball workshop that ran alongside the AGM in February.

Since our last update we have not had any changes to the committee. However I will be handing over the role of regional rep into the very capable hands of Anita Wade-Moulton from April. As always we would like to make an appeal to all our members to join the committee if you are interested. We would really value your input and contributions. Please contact us through our email (merseysideacpin@yahoo.co.uk) if you would like further information.

Some of the details for the remainder of the 2011 programme are to be confirmed and we will send out further information closer to the time. Programme 2011

- June 11th and 12th *Workshop* with Clare Fraser (Bobath tutor). Venue, topic and price to be confirmed
- September (evening lecture) *Neuromyelitis Optica (NMO) – Devic's Disease* at the Walton Centre for Neurology and Neurosurgery, Liverpool. Start time and date to be confirmed. Free to ACPIN members and £3.00 for non-members
- October course To be arranged

Our current membership stands at 52 and we would like to thank all members of Merseyside ACPIN for their continued support.

Northern Ireland

Jacqui Crosbie

Hi to all our NI members. We have had an exciting start to our programme this year, working jointly with AGILE to present a successful lecture on vestibular rehabilitation and learning about early supported discharge in stroke. NI ACPIN is always keen to investigate new

research happening in our locality and, as such, had the pleasure of Professor Richard Carson to support our AGM with a lecture on his work in stroke and transcranial magnetic stimulation.

The University of Ulster ran a very successful course on CIMT in March and, in collaboration with NI ACPIN were able to provide a training day on CIMT and also an evening lecture from Professor Gert Kwakkel on Intensity of Therapy. The varied nature of our programme continues into the spring, with a workshop on movement disorders and a final lecture on outcome measures in May.

The committee has had some major changes this season, with long-standing members Maire Kerr and myself, both retiring, making way for new, enthusiastic volunteers! We are always happy for more committee members, which makes organisation of the yearly programme and study days easier and the content more varied.

NI ACPIN ran a lottery over the first half of the programme, where attendees got a ticket for every evening lecture. There was then a draw in January for a free place to the national ACPIN conference and this was won by one of our NI ACPIN members. Your support at NI ACPIN events allows us to continue with this kind of educational support and is, as always, greatly appreciated.

Enjoy the summer and we look forward to seeing you at a NI ACPIN event soon!

North Trent

Anna Wilkinson

We have already had two exciting events this year. Dr Rebecca Palmer spoke to us about *Cortex, Classification, Compensation and Communication*. It was very interesting to identify different traits in communication problems and look at strategies around managing them in relation to physiotherapy. We then held a technology day in conjunction with CSP network and local branch which was popular and introduced technologies currently being developed, the research aspects and then went on to look at what is available

now. We had interesting talks from people who commission technology which hopefully got everyone thinking about how we can move forward in what is fastly becoming a big priority in healthcare.

Over the next year we will be running courses on:

- neuroanatomy
- legal and capacity issues
- latest developments in Parkinsons Disease and research
- practical tutoring sessions
- a joint podiatry evening course looking at biomechanics and how these can be corrected.

We also have a one day vestibular course planned in September.

Hopefully this is an exciting programme. If anyone has anything they would like to see in our region, as always, please let us know – we do still have a couple of gaps in this year's programme.

We have space on the committee for new members if anyone is interested in joining us or wants a chat what it's all about, let us know.

We look forward to seeing you at our next events.

Oxford

Claire Guy

From our committee to all Oxford members, welcome to our report for the Spring edition. Our evening lectures remain the mainstay for Oxford ACPIN with regular attendance over 20 and although the venue tends to be Oxford, we will hope to be sharing these more widely. We appreciate the venue is not ideal as access is becoming harder. Many of you do not live in Oxford and I hope you will bear with us and note new venues on the fliers. Please let the committee know your preference on venue location.

Giles Yeates, principal clinical neuropsychologist, gave a very thorough and stimulating talk on the psychological aspects behind gait re-education. It was a very interactive discussion into a minimally researched area. Professor Wade once again provided a thought provoking talk and an evening lecture on apraxia with a physiotherapist and occupational therapist had a bumper turnout.

The AGM once again welcomed Stana Bojanic, always a popular speaker.

We are planning two courses this year, Richard Sealy and Martine Nadler will be presenting *Neuroplasticity, learning and cognition for therapists* on 18th June and we have yet to confirm a weekend day course exploring the pusher syndrome. Evening courses planned will be delivered by clinical psychologists, a speech and language therapist and Jo Camp will speak on vibration therapy. A social will be held in July.

We hope to repeat the evening research forum, with a range of speakers and topics in bite size chunks to stimulate discussion and application to our neurological practice. Please look out for details on fliers, *frontline*, and the Oxford section in the national ACPIN website or call any of the committee.

Again thank you to all our members for your support, Oxford ACPIN is for you; please feel able to suggest topics and thank you for entering into healthy debate. Sophie has left our committee but I am sure will continue to be an active local member.

Scotland

Dorothy Bowman

Welcome to any new and existing members. Hopefully you will all have received your newsletters.

Since the last report we have had a study day on *Visual deficits in Neurology* with Therese Jackson (Consultant OT). The day was well attended and feedback was excellent. A study day on conversion disorder is underway and hopefully there will be a good turnout for this fascinating topic. An *Exercise in Neurology* day is planned for June with a range of excellent speakers, it promises to be a another really interesting and thought provoking day. As a committee we would like to thank all those who attend and support the courses and those that have helped organise or been a speaker.

Several current committee members are stepping down and it is urgent that replacements are found. Please consider what you might be

able to contribute to keep ACPIN Scotland from folding. If you want training and study days to continue more assistance is required. For those committee members that are stepping down thank you for all your hard work and support for ACPIN over the years.

Programme for 2011

- Saturday June 4th 2011 *Exercise in Neurology*. Currently confirmed topics – *Exercise Physiology, Stroke, PD, Neuromuscular Disease, MS*. Speakers: Mark Smith/John Dennis (Stroke), Dr Gita Ramdharry (Neuromuscular disease), Bhanu Ramaswamy (PD), Paula Cowan/Jane Lough (MS). Edinburgh Training and Conference Venue, St Marys Street, Edinburgh.

South Trent

Katy Coutts

South Trent ACPIN has a healthy membership and the committee is now stable after a few changes. I am now the permanent regional representative and I look forward to meeting more of you over the coming months.

Although we had a relatively quiet Autumn/Winter period, things are picking up and we are looking forward to the year ahead.

We have recently held an evening lecture on *The role of the psychologist in neurology*. This was well attended and gave us an insight into what we may expect from a neuro patient in terms of psychological presentation and when we might need to refer to a psychologist. He also gave us a brief overview of his role once he has been referred a patient and what tools he may use to assess them.

There are several events this year to look forward to.

- June *Bobath Problem Solving Workshop around gait* (dates and prices to be confirmed)
- July *Ultrasound Biofeedback* Gill Campbell, Physiotherapist at the Ashbourne Physiotherapy Clinic

We have a couple of proposed events including evening lectures on movement science and one on vestibular disorders. We also have Mary Lynch-Ellerington booked for February 2012

for an advanced Bobath workshop.

As always, we are keen for our members to contact us with ideas or feedback so feel free to get in touch (katy.coutts@nhs.net).

South West

Helen Madden

South West ACPIN continues to develop with a growing committee with subgroups now formed in Devon and South Wales, so we hope to be able to be running more courses in more locations in 2011 and beyond. Thank you to everyone who has volunteered to join the committee, and for all the committee for their continued hard work.

Courses held at the end of 2010 and beginning of 2011 have included feedback on the National ACPIN conference on exercise and neurology, treatment of unexplained symptoms (back by popular demand!), neuropilates and ataxia which formed part of our AGM in 2011. All the courses have received positive feedback and have been oversubscribed so thank you as ever for your continued support. We also held our first lecture in South Wales for some time on *Exercise and Huntingdon's Disease*. We hope to be running more courses in South Wales as well as other locations across our region, so more of our members should hopefully be able to access courses closer to where they live.

Courses will be continued to be advertised on our regional page on the ACPIN website, interactive CSP and via email to our members. Places for courses will only be confirmed once a completed application form and payment has been received by the course organiser.

In 2011 we have launched a new initiative for South West ACPIN members to potentially access course funding to enhance the individual's physiotherapy skills in managing neurological patients. Further details of this new initiative including the policy and application form are available on our regional page on the ACPIN website. We will review this at the end of 2011 but we hope our members take advantage of this potential source of funding to attend

courses and conferences.

Please get in touch with us if you wish to find out more information about being on the committee or ideas/suggestions for future courses Helen.Madden@banes-pct.nhs.uk

Surrey and Borders

Kate Busby

Hello to all members! We have had a successful 2010 with good attendance at all events. After four years in term, Anna Lavelle (chair person), Louise Everard (secretary) and myself will be stepping down from our roles. We will remain on the committee however! In addition, I have now joined the executive committee as *Synapse* editor. Emma Jones is becoming our new regional representative and Michelle Green, our chair.

Our 2011 programme began in February with our AGM and lecture on *Mental Practice with Motor Imagery in Rehabilitation* by Thamar Bovend'Eerdt. This was well received by all and created much discussion.

Future events

- 18th–19th June *Weekend course on Gait and Postural control* with Nicky Penny. Woking Community Hospital
- 24th September *Day Gym Ball course* with Janice Champion. Haslemere Community Hospital
- 23rd November *Evening Lecture– Intrathecal Baclofen*. Holy Cross Hospital

Our courses will be advertised on icsp, in *frontline* and on the ACPIN website. Please do not hesitate to feed back to us your ideas for future lectures. If anyone is keen to join the committee or has any queries then please contact Emma Jones on: emrob222000@yahoo.co.uk. Wishing you a lovely summer ahead and farewell!

Sussex

Gemma Alder

A big thank you to all the speakers and everyone involved in supporting the running of Sussex ACPIN to date. We were delighted to welcome a number of new committee members towards the end of 2010.

We have had a mixture of study days and evening lectures and our 2010/2011 programme has been well attended thus far. Here's a quick recap:

In September I was very excited to present a study day on *Understanding and treating Pusher Behaviour*. This was well received and attracted non ACPIN members as well as therapists out of the Sussex area.

In October Diana Drawbridge and Clare Hall our committee members presented an evening feedback session on the highlights from *Fit for life – Neurology and Exercise* from 2010s national conference. This was a great opportunity for local members that didn't manage to attend conference this year.

In November we were thrilled to have Professor Anne Ashburn and Dr Emma Stack from Southampton University to present an interactive workshop on *Falls and instability in people with Parkinson's Disease and stroke*. This also included discussions about their current research.

For our AGM in March 2011 we welcomed Nicky Penny and Lesley Barnes to present an interactive and fresh look on the *Assessment and treatment of the upper quadrant and the role of musculoskeletal techniques*. This also included patient demonstrations.

Our plans for the summer months ahead include an evening lecture on the *Assessment and treatment of neglect* and a two day study weekend on *Dynamic movement screening and functional exercise* with Bob Wood MCSP.

In order to keep up to date with this year's programme, venues and speakers we will be providing updated information on the ACPIN Website and iCSP.

As always your thoughts and ideas are important to us. Please feel free to contact myself or any of the committee members to share your ideas. Gemma.Alder@wash.nhs.uk

Wessex ACPIN

Hayden Kirk

2011 appears to be a key year for change for Wessex ACPIN due to be a number of key committee members stepping down, chair, secretary and regional representative. It will therefore require new committee members to take up these roles so please let us know if you are interested. In the meantime the committee will continue to work hard to deliver an exciting regional events programme at reduced rates for its members.

Also, if during these times of austerity you are finding CPD budgets restricted, may we remind you to look on the website for the Wessex funding application form. This can be used to assist individuals in the funding of courses, conferences etc. Please refer to our website www.acpin.net/wessex for the form and funding policy.

Membership is up to 97 which is fantastic and it was great to see so many of you at our first event of the year on CIMT, by Alison Burns, Clinical Specialist Physiotherapist. Thank you everyone who completed the online survey for future course formats and topics. This was very helpful and we will try to deliver those topics that most of you requested. I hope you are able continue to support forthcoming events and please do chivvy along any non members or MDT colleagues.

West Midlands

Katherine Harrison

West Midlands ACPIN is looking forward to a successful year in 2011. Membership in the region remains good with a healthy sized committee, although new committee members are always welcome. The main role of the committee is to organise events for West Midlands ACPIN members but we have also started a discussion group within the committee. So far two interesting topics have been discussed; *Hope in rehabilitation* and *Sensory assessment and rehabilitation* both sessions led by a researcher at Birmingham University. By discussing these topics we aim to identify and promote emerging research in neurological physiotherapy.

Last year our Christmas evening lecture was on the subject of TMS. There was a very enthusiastic student attendance at the lecture and again it was interesting to find out about local research. The lecture gave a good grounding for the assessment of neglect and also how local hospitals can get involved in this innovative area.

In January Paulette van Vliet gave a morning lecture to 40 people on the subject *Putting feedback into practice*. At a credit crunch busting price of £5 this course was oversubscribed. Feedback from the course was very positive with participants

saying it gave a different way of looking at treatment of neurological patients with lots of practical suggestions. Ideas like group practice were thought to be especially useful in clinical areas where staffing levels have been reduced. Other areas discussed at the lecture were repetition, communication and the importance of ADL practice in treatment.

So what will the rest of 2011 bring? Next on the agenda is our AGM and evening lecture on the *Birmingham University cognitive screening tool*. At the time of writing this is likely to be held at the end of March. After this we hope to do an evening lecture on the cerebellum in May or June. An evening lecture on CIMT will follow. Nearer the end of the year we hope to do a study day on MS and possibly conclude the year with the Christmas lecture on Saebø Flex. Wow ... lots to look forward to! Please check emails and ACPIN website for details nearer the time.

As always West Midlands ACPIN welcomes any suggestions or questions you may have. Please do not hesitate to contact me via email: katherine.harrison@warwickshire.nhs.uk

WRITING FOR SYNAPSE

Synapse is the official peer-reviewed journal of the Association of Chartered Physiotherapists in Neurology (ACPIN). *Synapse* aims to provide a forum for publications that are interesting, informative and encourage debate in neurological physiotherapy and associated areas.

Synapse is pleased to accept submitted manuscripts from all grades and experience of staff including students. We particularly wish to encourage 'novice' writers considering publication for the first time and ACPIN provides support and guidance as required. All submissions will be acknowledged within two working weeks of receipt.

Examples of articles for submission:

Case Reports

Synapse is pleased to accept case reports that provide information on interesting or unusual patients which may encourage other practitioners to reflect on their own practice and clinical reasoning. It is recognised that case studies are usually written up retrospectively. The maximum length is 3,000 words and the following structure is suggested:

Title – this should be concise and reflect the key content of the case report.

Introduction – this sets the scene giving background to the topic, and why you consider this case to be important, for example what is new or different about it? A brief overview of the literature or the incorporation of a few references is useful so people can situate the case study against what already is known.

The patient – give a concise description of the patient and condition that shows the key physiotherapeutic, biomedical and psychosocial features. Give the patient a name, but not their own name. Photographs of the patient will need to be accompanied by explicit permission for them to be used. Only relevant information to the patients' problem should be included.

Intervention/method – Describe what you did, how the patient progressed and the outcome. Aims, treatment, outcomes, clinical reasoning and the patient's level of satisfaction should be addressed. Indications of time scales need to be considered.

Implications for practice – Discuss the knowledge gained, linking back to the aims/purpose, and to published research findings. Consider insights for treatment of similar patients, and potential for application to other conditions.

Summary – List the main lessons to be drawn from this example. Limitations should be clearly stated, and suggestions made for clinical practice.

References – the Harvard style of referencing should be followed (please see *Preparation of editorial material* below).

Original research papers

These should not exceed 4,000 words and papers should include the following headings:

Abstract – (maximum of 300 words)

Introduction

Method – to include design, participants, materials and procedure

Results

Discussion

Conclusion – including implications for practice

References

Abstracts of thesis and dissertations

Abstracts from research (undergraduate and postgraduate) projects, presentations or posters will be welcomed. They should be up to 500 words, and broadly follow the conventional format: introduction, purpose, method, result, discussion, conclusion.

Audit report

A report which contains examination of the method, results, analysis, conclusions of audit relating to neurology and physiotherapy, using any method or design. This could include a Service Development Quality Assurance report of changes in service delivery aimed at improving quality. These should be up to 2,000 words.

Sharing good practice

This *Synapse* feature aims to spread the word amongst ACPIN members about innovative practice or service developments. The original format for this piece started as a question and answer session, covering the salient points of the topic, along with a contact name of the author for readers to pursue if they wish. Questions were loosely framed around the following aspects (this would be for an audit)

- What was the driving force to initiate it?
- How did you go about it?
- What measurements did you use?
- What resources did you need?
- What did you learn about the process?
- How has it changed your service?

However recent editions have moved away from this format, and provide a fuller picture of their topic eg *Introducing a management pack for stroke patients in nursing homes* (Dearlove H Autumn 2007), *An in-service development education programme working across three different hospitals* (Fisher J Spring 2006), *A therapy led bed service at a community hospital* (Ramaswamy B Autumn 2008) and *Establishing an early supported discharge team for stroke* (Dunkerley A Spring 2008).

Product news

A short appraisal of up to 500 words, used to bring new or redesigned equipment to the notice of readers. This may include a description of a mechanical or technical device used in assessment, treatment management or education to include specifications and summary evaluation. Please note, ACPIN and *Synapse* take no responsibility for these products, it is not an endorsement of the product.

Reviews

Course, book or journal reviews relevant to neurophysiotherapy are always welcome. Word count should be around 500. This section should reflect the wealth of events and lectures held by the ACPIN Regions every year.

OTHER REGULAR FEATURES

Focus on...

This is a *flexible space* in *Synapse* that features a range of topics and serves to offer different perspectives on subjects. Examples have been a stroke survivor's own account, an insight into physiotherapy behind the Paralympics and the topics of research, evidence and clinical measurement.

Five minutes with...

This is the newest feature for *Synapse*, where an ACPIN member takes 'five minutes' to interview well-known professionals about their views and influences on topics of interest to neurophysiotherapists. We are always keen to receive suggestions of individuals who would be suitable to feature.

PREPARATION OF EDITORIAL MATERIAL

Copies 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.

The first page should include:

- The title of the article
- The name of the author(s)
- A complete name and address for correspondence
- Professional and academic qualifications for all authors and their current positions

For original research papers, a brief note about each author that indicates their contribution and a summary of any funds supporting their work.

All articles should be well organised and written in simple, clear, correct English.

The positions of tables and charts or photographs should be appropriately titled and numbered consecutively in the text.

All photographs or line drawings should be at least 1,400 x 2,000 pixels at 72dpi.

All abbreviations must be explained.

References should be listed alphabetically, in the Harvard style. (see www.shef.ac.uk/library/libdocs/hsl-dvc1.pdf) eg:

Pearson MJT *et al* (2009) *Validity and inter-rater reliability of the Lindop Parkinson's Disease Mobility Assessment: a preliminary study* *Physiotherapy* (95) pp126-133.

If the article mentions an **outcome measure**, appropriate information about it should be included, describing measuring properties and where it may be obtained.

Permissions and ethical certification; 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.

SUBMISSION OF ARTICLES

An electronic and hard copy 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* coordinator Kate Busby at: ksmoff@hotmail.com

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