AUTUMN 2001

Syn´apse

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

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ACPIN's AIMS

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

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From the Chair

Linzie Bassett MCSP SRP
Chairperson ACPIN

Address for correspondence
92 Redacre Road, Boldmere,Sutton Coldfield, West Midlands B73 5EE

My first draft of this report was written on 11th September 2001, whilst sitting on the London-Birmingham train following an Executive Committee meeting. I had little idea of the poignancy of such a day nor of the devastation occurring in New York. The Association offers heartfelt sympathy to all concerned and especially our American physiotherapy colleagues who are working in the midst of this tragedy.

Since my last report we have seen many exciting headlines with implications for neurological physiotherapy practice, the most publicised being the publication of the NSF for Older People, particularly the reference to Stroke and Intermediate Care. Obviously, to implement such guidelines there needs to be an increase in experienced physiotherapists. The downside of this being the time required to train physiotherapists and the major retention problem the NHS is currently experiencing, combined with the fact that winter pressures are still occurring in June!

NICE and the Health Select Committee are currently drawing up documents regarding the care of Head Injury patients.

The Stroke Association produced *Speaking out about Stroke Services* which highlighted patients' perceptions of therapy, a useful booklet for all departments.

There is a working party investigating the standards of MS care nationally, findings are due to be released next year. This document is eagerly awaited.

The NSF for Progressive disorders ie Traumatic Brain Injury (TBI), Spinal Cord Injuries (SCI), Parkinson's Disease, MS and Epilepsy is currently being scoped. The document is due to be published in 2004, but there are concerns that it will be too broad, as it is felt that TBI and SCI should be covered separately.

A short report by Dr R Plant et al on *Physiotherapy for People with Parkinson's Disease: UK Best Practice* is summarized in this edition of *Synapse*.

All of these reports are extremely encouraging, thus raising the standard for service provision and ultimately patient care.

The CSP has released an Effectiveness Bulletin; ACPIN has been consulted throughout its process. It is entitled *Neurology* and examines the evidence base for Parkinson's Disease, MS and TBI.

Membership goes from strength to strength with currently 1,252 members, making it one of the largest CIG's. Enclosed is a new membership form for the Year 2002, please complete, noting the change regarding the private Physiotherapy Register. Cheques will not be cashed until January 2002.

Members within the Northampton area are in the process of setting up a new regional group. They are seeking support by holding informal meetings; if the attendance rate is high then the group will receive official recognition at the next AGM. Contact Jan Mathews on 01604 678101 for further details.

Sadly, despite the growing membership our Autumn conference – 'Medicolegal Issues' had to be cancelled due to lack of interest, at the time of writing only 14 members had applied. This is extremely disheartening for all concerned with the planning of this event.

Our next conference is planned for Saturday 9th March 2002 – 'Management of Incomplete spinal Injuries & AGM', the venue will be the Hilton Hotel, Bristol. See advertisement in this edition.

ACPIN will be hosting a programme at Congress 2002 and are currently contacting speakers. Watch out for further details and be sure to book early next year.

Following the overwhelming success of our residential conference in March 2001 a further residential conference has been booked for Friday 21st to Saturday 22nd March 2003 at the Hilton Hotel, Northampton. The title of the conference has yet to be decided, ideas welcomed. Keep your diary free!

Synapse is becoming a recognised journal providing a wealth of information for members. As always, I urge you as members, to contribute by writing articles, case reports, equipment and course reviews and reviewing articles.

The website *www.acpin.net* is updated twice a year and has regional programmes and contact names. The Executive Committee is listed and can be e-mailed directly. Your feedback on the website would be useful, is anything vital missing?

The publication of the Manual Handling Document provoked a huge response, a free copy being sent to each member. A re-run is now taking place and extra copies can be purchased from: Anthea Dendy or Ros Wade (see page 26 for details). For further information regarding the document see the *Letters* page.

This summer the Executive Committee formally discussed the provision of a small bursary and applications will be invited from members in the Spring 2002 edition of *Synapse*.

The education of physiotherapy students is currently under review following the publication of *Meeting the Challenge*. Alongside this there is a review of the curriculum by the CSP Curriculum Framework for Qualifying Programmes in Physiotherapy Working Party.

On 15th February 2001, Alan Milburn stated, that to reflect the NHS National Plan, a 59% increase in the number of physiotherapists was needed. To accommodate this, universities across the country are increasing their intake of students. There is therefore a high demand for the provision of clinical placements and many varying models are being advocated, ie 2:1, 1:2 and even 4:1, the role of the clinical educator being vital to provide the 'hands on' teaching required for neurology placements. Clinicians, university staff and students will have to work closely together to ensure that the high standard of clinical placements is maintained, without detriment to patient care. ACPIN would like to hear your opinions.

Following the AGM the National Committee has several new faces, Jo Tuckey and Alison Bailey-Hallam were elected as committee members. Dr Mary Cramp has become our Research Officer and Louise Dunthorne has been co-opted as an Executive Committee member. Gillian Emond (Northern), Nicky Sharman (Oxford) and Steve Cheslett (North Trent) have all resigned from the committee, we thank them for their commitment and wish them well.

To conclude I would like to thank you, our members, for supporting ACPIN and driving the committee forward to meet new challenges. As always, thanks must go to the dedicated National Committee for their enthusiasm and capacity for extra work!

The use of casting in the management of elbow contractures in a head injured patient: a case report

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Diana Jones BA MCSP, Research Fellow, Institute of Rehabilitation, Newcastle upon Tyne.

This case report was prepared whilst the first author, Leanne Allsopp, was on rotation at a regional neurological rehabilitation centre. It was written up with support from Diana Jones, following the Northern and Yorkshire Bobath Memorial Workshop, Writing Case Reports, July 2000.

The development of contractures in patients who survive severe brain injuries is a common and serious problem, for which serial casting may be considered as a management option. The majority of the literature on the effects of serial casting following traumatic brain injury relates to management of the lower limbs, particularly in relation to plantarflexion contractures (Booth et al 1983, Conine et al 1990, Moseley 1993). Research regarding serial casting of the upper limb is less prevalent, however several authors have indicated benefits in relation to improving both range of movement and function (King 1982, Hill 1994, Copley et al 1996). All identify the major aims of casting as being firstly, to reduce contractures, and secondly, to reduce the degree of spasticity in a muscle group.

The literature supports the potential contribution of mechanical changes in muscle following casting to the reduction of contractures. Williams and Goldspink (1978) found that immobilisation of muscles in a lengthened position during casting resulted in an increase in sacromere numbers and therefore an overall increase in muscle length. It has been suggested that mechanical changes in soft tissue could occur via collagenous connective tissue elongation under mild to moderate constant tension (Watkins 1999).

It has also been suggested that serial casing may decrease the activity of spastic muscles (Booth et al 1983, Lehmkuhl et al 1990, Moseley 1993), however definitive evidence as to the neurophysiological effects of casting on spasticity remains limited. This may be influenced by the lack of valid and reliable measurements of spasticity. This is highlighted in the study by Hill (1994) who measured changes in spasticity by the joint angle at which the stretch reflex was elicited. The validity of these clinical measurements is questionable because outcome could be related to changes in muscle length or soft tissue changes. In comparison Childers et al (1999), in a study using 10 patients, tested the use of inhibitory casting to reduce spasticity in the upper limb using electromyography. Findings from the use of surface electrodes indicated a decrease in vibratory inhibition index. This positively correlated with a decrease in motor neurone excitability in the spastic upper limb.

AIM OF CASE REPORT

The primary aim of this case report was to evaluate the effect of an 8 week serial casting programme on the degree of elbow contracture in a patient presenting with severe bilateral elbow contractures six months after traumatic brain injury.

THE PATIENT

LM, a 26 year old male, sustained severe traumatic brain injury following an assault with a baseball bat. On arrival in hospital, his Glasgow Coma Scale was 3 out of a possible 15. He was thought to have suffered a secondary respiratory arrest and a computerised tomography report showed diffuse anoxic brain damage. Following six months' of conservative treatment LM was admitted to a regional neurological rehabilitation centre for therapeutic input and recommendations.

On admission LM was fully dependent in all aspects of care and required hoisting for transfers. He demonstrated no purposeful active movement in any of his limbs but he had flickers of activity around his left shoulder and hand. He had moderate awareness of his joint position and was able to localise touch. LM's main problems were:

- spasticity affecting all four limbs with resultant contractures affecting elbows, hands and ankles
- marked associated reactions especially relating to anxiety
- loss of bilateral hip and knee flexion together with ankle contractures making seating difficult
- minimal head control and no trunk activity
- severe cognitive impairment with learning and memory severely affected
- difficulties with initiation and perseveration of thoughts
- behavioural problems including disinhibition and emotional outbursts which had a detrimental effect by increasing his spasticity.

INTERVENTIONS

Serial casting was employed to address the main treatment goal of improving range of movement in both elbows in order to:

- aid positioning and seating
- assist with personal care and hygiene
- access any underlying muscle activity for functional use
- reduce pain

During the casting programme LM received daily physiotherapy input. This included work on head, trunk and limb mobility and control in varying postural sets. Tilt table standing, positioning on the ward, specific inhibitory mobilisation and seating modification were also used as adjuncts to treatment.

Injections of botulinum toxin into biceps and brachioradialis were performed prior to admission and repeated after the casting programme was finished. It is not anticipated that this medical intervention had a significant influence on the gain in range of extension during the casting period. Injections were administered three months prior to casting commencement, and Richardson and Thompson (1999) report that the direct drug effect is likely to have worn off within three months.

PROCEDURES AND MEASUREMENT TOOLS

Casting application and timing

Two therapists applied bilateral elbow cylinder casts at the end of a range of passive extension that was easily obtained. This initial cast is referred to as a resting cast by Booth et al (1983). Seven further casts were applied over eight weeks with an emphasis on increasing range. Casts were changed every seven days, which was the time period recommended by both Conine et al (1990) and Moseley (1993). The procedure for cast application followed guidelines of the Association of Chartered Physiotherapists Interested in Neurology (1998). Skin was protected with a layer of stockinette and 2-3 layers of cotton padding with extra dalizfoam around the olecranon. Three or four layers of plaster of Paris were then applied. Prior to re-application the skin was checked and passive range of flexion performed to maintain overall mobility of the joints. On one occasion, at the end of week five, mild red marking was observed over both olecranon processes. The casts were left off over night, however back slabs were made and applied over regular intervals. The following day the red markings had cleared but elbow range of movement had deteriorated and the casts were re-applied.

Goniometry

Following each cast removal the degree of elbow flexion was measured using goniometry with LM in supine and following American Academy of Orthopaedic Surgeons' (1965) guidelines. Rothstein (1983) reported goniometry to be a highly reliable measurement tool for assessing elbow joint range of movement.

Tape measurement

Measurements were also taken of the resting position of the hands before and after the regime of casting and hand splinting. Using a tape measure with the wrist in a neutral position the distance from distal wrist skin crease to tip of middle finger was recorded.

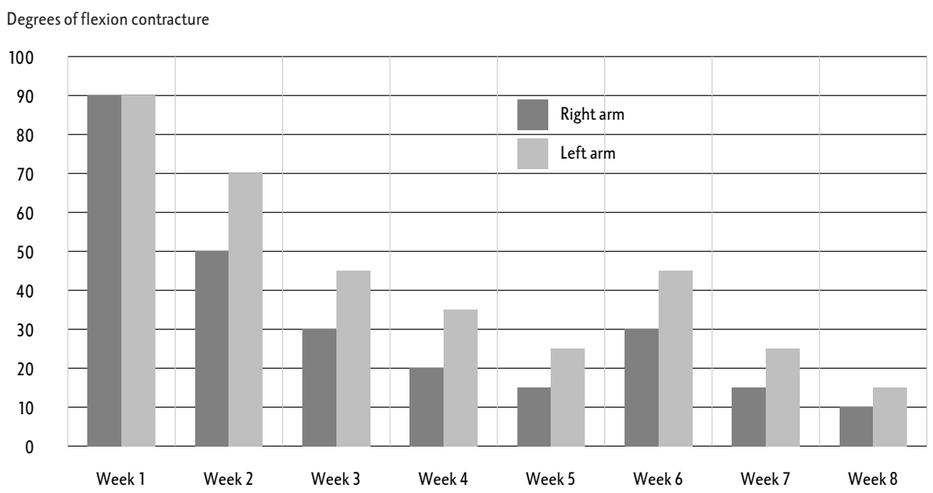
Photography

Use was made of photography to record changes pre- and post-treatment.

RESULTS

Figure 1 illustrates a progressive decrease in flexion contracture over the eight week casting period. The left elbow contracture reduced from 90 degrees of flexion to 15 degrees, giving an overall increase in range of 75 degrees. Similar improvement was exhibited on the right, with flexion contracture reducing by 80 degrees from 90 degrees to 10 degrees. Removal of the casts overnight at the end of week 5 due to skin redness led to an increase in flexion (see Figure 1, week 6).

Figure 1 ***Measurement of flexion contracture over eight week casting period***



The casting programme reduced the flexion contractures in both elbows to a minimal level of residual deficit. Increased elbow range of movement initially impacted on ease of care in tasks such as washing and dressing, and with positioning when seated. Figure 2 illustrates the range of passive extension gained post-casting on the right.

The *resting position of the hands* (distal wrist skin crease to tip of middle finger) was initially a distance of 4.7cm on the right and 3.8cm on the left. This increased to 7cm on the right and 8cm on the left.

Figure 2 ***Range of passive extension post-casting***

LM's *sitting posture* on admission is illustrated in Figure 3. Figure 4 illustrates the improvement in sitting posture during the casting programme.

Figure 3 ***Seating on admission***

Figure 4 ***Seating during casting programme***

POST-CASTING MANAGEMENT

Thermoplastic (Omega plus) elbow and hand splints were worn overnight and intermittently during the day to coincide with rest periods. Resting splints successfully maintained range of movement during the first month post-casting prior to discharge. Figure 5 illustrates the left anterior resting elbow and hand splint.

Training was carried out with other team members and the family in relation to the application and removal of splints. This included the necessity to check the skin and gently mobilise the elbows to prevent discomfort leading to a potential increase of spasticity.

Figure 5 ***Anterior resting hand and elbow splint***

Prior to discharge recommendations for appropriate seating were forwarded to the wheelchair service. A joint occupational therapy and physiotherapy visit to the returning hospital was carried out to ensure detailed hand-over of information. This included photographs as a visual aid to splint application and positioning, both in the bed and chair. Review at the regional neurological rehabilitation centre was arranged for 3 months post-discharge with a view to further botulinum toxin intervention.

DISCUSSION

Outcome for the patient

In the middle of the programme casts were left off overnight due to skin redness. This resulted in an increase in flexion contracture at both elbows (see Figure 1). Several factors could have contributed to this: LM's agitation was significantly greater overnight; he was experiencing some elbow joint pain particularly on the right; and he had been exposed to a greater amount of handling with the use of backslabs.

This case report supports the evidence provided by Hill (1994) and Lehmkuhl et al (1990) that serial casting is effective in the reduction of elbow contractures. Hill (1994) found all but 1 of 15 subjects demonstrated an increase in range of elbow extension, whilst Lehmkuhl et al (1990) found all of the 21 elbows cast showed increases in passive extension of 10 degrees or more.

The problematic issue of the effect of serial casting on spasticity is poorly addressed in the literature, however theoretically serial casting could have a neurophysiological effect by altering afferent input to the limbs (Watkins 1999). The Bobath concept attempts to facilitate normal movement by the use of afferent information (Bobath 1990). Serial casting provides more normal sensory input by breaking the spastic patterning and giving a more appropriate alignment. Spasticity measurement was not used as an outcome in this case report. It was felt however that casting and splinting impacted on flexor spasticity and that this was reflected in improvements recorded in the resting position of the hands.

Volitional control

Both cognitive and behavioural problems have an influence on the effectiveness of physiotherapy in improving the ability of traumatically brain injured patients to perform functional tasks (Tolfts and Stiller 1997). At the time of in-patient stay LM could perceive his arms were straighter but he was unable to access active movement due to problems of initiation. However the increase in available range enabled him in the longer term to begin to feed himself sandwiches, as reported by his mother.

In her study Hill (1993) reported that those patients with the greatest volitional movement responded best to the effects of inhibitory casting. These patients were more likely to achieve functional use in their upper limbs, making it easier to maintain gains in range of movement. For LM and many others who are dependent in their care needs, maintaining gains in elbow extension is dependent on correct and consistent application of splints. Lehmkuhl et al (1990) showed via patient follow-up averaging 183 days after casting that improvements could be sustained. 15 out of the 19 elbows cast had either maintained or increased range of elbow extension. As clinicians we rely on other professionals and carers to provide the on-going care of joints when patients are discharged from in-patient programmes. Sustaining the positive gains demonstrated in this case report become dependent on providing good advice and support whilst acknowledging variable local resources.

Timing of casting

LM's casting programme commenced six months after initial onset of injury. In many of the larger studies involving casting (Booth et al 1983; Conine et al 1990; Moseley 1993) intervention was within a three month period. In comparison Lehmkuhl et al (1990) included patients up to five years after initial injury. They found the joints most resistant to casting were those with the longest interval between onset and initiation of treatment. In this case report casting produced a reduction of contractures six months following head injury. However LM was experiencing pain towards the end of extension which could possibly be attributed to a joint problem rather than soft tissue contracture or spasticity. It could be hypothesised that increased length of time between injury and treatment increases the probability of joint changes in particular patients.

CONCLUSION

Effective early management of spasticity in this client group has the potential to affect:

- impairment by avoiding or reducing contractures
- level of dependency with regard to activities such as washing, dressing and eating
- participation levels in association with social interaction and relationships.

Serial casting in this case report proved an effective treatment in reducing elbow contractures. In the short term intervention also influenced positioning, seating and spatial awareness. It is anticipated that earlier specialist intervention could potentially have reduced the development of such severe secondary complications. In the longer term this patient continued to make functional improvements, underlining the importance of on-going management programmes.

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The incidence of shoulder pain in the spinal cord injured patients at the National Spinal Injuries Unit, Stoke Mandeville Hospital

There are estimates that between 30% and 100% of wheelchair users experience shoulder pain at some time (Pentland and Twomey 1994). Shoulder joint changes occur due to dependence on the upper limbs for transfers and wheelchair propulsion. These repetitive movements may cause pain as a result of the soft tissues of the rotator cuff becoming impinged in the narrowed subacromial space during humeral elevation with abduction and internal rotation (Burham1993 cited in Curtis et al 1999a). It has been suggested that the cause of shoulder pain in wheelchair users may be due to a muscle imbalance between the tightness in the anterior shoulder musculature combined with the weakness of the posterior shoulder musculature (Curtis et al 1999a). The presence of paralysis and spasticity in the upper limbs of tetraplegics are further predisposing factors to be considered (Curtis et al 1999b). Shoulder pain in wheelchair users has functional costs when wheelchair propulsion and transfers become inefficient as a result of the shoulder pain (Curtis et al 1999b).

OBJECTIVE

Shoulder pain appears to be a common experience for acute and readmission patients in the National Spinal Injuries Unit (NSIC) at Stoke Mandeville hospital. The objective of conducting this survey was to find out the extent of this problem by clarifying the prevalence and intensity of shoulder pain experienced by these patients.

METHOD

Measure

The Wheelchair User's Shoulder Pain Index (WUSPI) has been found to have concurrent validity with loss of shoulder range of motion and high levels of test-retest reliability. This supports the use of this tool to detect and monitor upper limb pain related to the functional activities of wheelchair users in a clinical setting (Curtis et al 1995b). The WUSPI is a 15 item self report questionnaire to assess the intensity of shoulder pain experienced in the preceding week during the performance of activities of daily living including transfers, dressing and wheelchair propulsion (Curtis et al 1995a). A visual analogue scale rating pain between 0 and 10 is used for each item. The aggregate score is then calculated and this could range between 0 (no pain) and 150 (most pain). The average performance-corrected score was calculated by dividing the aggregate score by the number of activities performed and then multiplying by 15. In this way the scale will more accurately reflect the actual intensity of shoulder pain experienced rather than assuming equivalent activity levels in all subjects. The questionnaire also consists of a section requiring a medical history which includes age, level of spinal cord injury, past and present history of shoulder pain and treatment modalities tried.

Sample

All the in-patients in the NSIC were requested, by their treating physiotherapist, to complete the medical history questionnaire and the WUSPI form on the day the survey was conducted.

RESULTS

There were 100 in-patients in the NSIC on the day of the survey and 68 questionnaires were returned. Patients who were ventilated, confused, or lacked shoulder sensation were excluded from the study.

The data collected is as follows:

- There were 77% male and 24% female respondents
- Age range: 9 to 86 years
- Average age: 44 years
- Range of time of wheelchair use: 0 to 39 years
- Average time of wheelchair use: 6 years
- 47% (30 patients) reported current shoulder pain
- 72% (49 patients) had experienced shoulder pain since using a wheelchair
- Treatment modalities tried: rest, ice, heat, exercise, medication
- Range of WUSPI scores: 0 (34 respondents) to 150 (1 respondent)
- Average performance-corrected WUSPI score: 17

DISCUSSION

This survey confirms that shoulder pain is a common experience (72%) for spinal cord injured patients in the NSIC. The average WUSPI score does not however indicate a high level of pain (17). It is possible that this score is low as 15 of the respondents were on bedrest (due to spinal instability or pressure sores) and would not have performed the functional activities asked about in the WUSPI in the week prior to the survey.

Physiotherapists in the NSIC are now aware of the incidence and prevalence of shoulder pain in their spinal cord injured patients and will be looking to implement a shoulder exercise programme to prevent shoulder pain in long-term wheelchair users (Curtis et al, 1999a). This study confirmed that the WUSPI is a simple tool to administer and interpret, and suggests that it could easily be used to assess, monitor and evaluate treatment programmes for shoulder pain in wheelchair users.

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Nonorganic origins? Alternative possible causes for hemiplegic symptoms and signs: a case study

Hemiplegia and unilateral loss of function is classically associated with an identifiable organic cause such as a bleed, infarction or tumour involving either the cerebral hemispheres, mid or hind brain. Cases are documented within the literature in which neurological syndromes including hemiplegia have been produced in patients with personality disorders and a concomitant previous history of feigning physical symptoms and signs (Bauer and Boegner 1996), (Biver, Delvenne, Hirsch, Lotstra 1992).

This report describes a case study in which inconsistencies were noted in a patient's presenting signs of unilateral functional loss. It was noted that during a review of his medical records, summary phrases including 'functional loss' and 'probable cerebrovascular accident' were used and a firm diagnosis of organic origin was not made during his admission.

The concepts of conversion disorder, malingering, factitious disorder and Munchausen's syndrome are defined in a bid to elucidate possible non-organic causes for such presentations. Notably however, the responsibility of diagnosis lies firmly within the field of psychiatry, and no attempt was made to label the patient's problems in this case.

The psychological concepts of 'locus of control', behaviourism and role theory are introduced and a means of managing the patient's problems in the light of these are described.

DEFINITIONS

The following definitions are taken from a psychological dictionary, psychology texts and journal articles generated by Medline search strategies.

- **Conversion Disorder** 'A psychopathological syndrome characterised by the "conversion" of psychic conflict into somatic form. The resulting functional disorder may appear superficially to have physical or physiological causes but may frequently follow no organic system. The symptoms manifested usually produce some secondary gain for the individual such as the avoidance of some noxious activity or garnering of support and concern from others' (Reber 1985, P157).
- **Malingering** 'The deliberate feigning of illness, disability or incompetence' (Reber 1985 p415.) This contrasts with 'conversion disorder' where the symptoms are not produced intentionally.
- **Factitious disorders** The most common of these is that in which the patient presents with plausible physical symptoms that are apparently under the individual's control (Reber 1985). Symptoms include those such as back pain, nausea, vomiting, dizziness, and amongst others, rashes. The patient's medical knowledge and imagination are the only limits (Reber 1985). Less commonly the individual produces various symptoms of psychological disorders seemingly under the voluntary control of the individual (Bauer & Boegner 1996).

  Here the condition is virtually always superimposed on a severe personality disorder although the displayed symptoms are not explained by that disorder. For example a patient complains of memory loss and hallucinations and has been secretly found to have been taking various drugs to produce these symptoms in a bid to feign a nonorganic mental disorder (Reber 1985).

  Malingering and having a factitious disorder are the same in that both involve individuals displaying symptoms and signs that are under voluntary control and have no organic basis. The difference lies in the origins of the behaviour. In the case of malingering, the person claims he or she is ill for a particular purpose; the diagnosis of a factitious disorder is reserved for those that feign illness for no other reason other than to play the sick role (Eisendrath 1996).
- **Munchausen's Syndrome** A specific variant of factitious disorder with physical symptoms in which the patient has had multiple admissions to hospital and often has had surgical procedures performed (Mayer 1978, (Reber 1985). Other characteristics typically include aggressive behaviour, self discharge from hospital and wandering off the ward and throughout the hospital during their stay (Mayer 1978).

All of the above can be responsible for producing motor and sensory symptoms that would otherwise be consistent with lesions of the central nervous system including balance and gait disturbances, incoordination and limb paralysis, sensory and speech disturbances for example.

Separating out the respective contributions of genuine neurological impairment from the factitious and hysterical is problematic even for psychiatrists and psychologists. The following case study illustrates that once the relative contribution of genuine neurological impairment has been established by completing the neurological assessment as is customary in neurophysiotherapy, psychologically based strategies are available to assist with the overall management of the patient.

MR H

Mr H, an international coach driver, presented to out patient physiotherapy with left sided incoordination and weakness. Medical investigations during his admission as an in-patient consisted of a computerised tomography (CT) scan and lumbar puncture, both of which were reported as unremarkable. A summary of his problems are listed as follows:

- Dysfunction within the left upper and lower limb manifested by unilateral incoordination during functional activities of gait and dressing.
- A reliable reduction in sensation to light touch confined to his 'hemiplegic' side.
- A marked stammer for which he was receiving outpatient speech and language therapy.

Socially, this gentleman was a divorcee and currently engaged to a new partner. They had a child of thirteen months old who was currently receiving physiotherapy treatment for cerebral palsy. Mr H remained off work following his 'stroke' and returned regularly to perform voluntary tasks such as coach cleaning until such time as he could resume his driver duties. He reported having no current hobbies.

Subjectively he presented as a cheerful man who engaged freely in conversation involving a variety of topics such as work, previous hobbies and his forthcoming marriage. Little difficulty was encountered in establishing a rapport.

Objectively, he displayed a marked asymmetry in his movement ability often using his sound side to assist his affected side, with regular vocal and physical expressions of dissatisfaction with the upper limb in particular such as 'tutting', 'huffing' or grabbing his affected hand roughly to reposition it.

On examination, his tone appeared to lie within normal limits. There were no signs of hyper-reflexia, ataxia, associated reactions during effort or heightened emotion, clonus, abnormal babinski or spatial neglect. Sensation was difficult to assess reliably although he reported sensory loss involving the entirety of his affected side. His movement disturbances appeared to worsen when attention was directed to his affected upper limb in particular. Speech disruption also deteriorated further following references to such during treatment sessions. Selective activity in his upper limb was notably poor during discrete tasks involving fine and gross motor control. In contrast when assessing automatic movement, his balance and saving reactions were disproportionately sharp with consistent demonstrations of undelayed, smooth, accurate movement in both upper and lower limb which was unhampered by any evidence of tonal anomalies.

Good tone and proximal stability were demonstrated with Mr H positioned prone over a gym ball. Furthermore, fatigue was not a significant factor as he could maintain this position and perform a variety of exercises in which the left upper limb was loaded with progressively increasing amounts of body weight. Good muscle definition had been preserved and there were no marked differences in appearance or muscle bulk diameter.

His gait pattern was markedly asymmetrical with notably poor selective hip and knee flexor activity to effect swing through. There were no joint range restrictions and fatigability fell within normal limits around the hip during stance phase; there was no evidence of a trendelenberg sign.

In summary Mr H presents with symptoms and signs which are not consistent with a disease process involving an organic system. A level of psychological contribution for at least part of his presenting difficulties would not be an unreasonable premise.

TREATMENT RATIONALE

The origins of Mr H's movement problems appear inconsistent with those stemming from a neurological impairment. The use of specific mobilisation techniques aimed at normalising tone and facilitating normal movement were felt likely to play less of a role in re-establishing this patient's function, given that his nervous system was capable of demonstrating perfect balance and reactions during specific tasks. An attempt to provisionally diagnose a particular psychological disorder or problem would not be within the remit of physiotherapy although recognition of its potential influence on rehabilitation assisted the overall management.

Confronting the patient with statements declaring the lack of organic basis for their complaint has been shown to be beneficial only in selected cases of factitious disorders where communication links between the patient and the psychiatrist are good; this in turn requires a particular degree of skill (van der Feltz-Comelis 2000) The same author states that studies examining the role of confrontation in dealing with factitious disorder are rare and quote a case of poor therapeutic outcome when confrontation was blunt. Furthermore, in a separate article by Sutherland and Rodin (1990), factitious disorder has been associated with mortality. Given the complexity of a conversion disorder which requires appropriate specialist assistance to resolve the underlying psychological conflict, and the potentially disastrous consequences of

mistimed and poorly communicated confrontation in the case of factitious disorder, a non-confrontational manner was adopted in this case.

PSYCHOLOGICAL THEORIES OF LOCUS OF CONTROL, ROLE THEORY AND BEHAVIOURISM

- **Locus of control** A social psychological term used to refer to the perceived source of control over one's behaviour. Measurement is along a dimension ranging from high internal to high external. A high internal person takes responsibility for his/her actions and believes their destiny is directly under their control. A high external believes that control resides elsewhere and that external forces are responsible for their success and failure. (Reber 1985, p4O7, Baron & Byrne 1989).
- **Role theory** A social psychological term used to describe any pattern of behaviours involving certain rights, obligations and duties which an individual is expected, trained and encouraged to perform in a given social context. There is no reality to the role - the behaviours deemed appropriate for a given role are appropriate because the individual perceives them to be so (Reber 1985, p650).
- **Behaviourism** A branch of psychology which argues that the only appropriate subject matter for investigation is observable measurable behaviour (Reber 1985, Skinner 1969).

'Behaviour derives from contingencies of reinforcements and particular responses made in the presence of stimulus situations... all behavioural disorders are assumed to result from 'unfortunate' contingencies in the life of the individual leading to the acquisition of maladaptive behaviours' (Reber 1985, pp96-89).

MANAGEMENT PLAN

The following summarises the format of Mr H's treatment plan in which a successful attempt was made to re-establish symmetry and function using the above approaches along with an active exercise programme in order that Mr H had the opportunity to generate a causal link between his own efforts to 'get better' and progressive physical exercise.

- From role theory: successful roles (past or present) were analysed and salient, pleasurable features were incorporated into treatment practice. Mr H was previously in the army which he described as 'the best time of his life'. The features of physical fitness and strength were explored and a programme of jogging working up to running on the treadmill was included in the plan. Objective markers such time, distance and speed were used as feedback measures.
- From behaviour theory: undesirable behaviours such as the 'tutting' and 'huffing' were ignored, and praise, eye contact and detailed description of the appropriate activity witnessed in the upper and lower limb was given.
- Attempts to problem solve any psychological problems were avoided from an early stage in rehabilitation, as it was found that once a negative mind set had become established, for every practical solution offered, further problems were generated.
- Locus of control: the aim was to increase Mr H's internal locus of control. Encouraging Mr H to take charge of his behaviour and provide appropriate markers of success, eg jogging without a 'limp', 2 miles, twice, between formal physiotherapy sessions. Praise directed by Mr H at the therapist during moments of success was actively discouraged since this was consistent with promoting external control. The therapists role in his successful attempts to return to normal function was thus de-emphasised and the patient's own endeavours as being responsible for their success was promoted.

CONCLUSIONS

At discharge Mr H was able to run for five minutes on the treadmill with a symmetrical gait pattern (including symmetrical arm swing); walk with a symmetrical gait; catch and bounce a ball with his affected side; and reported returning to jogging several times per week.

This case demonstrates a successful approach to management of 'hemiplegia' in which the origins are at least in part due to problems of a psychological nature. Success was achieved through a non confrontational approach, reestablishing greater internal locus of control and reinforcing non sick role behaviours.

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National Service Framework for older people: a summary

National Service Frameworks (NSFs) are a significant element of the standard setting machinery referred to in *A First Class Service: Quality in the NHS* (DoH 1998). NSFs will ultimately determine physiotherapy service configuration in England and Wales around a particular client group/care setting, and will set standards of service delivery for implementation at a local level. Scotland is developing a separate model of managed clinical networks, and consultation underway in Northern Ireland (Best Practice, Best Care) includes reference to a model of service development frameworks.

The NSFs are a performance management tool. The standards and goals set by the NSF have milestones for implementation; these will be used to assess whether the service is moving towards the changes required by the NSF. The service models described aim to enable services to reflect the need of their local population whilst ensuring that services across England and Wales meet an agreed standard. Performance will be monitored by the Commission for Health Improvement (CHI), the NHS Performance Assessment Framework, and the programme of patient and service user surveys.

NSFs have been published for Coronary Heart Disease (DoH 2000) and Mental Health (DoH 1999). An NSF for diabetes is due for publication later this year. Three further NSFs have been announced: children's services, renal services and long-term conditions. Further detail of the NSF programme (and opportunities for comment) is available at www.doh.gov.uk/nsf/nsfhome.htm

NSF FOR OLDER PEOPLE

The long-awaited NSF for older people (England) was published on 27 March 2001. Its content reflects many of the principles underpinning the NHS Plan including partnerships, person-centred care, performance and prevention. The models of service delivery recognise the key role played by therapists working with older people; implementation of this NSF will therefore offer many opportunities and some challenges for the physiotherapy profession.

Organisations in England should be developing strategies to ensure that they can meet the targets set by the NSF. Members working in England may therefore be actively involved in its implementation, either as clinical champions or as members of local or regional implementation teams. The Welsh Assembly will be looking to the content of this NSF and will be developing its own strategy for older people's services in Wales.

This paper aims to highlight issues and actions arising from the implementation of each of the eight NSF standards.

STANDARD 1

NHS services will be provided, regardless of age, on the basis of clinical need alone. Social care services will not use age in their eligibility criteria or policies, to restrict access to available services

The standard clearly states that denying access to services on the basis of age alone is not acceptable. Decisions about treatment and health care should be made on the basis of health needs and ability to benefit rather than a patient's age, and organisations will be expected to scrutinise their policies with reference to *ageism*.

National guidance should be published shortly to assist with the audits of age-related policies to establish whether they discriminate on the basis of age.

Local champions will be designated within each organisation to drive the change, including a clinical or practice champion who will lead professional development.

Actions

- October 2001: audits of all age-related policies to be completed, with the outcomes to be reported in annual reports;
- April 2002: from this date NHS Service and Financial Frameworks (SAFFs) and Joint Investment Plans (JIPs) to include initial action to address any age discrimination identified.

STANDARD 2

NHS and social care services treat older people as individuals and enable them to make choices about their own care. This is achieved through the single assessment process, integrated commissioning arrangements and integrated provision of services, including community equipment and continence services.

This standard refers specifically to *patient-centred care*. These principles will not be new to physiotherapists as they are enshrined in Rule 2 of the CSP rules of professional conduct, and reflected in the CSP core standards.

Implementation of this standard will drive a *whole systems approach* that recognises the contribution that all partners make to the delivery of high quality care. This approach will be underpinned by integrated commissioning and delivery via the use of the Health Act 1999 flexibilities and other systems for joint planning eg JIPs.

The introduction of a *single assessment process* aims to standardise assessment and ensure that older people's needs are assessed in the round. The assessment will explore a broad range of issues including the user's perspective, clinical background, disease prevention, personal care and physical well-being, senses, mental health, relationships, safety, immediate environment and resources, and will highlight where referral for specialist assessment is needed. Full multidisciplinary assessment (by the most appropriate team eg stroke, falls) will be instigated where admission to long term care is a possibility.

The standard recognises that the single assessment process will raise issues of skills in assessment practice and multidisciplinary working, and of processes for *information sharing*. Guidance on the implementation of the single assessment process should be available shortly.

The standard recognises the complex needs of vulnerable older people and introduces the concept of dedicated *care managers* to oversee their care. These care managers should be the most appropriate professional, given the individual older person's needs.

A single integrated *community equipment service* will be in place by 2004: specific guidance on modernising community equipment services was published on 27 March [HSC2001(08].

Actions

- June 2001: local arrangements for implementing the NSF are established;
- April 2002: the single assessment process is introduced.

STANDARD 3

Older people will have access to a new range of intermediate care services at home or in designated care settings, to promote their independence by providing enhanced services from the NHS and councils to prevent unnecessary hospital admission and effective rehabilitation services to enable early discharge from hospital and to prevent premature or unnecessary admission to long-term residential care.

The standard builds on the guidance issued in January 2001 [HSC 2001(01)]. Intermediate care will be an option in the following scenarios:

- responding to or averting a crisis;
- active rehabilitation following an acute hospital stay;
- where long term care is being considered.

Intermediate care will act as the bridge between hospital and home and should:

- be provided on the basis of a comprehensive assessment, resulting in a structured individual care plan that involves active treatment and rehabilitation;
- involve short-term interventions, typically lasting no longer than six weeks and frequently as little as one to two weeks or less;
- involve cross-professional working, within the framework of the single assessment process, a single professional record and shared protocols;
- be integrated within a whole system of care including primary and secondary health care, health and social care, the statutory and independent sectors;
- be provided by a core team of professionals (including physiotherapists) with support from care assistants, and will always include a programme of *active rehabilitation*.

Overall planning of intermediate care should be based on health authority boundaries, but service delivery will need to be organised on a locality basis agreed by PCTs, health authorities and councils. The service will be co-ordinated by a *jointly appointed manager* who will also be responsible for planning locally, and may also hold a pooled budget. A *clinical team leader* will be accountable for professional development and clinical governance issues. Intermediate care services will be commissioned jointly by the NHS and councils using the Health Act 1999 flexibilities.

Actions

- July 2001: local health and social care systems to have designated a jointly appointed intermediate care co-ordinator in at least each health authority area; to have agreed the framework for patient/user and carer involvement; and to have completed the baseline mapping exercise;
- January 2002: local health and social care systems to have agreed the JIP for 2002/3.

STANDARD 4

Older people's care in hospital is delivered through appropriate specialist care and by hospital staff who have the right set of skills to meet their needs

The standard recognises that the care of older people in hospital is complex and sets out action to improve the current situation. Specific reference is made to

ensuring that skills in caring for older people (including knowledge of assessment, discharge planning, needs of carers and onward referral) should form a part of the core competencies of all staff.

Resources (£120 million over three years) have been allocated to modernise Nightingale wards: specific reference is made to *space for therapy/ rehabilitation* as part of this modernisation.

Specialist multidisciplinary teams will be developed in all general hospitals: physiotherapists are listed as core members of such teams. These teams should be based around a specialist unit, which will act as a resource to develop skills within the workforce as well as disseminating best multidisciplinary practice. New opportunities will be available to develop *clinical specialists*: the NSF highlights their role in setting standards and developing protocols and guidelines for the care of older people in the general hospital; in clinical governance and in ongoing training programmes for other staff.

Implementation of this standard will therefore change the face of the healthcare workforce in terms of the profile of the specialism, the competencies of the workforce and the environment in which hospital care is delivered.

Actions

- April 2002: all general hospitals which care for older people to have identified an old age specialist multidisciplinary team with agreed interfaces through the hospital for the care of older people;
- April 2003: all general hospitals which care for older people to have completed a skills profile of their staff in relation to the care of older people and have in place education and training programmes to address any gaps identified.

STANDARD 5

The NHS will take action to prevent strokes, working in partnership with other agencies where appropriate. People who are thought to have had a stroke have access to diagnostic services, are treated appropriately by a specialist stroke service, and subsequently, with their carers, participate in a multidisciplinary programme of secondary prevention and rehabilitation.

This standard builds on the proposals outlined in Saving Lives: Our Healthier Nation (1998), the Coronary Disease NSF (1999), and reflects the content of the National Clinical Guidelines for Stroke (1999). Specific reference is made to *increasing physical activity* as a means of reducing the risk of stroke (readers may wish to refer to the CHD NSF (DoH - 1999) and Exercise Referral Systems: A National Quality Assurance Framework (DoH 05.05.01) for further detailed information about exercise referral schemes).

Patients who may have had a stroke should be treated by *specialist stroke teams* (the physiotherapist is a named member of this team) within designated stroke units. Part of the package will include a multidisciplinary assessment and early rehabilitation (within 24hours). The standard states that rehabilitation should continue until it is clear that maximum recovery has been achieved, and recognises the need for *ongoing long-term support*. Following a stroke, any patient reporting a significant disability at six months should be re-assessed and offered further targeted rehabilitation if this can help them to recover further function. Stroke teams will be involved in all aspects of stroke services, should contribute to the development of strategies to prevent strokes and will adopt a whole systems approach to ensure that the stroke service is well integrated.

The model proposed by this standard is relatively prescriptive eg access to rehabilitation within 24 hours of stroke, weekly meetings of the stroke team. The standard also increases the size of the population accessing healthcare eg by including preventative work for those at risk from stroke as well as recognising the long-term needs of people following a stroke. It is likely that the current physiotherapy workforce will need to grow in order to implement this standard.

Actions

- April 2002: every general hospital which cares for people with stroke will have plans to introduce a specialised stroke service as described in the stroke service model from 2004;
- April 2003: every hospital which cares for older people with stroke will have established clinical audit systems to ensure delivery of the RCP clinical guidelines for stroke care.

STANDARD 6.

The NHS working in partnership with councils, takes action to prevent falls and reduce resultant fractures or other injuries in their populations of older people. Older people who have fallen receive effective treatment and rehabilitation and, with their carers, receive advice on prevention, through a specialised falls service.

This standard details three interventions to reduce the number of falls and their impact:

- prevention including the prevention and treatment of osteoporosis;
- improving the diagnosis, care and treatment of those who have fallen;
- rehabilitation and long-term support.

These overarching objectives will be addressed in a number of ways including:

- encouraging appropriate weight-bearing and strength *enhancing physical activity*;
- development of an interagency specialist falls service: physiotherapists are listed as core members of this service.

Specialist assessment (building on the single assessment process) should be carried out by the falls service in collaboration with primary and social care professionals. This assessment will highlight any risk factors and make recommendations for rehabilitation (physiotherapy is named) or individually tailored exercise programmes administered by a qualified trained professional for example. (Readers may wish to refer to Exercise Referral Systems: A National Quality Assurance Framework (DoH 05.05.01) for further detailed information about exercise referral schemes).

Following surgery, older people with hip fracture repairs should be mobilised within 48 hours where appropriate: this may have implications for physiotherapy working patterns.

The rehabilitation strategies outlined reflect the principles outlined in the guideline for the collaborative rehabilitative management of elderly people who have fallen.

Actions

- April 2003: local healthcare providers should have audited their procedures and put in place risk management procedures to reduce the risk of older people falling;
- April 2004: the HIMP, and other relevant local plans developed with local authority and independent sector partners, should include the development of an integrated falls service.

STANDARD 7

Older people who have mental health problems have access to integrated mental health services, provided by the NHS and councils to ensure effective diagnosis, treatment and support, for them and for their carers.

The standard outlines the following key interventions:

- promoting good mental health;
- early recognition and management of mental health problems;
- access to specialist care.

Mental health services for older people should be community-orientated and provide seamless packages of care and support for older people and their carers. The hallmark of good mental health services is that they are comprehensive, multidisciplinary, accessible, responsive, individualised, accountable and systematic.

Specific reference is made to the management of *depression* (this includes risk assessment, antidepressant medicines and psychological therapies: no specific reference is made to the added value of exercise) and *dementia*.

Physiotherapy is not a named member of the core specialist mental health service for older people, but the standard states that the specialist service should have agreed working and referral arrangements with physiotherapists.

Actions

- April 2004: HIMPs and other relevant local health plans developed with local authority and independent sector partners, should have included the development of an integrated mental health service for older people, including mental health promotion; health and social care systems should have agreed protocols in place for the care and management of older people with mental health problems.

STANDARD 8

The health and well-being of older people is promoted through a co-ordinated programme of action led by the NHS with support from councils.

The standard aims to extend the healthy life expectancy of older people (one target outlined in Saving Lives: Our Healthier Nation). Cross-reference is made to the relevant sections of the Mental Health and Coronary Heart Disease NSFs and the National Cancer Plan.

The added value of physical activity as a means of promoting well-being in old age is recognised; specific multi-sectoral health promotion programmes will be developed for *exercise services* targeted at the older population. The DoH and the HDA will develop national guidance on how to operationalise, monitor and evaluate health promotion for older people in local settings.

Actions

- April 2003 HIMPs, SaFFs and other relevant local plans should have included a programme to promote healthy ageing and to prevent disease in older people. They should reflect complementary programmes to prevent cancer and CHD and to promote mental health as well as the continuation of flu immunisation.

LOCAL DELIVERY

The local implementation of the NSF reflects a number of the themes underpinning the NHS Plan:

- involvement of users and their carers

- partnerships
- leadership
- inclusive planning

The NHS and Social Care regional offices in collaboration with the Modernisation Agency will work closely with local health and social care partnerships to support implementation and to monitor progress.

PERFORMANCE ASSESSMENT

The NHS Performance Assessment Framework (PAF) will be used to assess performance in the following areas:

- health improvement;
- fair access;
- effective delivery of appropriate care;
- efficiency;
- patient/carer experience; and
- health outcomes of NHS care.

Comparable frameworks (Best Value) have been developed to assess the performance of personal social services (PSS). The NHS and Personal Social Services PAF will be used to assess local performance against the JIP and SAFFs. Implementation of the NSF programme will also be monitored by the Commission for Health Improvement (CHI).

The Taskforce for Older People (a subgroup of the National Modernisation Board) will be tracking delivery of the NSF for older people and supporting local planning and implementation through advice and feedback.

FURTHER INFORMATION

- Copies of the NSF are available to download from the DoH website at www.doh.gov.uk/nsf/older people.htm
- Also obtainable from DoH Publications, PO Box 777, London SE1 6XH, fax 01623 724524 or email doh@prologistics.co.uk
- A CSP policy briefing paper on the NSF for Older People is now available. The paper provides an overview of the content of the NSF, considers the impact of each of the NSF standards on the profession and makes recommendations for action.
- The CSP has also published policy briefing papers on the Coronary Heart Disease NSF, Exercise Referral Systems: A National Quality Assurance Framework, and the National Cancer Plan. Contact Gwyn Owen (020 7306 6615 or oweng@csphysio.org.uk) for your copies of these papers.
- The CSP Research and Clinical Effectiveness Unit have commissioned a series of evidence-based reports to support members involved in the implementation of the NSF for Older People. The reports will cover include falls, palliative care, rheumatology and stroke, and should be available shortly. It is also hoped to organise a series of regionally based conferences to inform members of the content of the NSF and to discuss its impact on physiotherapy services.

If you are already involved in work around the implementation of the older person's NSF, either locally or regionally, please contact Gwyn Owen. This will enable the CSP to start mapping the impact of implementation on the physiotherapy profession and the delivery of services, as well as being able to offer support to members if necessary.

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2001 Vol 81, no 8

• Janice J Eng et al, *Use of prolonged standing for individuals with spinal cord injury.*

• Margaret L Schenkman et al, *Spinal movement and performance of a standing reach task in participants with and without Parkinson's Disease.*

• Stephen J Page et al, *Mental practice combined with physical practice for upper limb motor deficit in sub acute stroke.*

2001 Vol 81, no 4

• *Balance and mobility following stroke. Effects of physical therapy interventions with and without biofeedback/force plate training.*

• Colleen Peterson, *Exercise in 94 degrees F water for a patient with MS.*

2001 Vol 81, no 3

• Sheila Lennon, *Gait re-education based on the Bobath Concept in two patients with hemiplegia following stroke.*

2001 Vol 81, no 2

• *Reliability of measurements obtained with the timed ' Up & Go' test in people with Parkinsons Disease.*

■ SOCIOLOGY OF HEALTH AND ILLNESS

1999 Vol 21, no 5 September

• Susan M. Cox , William McKellin, *'There's this thing in our family': predictive testing and the construction of risk for Huntington Disease.*

2000 Vol 22, no 2 March

• Davina Allen, *Negotiating the role of expert carers on an adult hospital ward.*

2001 Vol 23, no1, January

• Elizabeth Hart, *System induced setbacks in stroke recovery.*

■ SOCIAL SCIENCE & MEDICINE

2000 Vol 51, No 12 December

• Masahiro Nochi, *Reconstructing self-narratives in coping with traumatic brain injury* pp1795-1804.

2000 Vol 51, Issue 10 November

• Pandora Pound and Shah Ebrahim, *Rhetoric and reality in stroke patient care* pp1437-1446.

ACPIN news

MINUTES OF ACPIN ANNUAL GENERAL MEETING

Saturday 24th March 2001
The Hilton Hotel, Northampton
Chairperson: Linzie Bassett

Linzie Bassett opened the meeting at 12 noon.

1. APOLOGIES

Pam Evans
SallyAnn Belward
Sally Bowes
Steve Cheslett
Louise Dunthorne
Siobhoan McAuley
Louise Gilbert
Jackie Newitt
Gillian Emond
Jennifer Young
Naomi Jones.

2. MINUTES OF AGM 2000

The minutes were approved and signed as a true record of the meeting. Proposed by Rowena Wright and seconded by Kate Duffield.

3. PRESIDENTIAL ADDRESS

Sue Edwards

Sue began by thanking everyone and announcing it would be her last presidential address and that she wouldn't be getting on her famous 'soapbox'! She proceeded to say that her actual address would be in *Synapse* and thanked the Wade partnership for such an excellent journal. Sue extended her gratitude to the committee and to the whole of ACPIN for all their strength and commitment, the reward of which could be seen in the ever-growing membership.

4. CHAIRPERSON'S ADDRESS

Linzie Bassett

Traditionally, the Chairpersons report is intended as a resume of the year's activities within the organisation and outlines plans for the next year. As always there are too many to mention in detail, so you will find reports on the display board from each sub-group leader identifying activities they may have undertaken on behalf of us all.

This report also allows me to offer personal thanks to the hard-working members of the National Committee and to thank them on your behalf.

This year sees the resignation of two longstanding honorary officers, Tricia Moffitt our Treasurer and Pam Evans our Research Officer. We thank them for all the time and energy they have given to the committee and wish them luck in future ventures.

We also say good bye and thank you to two experienced representatives, Liz Britton, South West and Margaret Lewis, Northern Ireland.

Our President, Sue Edwards, has kindly agreed to remain President for another year. She provides such a valuable asset to the committee, particularly with her controversial editorials!

The first task this year for the Executive Committee was to review the current business plan. Following slight adjustments we decided that the main aim is to 'encourage, promote and facilitate the exchange of ideas between ACPIN members within clinical and educational areas'.

We encourage evidence based practice and CPD, and urge members to participate in research activities and the dissemination of information.

Membership continues to flourish through the guidance of the National Committee but the driving force being you, its members. At the end of 2000 we had 1,250 members, and to date 700 memberships have been received, this figure includes an encouraging 174 new members; the largest membership in the history of ACPIN. This makes ACPIN one of the largest clinical interest groups and can act as a powerful voice.

Synapse has become increasingly professional in its presentation, as it continues to develop. *Synapse* provides a vital link in our communication network and relies on members to submit material, as mentioned earlier our main aim is the exchange of ideas and information. I would like to thank Ros Wade, our *Synapse* Co-ordinator, Karen Rowland, Louise Gilbert and Kevin Wade our graphic designer for their tireless work.

On reviewing past reports I was astonished at the number of projects that ACPIN as a voluntary organisation has successfully completed. For the year 2000 we had two major achievements: Firstly, the setting up of the ACPIN website www.acpin.net – thanks to Karen Rowland and Louise Gatehouse for co-ordinating this fantastic resource, and, secondly, the publication of the Manual Handling document. We hope these guidelines will assist members with the problems encountered with manual and therapeutic handling. This enormous task was undertaken by Anthea Dendy, who will tackle any manual handling issue, her team included Monica Busse, Vicky Sparkes and Dot Tussler, a huge thank you for completing such a much needed document. It will be free to all members and accompanied the spring issue of *Synapse*.

As always ACPIN has had an action packed calendar of events.

In November 1999 ACPIN was approached directly by Athena Neurosciences to co-host a series of workshops on MS and Spasticity Management in the community. In spring last year three workshops were held in Merseyside, Scotland and East Anglia.

The feedback has been positive and we are looking at continuing the format this year in Wessex and London.

The Bobath Memorial Study Days were held in the summer, unfortunately the take up of places was poor and the production of single case studies has been limited. However, delegates who did attend found the day very informative.

In October ACPIN combined forces with the CSP to host the 2nd annual congress entitled 'Expanding Horizons', our title being 'Neurophysiotherapy: the CNS and beyond'. We were in stiff competition this year with AGILE and therefore we saw a slight reduction in delegates compared to last year.

Generally, feedback was positive but certainly highlighted the need for evidence base practice and further research, and to quote Dave Fitzgerald 'the research needs to be useful'. We hope that this conference reflects the comments made.

We have submitted a programme for Congress 2002 and have provisionally included several international speakers. ACPIN will not be hosting a programme for 2001, as it was understood that each CIG could only host two consecutive programmes.

Our Autumn Conference will have the theme 'Medico-legal Issues' and will take place on Saturday 10th November at Leeds Metropolitan University.

A neurology effectiveness bulletin is currently being produced by Martyn Summer on behalf of the CSP, the committee would like to make you aware that we reviewed the document several times, as we were unhappy with the content and the implications if it was published. I believe the last draft was more acceptable.

As a National committee, we feel that ACPIN should provide a small bursary on an annual basis to its membership in order to support research and project work.

However, we acknowledge the fact that we could not provide a full funding to complete a research project. A proposal is currently being written.

Good news this year regarding motions for Annual Representatives Conference, two have been accepted, the first being seven-day working and the second, on equal access to rehabilitation. Thank you to Nicola Hancock and her team for co-ordinating this.

Following discussion recently, it was felt by some committee members that ACPIN was slightly behind the times! It was decided that our logo and stationary required a make-over! ACPIN's graphic designer has come to the rescue, designing a new image for ACPIN. We would like you to view the samples here today and vote for the best design.

On a serious note, the Committee are proposing to offer a small honorarium, between £200-£500, to each honorary officer in recognition of the work undertaken on behalf of ACPIN. A recent audit of time spent on ACPIN related activities revealed that each officer was spending on average, between 8-10 hours per month. At normal NHS rates this equates to approx. £120 per month, or £1,400 annually. The committee would like to invite you as members to vote on this proposal, which I think you will agree offers value for money. Voting slips are enclosed in your delegate packs.

So thank you all for listening. I hope this has clarified some of the work ACPIN has carried out on your behalf.

Finally I would like to thank our members for making ACPIN such a dynamic association, one that you should be proud of.

5. TREASURER'S REPORT 2000/2001

Patricia Moffitt

Another 'trusty Treasurer's report' in a style that Trish has become famous for! Unfortunately this is to be her last as she steps down from this post now.

Brief overview

Total incomings just under £37,000 but this year there has been an emphasis on trying to spend some of the reserve – we have spent a huge £44,500! Before you think I have been reckless with your money, I must point out that the executive committee did make the decision to spend some of the reserves, which at the end of the financial year for 1999 was approximately £28,000. The balance at the end of this year is approximately £20,500.

Summary of regional accounts

Have recommended to regions to have a balance of approx. £1,500 – £2,000 at the end of the financial year.

Northern Ireland	2,095
Scotland	5,860
Merseyside	1,262
Wessex	1,863
Northern	2,199
East Anglia	1,834
North Trent	2,364
Greater London	2,587
South Trent	2,152
Sussex	1,207
Manchester	1,309
Oxford	1,452
Yorkshire	1,800
South West	1,207
West Midlands	3,272
Kent	858
Total	**£33,321**

Trisha then formally thanked all the regional treasurers for all their hard work over the last year.

Accountants: Langer & Co., 8-10 Gately Rd, Cheadle. A unanimous vote was taken to retain the accountants.

6. NOMINATIONS

Honorary research officer
Mary Cramp (Jacqui Twelftree, Louise Gilbert)
Committee member
Alison Baily Hallam (Heather Thornton, Emma Hodge)
Committee member
Jo Tuckey (Anne McDonnell, Lynda Wheeler)

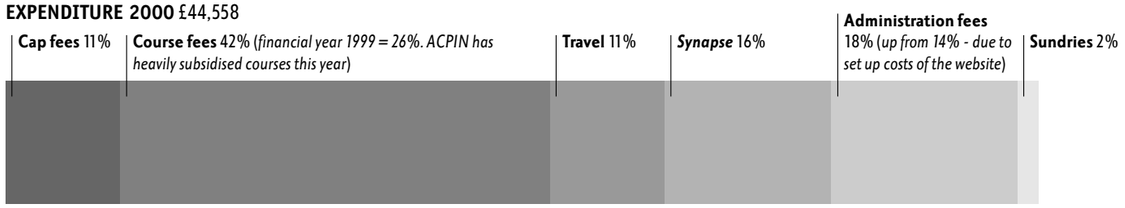
7. AOB

Rowena Wright thanked Linzie Bassett, the chairperson, for her leadership and support to the group over the past few years in which we have witnessed ACPIN go from strength to strength.

SUMMARY OF ACCOUNTS

INCOME 2000 £36,883

EXPENDITURE 2000 £44,558



THE ROLE OF THE CSP PUBLIC AFFAIRS MANAGER/ PARLIAMENTARY FEEDBACK

Alice Holmes

As the CSP Public affairs manager I am tasked with developing the Society's public affairs profile working with the UK Parliament, the Greater London Assembly, influential networks and the media. I also work with the national policy officers in developing a co-ordinated UK lobbying strategy.

As part of my job I keep a close eye on Parliament and the Department of Health. We need to know what's going on so that our members can make the most of the opportunities to influence local and national policymaking.

As part of my monitoring role I produce a weekly public affairs bulletin and if there are any specific questions which you would like me to get an MP to table for you (if there is some information you would like from government) please let me know and I will try to arrange it when the House of Commons returns in October.

I would be very interested in working more closely with ACPIN. I have good relations with the Stroke Association Parliamentary officer and also the All Party Parliamentary Group on Ageing and Older People and we could perhaps arrange to do some parliamentary work with them around the work of neurophysiotherapists.

In the meantime please find attached some relevant information from the *Public Affairs Bulletin* for the week ending 11 May 2001.

Health & Social Care Bill has completed all its stages in Parliament

The government plans to press ahead with its reform of patient representation despite losing key clauses of the Health & Social Care Bill. Speaking in the Commons, health minister John Denham told MPs that despite bowing to the Lords on some issues in order not to lose the bill, patient advocacy and liaison services and local authority scrutiny would still happen. He said the government would also 'seek to establish patients forums', although he admitted that they would have to go ahead on a non-statutory basis 'in the interim'. Community health councils will also survive – at least until after the election when ministers will have to fight for parliamentary time if they want to go ahead with further changes.

With both houses of Parliament now in agreement, the bill goes for royal assent.

Written answers

MEDICAL SPECIALITIES

Mark Todd (Lab, Derbyshire South) asked the Secretary of State for Health what guidance he has given to health authorities on their allocation of resources to individual medical specialties.

Responding Health Minister ***John Denham*** said that to enable health authorities to manage flexibly the totality of resources available to them, there is limited earmarking of funds within allocations. For 2001-02 the national health service plan implementation programme identified the following sums included in allocations with an intention that they be spent on the purpose for which they were allocated:

Priority	*£ million*
Cancer and coronary heart disease	450
Waiting times and access	423
Intermediate care and community equipment	188
Information management and technology	113

These sums reflect national estimates of investment needed to deliver targets and milestones in implementing the NHS plan. They are intended as a guide for local health communities in ensuring that their own plans will meet these targets and milestones. [*Commons Hansard 09/05/01 col: 206W*]

STROKES

Helen Brinton (Lab, Peterborough) asked the Secretary of State for Health what action he is taking to address the incidence of stroke in ethnic minority groups, to identify and raise awareness among those at greatest risk and to provide accessible, culturally sensitive and appropriate prevention information.

Responding, the Health minister ***Yvette Cooper*** said, 'The Department is taking action to address the incidence of stroke in minority ethnic groups through the National Service Frameworks (NSFs) for coronary heart disease and older people.

'Given the higher prevalence of stroke in some minority ethnic communities, the NSFs recognise the need to ensure that integrated stroke services and stroke prevention advice should take into account the need for advocacy support, especially for those patients and carers for whom English is not their first language.

'The Department is currently funding the Stroke Association to produce information packs on high blood pressure, effects of diet, risks from smoking and alcohol and the importance of exercise. The packs will specifically target Afro-Caribbean people and will be publicised and distributed through local community, church and health groups by the end of 2001.

'As part of the Department's tobacco education campaign, a dedicated campaign focused on ethnic minority populations is being developed. The campaign will start in summer of this year and will be supported by a specialist Asian language helpline'.

Helen Brinton then asked what progress has been made towards the target set in *Saving Lives: Our Healthier Nation* of reducing stroke in those under 75 years.

Yvette Cooper said, 'The target set in the White Paper *Saving Lives: Our Healthier Nation* was not solely for stroke, but was for all circulatory diseases combined: "To reduce the death rate from coronary heart disease (CHD) and stroke and related diseases in people aged under 75 by at least two fifths (40 per cent) by 2010". It is not yet possible to assess progress towards the target, since the latest available data (for the years 1997-99 combined) overlap with the start of the *Our Healthier Nation* strategy, which was published in July 1999. The last two years' data do demonstrate some movement towards the target, but there are still insufficient data points to establish a trend'.

The Minister provided the table below showing directly standardised mortality rates in England (based on three-year rolling averages) from stroke, CHD and for all circulatory diseases (the target group), among people aged under 75.

	Stroke	*CHD*	*All circulatory diseases*
1996 (1995-97)	24.5	88.9	139.6
1997 (1996-98)	23.8	84.3	133.8
1998 (1997-99)	22.8	79.2	127.0
Change 1996-98	-6.6%	-11.0%	-9.0%

Source: Office for National Statistics

Helen Brinton then asked the Secretary of State for Health what guidance he will be issuing on the development of stroke registers to identify those at greater risk of stroke; and when that guidance can be expected.

Yvette Cooper said 'advice on constructing and populating stroke registers will be contained in the

Information Strategy for Older People which will be published shortly.

'The National Service Framework for Older People requires that individuals at particular risk of stroke should be identified and offered advice and support to make lifestyle changes. General Practitioner practices should build on registers being developed for the prevention of coronary heart disease as described in the Coronary Heart Disease National Service Framework (Standards 3 and 4) and put in place models of care. The milestone for the registers is April 2004'. [*Commons Hansard 09/05/01 col: 207W*]

Further details are available from Alice Holmes at the CSP ext 624.

PRO & COMMUNICATIONS REPORT

Nicola Hancock
Honorary PRO ACPIN

The group continues to facilitate communication within ACPIN itself and between ACPIN and other health professionals and neurological bodies.

Following the disappointing rejection of our motion for ARC 2000, we prepared earlier and more thoroughly this year. We were delighted to have two motions accepted and thanks to excellent speeches proposing the motions from Steve Cheslett and Nicky Sharman, both were passed resoundingly. The motions are cited below for your reference and we look forward to the CSP acting on them promptly.

We continue to seek sponsorship from national companies for our major study days. After one disappointment with late payment we will be formalising our arrangements with major sponsors for the future. We have compiled a sponsors database with contact details for supportive companies and this will be made available to the Regional Reps from November 2001.

Motions for ARC 2001

1. This conference believes that the CSP should strongly campaign for equity of access to rehabilitation services irrespective of client age. Many services operate with client age limits in place, against the equity of access expected in a modern NHS.

2. This conference demands that the CSP issue formal national guidelines for physiotherapy departments, detailing all the implications of a seven day working system, particularly in view of the recruitment crisis evident in many departments when trying to fill even five day posts.

ANNUAL REPRESENTATIVE CONFERENCE (ARC)

13th-15th June 2001
Manchester

Steve Cheslett
North Trent regional representative

What is ARC? ARC is an annual conference where representatives of groups involved in UK Physiotherapy meet to discuss CSP actions and policy for the coming year, although ARC does not set policies for the CSP. Around 300 representatives attended this year at Manchester UMIST for groups including CSP Local Branches, Management, Assistants, Students and Special Interest Groups.

Each group sends representatives who are funded by the CSP for expenses including travel, food and accommodation. This year ACPIN were eligible to send four representatives and all places were filled.

Each group submits motions to CSP Council for inclusion at ARC around six months prior to ARC. These motions are requests for actions to be taken by the CSP in the forthcoming year and are voted on at ARC by the attending representatives. CSP Council decides on which motions are to be included at ARC and if they need rewriting, amending etc. Some motions are submitted as emergency motions at the last minute and these, as with all motions, need seconding by another group attending ARC.

Work prior to ARC started in ACPIN well before Christmas with the formulation and writing of two motions by myself, Nicola Hancock and the Communications Group prior to the February deadline for submission to Council.

These motions were on Equality of access to rehabilitation and on the need to draw up guidelines for seven-day working. Both of these motions were accepted for inclusion at ARC.

The next stage was writing a speech! Luckily Nicola Sharman agreed to speak on the Seven Day Working motion, leaving myself to speak on the Equality of Access motion. As a newcomer to public speaking and to ARC, I was looking forward to the CSP organised training day in London for first time speakers. Unfortunately this was cancelled due to lack of demand and it was down to Plan B. Plan B turned out to be a meeting on election night in a pub in Sheffield with motion seconder from AGILE. Speeches were formulated and practised over a pint and the plan was to keep them short and to the point.

Manchester UMIST 12pm

ARC starts with registration of delegates, a buffet lunch and a reception for first time reps. Generally the food was excellent!

After lunch proceedings started in the main lecture theatre with the ACPIN motions coming 10th and 13th in the running order, both included in the section on the NHS Plan.

All too soon it was my turn to speak and it turned out to be a little terrifying trying to get the words out whilst physically shaking and having a photographer trying to take your photo whenever you looked up from your speech! After my speech, there was a speaker seconding our motion from AGILE and then a couple of other delegates spoke in support. The conference then voted on our motion and it was carried almost unanimously, phew!

ACPIN's seven day working motion elicited much debate amongst delegates and was again carried by a large margin. For more information on the debates please refer to July editions of *Frontline* where there is extensive coverage.

Motions debated over the next two days covered ten categories; Health and Safety, The NHS Plan, Education, Professional Issues, Industrial Relations Issues, Equal Opportunities, Social Policy, CSP Policy and CSP Resources.

Alongside the motions for debate were three guest speakers and a panel session on the Agenda for Change. Fringe meetings were held following the main conference sessions and these included meetings on Clinical Specialists, CPD Portfolio, War on Want, Devolution and Modern World Slavery.

On the social side Wednesday evening was spent sampling the famous Manchester nightlife and Thursday had a buffet and disco evening! The accommodation at UMIST was compact, noisy and reportedly of variable quality. To sum up, my experience of my first ARC was of a fascinating event, with a vast amount of topics being discussed and it was a great way to gain an appreciation of different peoples viewpoints on issues.

Now it all starts again for ARC 2002! If you have any ideas for motions or would like to represent ACPIN please contact Nicola Hancock, Honorary PRO, ACPIN.

EDUCATION OFFICER REPORT

Karen Rowland
Honorary Education Office, ACPIN

This has been another busy year for ACPIN on the educational front with continued development in many areas.

The ACPIN website is now fully operational and is offering a range of services:

- Information on the National ACPIN executive committee and the developments at this level.
- Information on regional groups and the programmes of events running in local areas.
- Details on national ACPIN courses.
- Membership details and membership forms for renewal/application.

The website will be developed over the next year to include sections from the research sub group of ACPIN and relevant national initiatives connected with neurology. This website is continuing to go from strength to strength but please let us know if you feel there are other areas of interest that could be included. The website will be updated four times a year.

This year also saw ACPIN run a national residential conference in Northampton in March. The topic for the conference was 'Posture and Balance' and attracted many eminent speakers and a large audience. The venue of the Hilton Hotel in Northampton offered us a high standard of conference support and all participants appreciated this.

ACPIN are planning another residential conference at the same venue in 2003.

In March 2002 there will be the AGM and National study day, where the topic will be incomplete spinal injuries and this will be held in Bristol.

With all the national courses our aim is to try to move the venues around the country to enable as many members as possible to attend.

There are also plans this year to set up a small bursary to assist members with research at a clinical level. This will be developed and details contained in *Synapse* in Spring 2002.

The next 12 months will continue to as busy as the last and I would like to thank members for their continuing support with the educational events that ACPIN organises.

ACPIN RESEARCH REPORT

Mary Cramp
Honorary Research Officer, ACPIN

The research subgroup recently reviewed the position of several of it's projects and the outcome is summarised here. In late 1998, a questionnaire 'ACPIN and Research' was circulated to members with a report in *Synapse*. We would like to build on the information gained in the initial survey and to utilise additional information to further support and develop research within our specialist interest and profession. To this end, we are considering an annual review process of research activity among members, conducted in conjunction with membership application.

ACPIN produced a guide *Taking the Plunge* to assist members in the process of evaluating research articles. A series of workshops were run alongside in 1999/2000. We intend to develop a regular research feature in *Synapse* to address research-related issues such as literature searching, ethics, funding etc. We hope the first feature will appearing the Spring issue 2002.

Pam Evans has stepped down as Honorary Research Officer and we would like to thank Pam for all her work. Her replacement is Mary Cramp. We are always willing to hear your views, and any queries/comments can be forwarded to Mary at m.c.cramp@uel.ac.uk

CLINICAL INTEREST GROUP LIAISON COMMITTEE (CIGLC) REPORT

Rosie Hitchcock
CIGLC Representative for ACPIN

Committee Structure
CIGLC representatives have now formally divided into seven umbrella groups to facilitate discussion within the committee. ACPIN have joined up with ACPTR (Therapeutic Riding) and BABTT (British Association of Bobath Trained Therapists – paediatrics) in the Neurology Group. It has been recognised however, that flexibility across the groups is required depending on the discussion topic.

Restructuring of the Committee's agenda is planned to facilitate debate around the Professional Practice Committee papers.

Further Development of the Standards of Physiotherapy Project
The latest draft of the information concerning CPD opportunities and other support provided by Clinical Interest/Occupational Groups (CI/OG) has been presented to the committee and discussed in preparation for the final document.

The CIGLC is planning as its priorities over the next two years:

- Funding and time off issues: survey the extent of the problem, promote role of CI/OG's and develop guidance for managers.
- Ensure that CI/OG's are well represented at ARC – issues around perceptions of ARC and training needs.
- Promoting CI/OG membership – increase membership rates.
- Developing links with CI/OG networks in other professions around issues of mutual interest.

It is proposed that the 2002 CIGLC Conference should run over two days to provide training on 'representation' eg presentation, public speaking and organisational issues (compare stewards training).

MEMBERSHIP

A note from the database coordinator

Lucy Mees

Due to the growing number of members within ACPIN, I must stress the importance of the ACPIN membership numbers. As this is a unique number to yourself it allows us to have a speedy response to your application. Consequently, if the ACPIN number is not provided, this will slow down the processing of your applications considerably. Please ensure that you hold on to your membership card that includes these specific details. This does not apply to new members.

Other points to consider:

- Please ensure that block capitals are used and that your full address including postcode is given.
- When detailing specific interests please write clearly, it can sometimes be very difficult to decipher information, and this may result in you missing out on information pertinent to your particular interests.
- Before you seal the envelope: Have you enclosed your cheque? Have you signed your cheque and written the region on the back?

GUIDANCE ON MANUAL HANDLING IN TREATMENT

ACPIN is pleased to announce that the document produced by the ACPIN Manual Handling Working Party has now been published. The document took eighteen months to produce via the ACPIN Working Party and some regional groups. The Working Party was chaired by Anthea Dendy, and included Monica Busse, Vikki Sparkes and Dot Tussler.

Manual handling in Rehabilitation continues to be a challenging area. ACPIN's members have been asking for some time for some practical assistance in addressing the problems of manual handling particularly during treatment intervention. As a group, ACPIN is very aware that our members are working in a potentially high-risk environment. The aim of the document is to assist members in the development of local risk assessment policies for manual handling tasks within treatment by physiotherapists working in neurology.

The document contains the following sections: Introduction, The Assessment Process, Sample Protocols of Treatment Interventions, and, practical examples of manual handling risk assessment protocols.

The document does not address generic risk assessment or delegation of tasks. A clear statement is made within the document that ACPIN does not recommend or endorse any specific handling techniques, and that a full risk assessment must be carried out and documented as part of any assessment and treatment programme.

Work is currently being carried out by a second working party on producing a smaller complimentary document on how to carry out a risk assessment. It is anticipated that this will be published in Spring 2002.

All current members should have received a copy of *Guidance on Manual handling in Treatment* following receipt of this year's subscription. Although 1,500 were printed initially these have all been taken up, and a slightly revised version has now been reprinted (October 2001). Further copies can be obtained by sending a cheque for £2.50 and an A4 stamped (44p) self addressed envelope to:

Mrs A Dendy,
Physiotherapy Department
St George's Hospital
Blackshaw Road
Tooting
London SW17
or

Mrs R Wade
Physiotherapy Department
Mardon Neurological Centre
Wonford Road
Exeter
Devon
EX2 4UD.

NEW ADVANCE IN THE MANAGEMENT OF PARKINSON'S DISEASE PHYSIOTHERAPY PRACTICE GUIDELINES

An innovative collaboration between neurological rehabilitation and information management expertise at the University of Northumbria has enabled the production of guidelines for physiotherapy practice in Parkinson's disease. Working with a nationwide panel of specialist physiotherapists, the Institute of Rehabilitation and Information Management Research Institute produced a series of practice-based questions, which were answered using the appropriate evidence and expertise. The guidelines will support evidence based practice and enable physiotherapists to educate individuals with Parkinson's disease and their carers, referrers to physiotherapy, and researchers about the scope of their work.

Guidelines for Physiotherapy Practice in Parkinson's Disease are available on the Internet at: http://online.unn.ac.uk/faculties/hswe/research/Rehab/Rehab.htm

Copies of the guidelines can be obtained from the Institute of Rehabilitation at a cost of £5.50 to include postage and packing (cheques payable to University of Northumbria). The project was undertaken with funding from the Parkinson's Disease Society. Further sponsorship is required to ensure that the impact of the guidelines is maximal and that the resource is updated on a two- yearly basis.

For information contact:
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Institute of Rehabilitation
Hunters Moor Regional
Rehabilitation Centre
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NEWCASTLE UPON TYNE
NE2 4NR
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MS PATIENTS NEED TOTAL TREATMENT PACKAGE

Rachel Potter
*Reproduced by kind permission of **Frontline**. October 17 2001*

This year's CSP fringe meeting at the Labour party conference asked the question: is physiotherapy an alternative to beta interferon in treating multiple sclerosis?

CSP chief executive Phil Gray told the audience of delegates and local physiotherapists that MS patients must be given a total package of care.

With a final decision due next month from the National Institute for Clinical Excellence (NICE) on prescription of beta interferon, it is important that the use of physiotherapy as an additional service should not be forgotten or misrepresented, said Phil. And it is vital that any money for drug therapies is not to the cost of physiotherapy and other services. There are around 85,000 people living with MS in the UK, and many feel they are being short-changed on treatment, the meeting heard. Drug therapy is not suitable for many patients and, while beta interferon hogs the headlines, many MS sufferers have a need for physiotherapy as part of their treatment package.

There is evidence to suggest that rehabilitation may have the potential to slow down the rate of deterioration for people with MS, said Phil. But, he added, many are subject to long waits or unable to access physiotherapy services at all.

What the UK lacks, he said, is workforce planning to ensure equality of access to services – but he added, the NHS and its managers are still 'addicted to short-term planning. In recognising the value of physiotherapy for people with MS we must use it as a spur to action, not as an excuse for depriving people of needed drugs which could be of enormous use to them and their families.'

MS Society spokesperson Glynn McDonald said people with MS suffered a 'double whammy': poor access to services such as physiotherapy, and poor access to drugs which could reduce their need for these services. MS Society figures reveal that one in three people with MS describe access to physio services as 'difficult or not available'.

If, next month, NICE confirms its provisional review (nobody not already receiving beta inteferon to be prescribed the drug), the MS Society will consider a judicial review and court action, Mr McDonald added.

Lord Dubs, chairing the fringe meeting, promised to take the points made back to the government. 'We should not look at treatment as being one-dimensional, but look at a whole range of treatments,' he said. 'I am aware of how important beta interferons and physiotherapy can be for people with MS.'

NEW ACPIN LOGO AND STATIONERY

Following the March conference in Northampton, when delegates were asked to vote on a new design for the ACPIN logo, the overwhelming response was to retain but update the original design.

The new logostyle will now be applied to all official communications, giving ACPIN a strong visual presence, from the website to *Synapse* (as can be seen from this issue which has been redesigned to reflect the new identity), to publicity and stationery. The updated stationery with the new logostyle on has been in use since 1st September 2001. If you have any of the old style letterheads and compliment slips please do not use them for official ACPIN business. The new style stationery is available from your Regional Secretary.

ACPIN National Conference 2001
Posture & Balance

CONFERENCE REVIEW

Helen Lindfield MCSP SRP

The ACPIN 2001 conference was residential and took place at the Hilton in Northampton on March 25th and 26th. The programme promised an exciting and varied two days on the subject of posture and balance and participants were not disappointed.

The conference was purely theoretical with a variety of speakers providing an overview of the many areas that contribute to posture and balance. Key speakers were allocated 45 minutes to present and answer questions. They included:

- ***Dr Jon Marsden*** Post Doctoral Scientist at the Medical Research Council
- ***Dr Tungland*** Consultant audiological physician
- ***Janet Lewis*** Physiotherapy lecturer
- ***Dr Andrew Bateman*** Senior lecturer in physiotherapy
- ***Anna Hamer*** Bobath tutor and private practitioner
- ***Liz Mackay*** Bobath tutor and senior lecturer in physiotherapy
- ***Professor Ann Ashburn*** Head of Research, School of Health Professions and Rehabilitation Sciences
- ***Fiona Coutts*** Principal lecturer in Physiotherapy
- ***Julie Bilclough*** Senior physiotherapist
- ***Wendy Dickens*** Research physiotherapist

Included in the conference format was the opportunity for free papers to be presented providing an excellent opportunity for us to hear about some of the current research taking place. These were well presented by Maggie Campbell and OA Oshonniyi.

Jon Marsden started the conference with a whirlwind tour of the vestibular system. A review of the functions of the vestibular system and its integration with the other systems involved in posture and balance was given. It was a perfect grounding for the following lectures.

Dr Tungland followed with a relaxed presentation on how to diagnose and differentiate various pathologies within the vestibular system with some top tips on what not to try at home! This presentation aimed to provide us with a simple model for understanding the balance system and complimented the following presentation given by Janet Lewis.

Janet delivered a useful presentation on the role of the physiotherapist within the team assessing and treating vestibular disorders. She provided us with some background on the development of this specialised area, in particular highlighting the usefulness of Cawthorne-Cooksey exercises with central vestibular disorders and the importance of compensation in these conditions.

Andrew Bateman then presented on 'How do I know where I am? Attention, posture and balance' His presentation reminded us of the importance of attention in the maintenance of posture and balance while allowing us to carry out activities within a specific environment. The use of a case study was most useful to clarify some of the points made during this presentation

Anna Hamer followed with an interesting and enjoyable presentation on alignment in relationship to posture and balance. This presentation amalgamated ideas from widely used concepts such as, Bobath and muscle imbalance, with recent research and case studies providing us with a model of how these areas can be integrated within clinical practice.

The hotel had a well appointed exercise suite with a variety of exercise machines, a jacuzzi, a swimming pool and a sauna.

The second day started with a stimulating presentation from Liz Mackay in which she provided us with an excellent framework, which encompassed proprioceptive control, the CNS, neuromuscular integrity and their contribution to functional stability. This presentation pulled together many of the aspects of posture and balance addressed by neurophysiotherapists and placed them into a logical and clinically relevant context.

Professor Ann Ashburn followed with an update on the topic of pusher syndrome. Recent research was presented and the audience was left with several key questions about the validity of this syndrome, it's onset and presentation. This presentation created a thinking and questioning atmosphere appropriate to the present climate of clinical governance and evidence base.

Fiona Coutts' presentation provided us with a thorough and useful review of the measures of posture and balance available to clinicians. What could have been a dry subject was dealt with in a dynamic and interesting way, demanding the audience's attention. It developed questions as well as giving solutions and highlighted the importance of picking the right measure for the environment and subject.

Julie Bilclough's presentation drew on her experience working as a researcher in clinical practice to address the areas of balance and falls in Parkinson's patients. Risk factors were highighted and the audience was left with ideas on how these may be used to identify patients at risk of falling

Finally, the presentations finished with a lecture on biomechanics by Wendy Dickens, an expert in this area. Wendy guided us through the core aspects of biomechanics 'without her anorak' and then used case studies to great effect to illustrate key points.

The conference provided a wide variety of presentations on posture and balance. Some were very factually based and delivered a summary of the information available from a particular area while others provided us with an insight into how the individual speakers interpreted this complex topic. Both styles were useful and complimented each other to produce a very successful two days.

Overall the ACPIN 2001 conference was a great success combining a high standard of presentations with a great opportunity to network and socialise. The residential aspect worked well and facilitated a relaxed (for everyone but the speakers), and sociable environment. Thanks to the National ACPIN Committee for all their hardwork I look forward to the next one.

Abstracts and biographies

VESTIBULAR SYSTEM, IMPLICATIONS FOR PHYSIOTHERAPY

Jon Marsden

Through its connections with the cortex, brainstem, cerebellum and the spinal cord the vestibular system plays a pivotal role in ocular control, the control of human posture and balance, spatial perception as well as contributing to autonomic regulation. An understanding of the anatomy and physiology of the vestibular system and its interactions with other areas of the sensori-motor system allows one to interpret the signs of patients presenting with peripheral and central vestibular lesions. Combined with a knowledge of the potential mechanisms of recovery following a vestibular lesion, referred to as vestibular compensation, this has allowed therapists to outline and evaluate therapeutic intervention for the patient with vestibular pathology. The importance of the vestibular system for physiotherapists may not however only lie with an understanding and treatment of vestibular disorders but possibly also in the ability of vestibulospinal pathways to modulate muscle tone following neurological disease.

Dr Marsden qualified as a physiotherapist from Manchester School of Physiotherapy in 1991. His basic grade rotations were performed at Bristol Royal Infirmary/ Children's Hospital. He joined the National Hospital for Neurology and Neurosurgery (NHNN) as a Senior II in 1993. In 1996/7 he obtained an MSc with distinction in Neurological Science from University College London. From 1997-2000 he then studied under the guidance of Dr P Brown for a PhD at the MRC Human Movement and Balance Unit, Queen Square the title of which was 'Oscillations and synchronisation in the motor system in health and neurological disease'. At present he is currently employed by the Medical Research Council as a post doctoral scientist where he works with Dr B Day in the area of sensori-motor integration. Current research is directed at investigating the role of vestibular stimulation in the genesis and modulation of lower limb spasticity.

A SIMPLE MODEL TO UNDERSTAND THE COMPLEX SYSTEM OF BALANCE

Dr Tungland

The patho-physiology of balance problems is a complex one and it is sometimes difficult to get a proper diagnosis. There is no doubt that we still do not fully understand all the mechanisms involved in the perception of balance. As a number of diseases from different organ systems have to be considered in patients with balance problems, it may be difficult to arrive at a single diagnosis. This leaves us treating the patients' symptom and not necessarily the cause. Using a simple model to assess patients with balance problems has proved helpful both in the more complex diagnostic situation and primarily as a basis for rehabilitation.

The concept of the postural system is based on a three-way sensory input. First the information from the proprioceptive system, secondly the visual information, and thirdly the information from the balance organ in the inner ear. Signals from these sensory organs converge into a complex system of nerve cells in the upper part of the brain stem. Through the central management of this information the brain gets a full picture of the body's movement and position. This system is a learnt system but quickly turns into an automated process. However, under new and sometimes unfamiliar situations this automated process is again controlled and surveyed by our conscious intervention. The resulting centrifugal motor signals are controlled by coordinating cells in the cerebellum and by the extrapyramidal system. As we move this information is re-assessed by the visual, proprioceptive and vestibular receptors and continuity of information is established. There are, however, psychological factors that can influence this system, such as emotions, level of concentration and arousal, ie these will have an effect on the perception of balance. New sensory inputs are continuously checked against the stored postural memory and thereby facilitate the process of maintaining balance. So if we register a combination of sensory input which does not match the stored postural memory, we may experience dizziness and unsteadiness. Sometimes the postural memory is not capable of re-adjusting fast enough to prevent reactions. This can typically be seen in relation to motion sickness. Here the brain does not accept all the new postural information, at least not soon enough for some patients, and the perception of imbalance provokes the autonomic nervous system with the typical reaction of nausea, vomiting, cold sweating, pallor, etc. These unwanted reactions will continue until there is a certain recognition of pattern of the over-stimulation and a habituation process takes place.

As mentioned initially, the concept of the postural system is one of a learnt system and this is the basis for

the rehabilitation. As there is a three-way sensory input there is, in general terms, a surplus of postural information. The most important sensory information comes from the proprioceptive system and this system is the only one which we cannot survive without. Both the vestibular and the visual system can be compensated for by the proprioceptive system.

To simplify the diagnostic problem even further we divide imbalance problems into peripheral and central pathology. Peripheral in this connection means damage localised to the labyrinth or the first peripheral vestibular neurone. The central could be defined as non-labyrinthine causes of vertigo. In this lecture I will therefore use the model explaining the three major events which can happen to the peripheral organ, ie sudden loss of function on one side, Morbus Meniere and benign paroxysmal positional vertigo.

Dr Tungland has worked in England since 1989 when he was appointed Consultant Audiological Physician at the Hospital for Sick Children at Great Ormond Street. He has been a consultant at the Central Sheffield University Hospitals in the same field since 1994. His main interests now are in paediatric audiology, balance and tinnitus problems and their rehabilitation. Before coming to England he was an ENT consultant in Norway, Sweden and Saudi Arabia for about ten years. He trained in France, Norway and Sweden. He has also had one year's training in the United States.

THERAPEUTIC MANAGEMENT OF VESTIBULAR DYSFUNCION

Janet Lewis

Vestibular rehabilitation exercises were first conceptualised by Cawthorne (1944) who asked his colleague, physiotherapist Cooksey to devise a series of exercises that would progressively encourage patients post inner ear surgery to move their heads, and consequently reduced complaints of dizziness post surgery. Although the original exercises were designed for patients post surgery, they are now used with a variety of patients who complain of dizziness and disequilibrium. (Shepard et at 1993)

A brief overview of the theoretical basis underpinning vestibular rehabilitation will be given followed by a reminder of the original Cawthorne-Cooksey exercises and the many ways in which they are varied in clinical practice.

Until the 1990's vestibular rehabilitation had been largely targeted at those patients with a diagnosis of peripheral vestibular dysfunction. However, there is growing use of vestibular rehabilitation for patients with other neurological conditions, where there is implication that the vestibular apparatus or sensory integration mechanisms are involved.

There is a wide range of reported incidence of dizziness following head injury with a range of 30-65% quoted (Shumway-Cook 1992). The pathophysiology of dizziness in the head injured population will be reported as well as the links between anxiety and dizziness.

The current evidence base for the use of vestibular rehabilitation with mild head injured patients will be outlined. In addition anecdotal experience of treating this client group with vestibular rehabilitation will be given.

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Janet Lewis qualified as a physiotherapist in 1988 from the North London School for Physiotherapy for the visually handicapped. Junior rotations were completed at the Luton & Dunstable hospital. First senior post was at Garston Manor Medical Rehabilitation Centre, that was at the time the Regional Rehabilitation Unit. In 1994 due to her husbands work she relocated to Poole, Dorset, where she took up a Senior position with the County Traumatic Brain Injury Service. It was at Poole that the Consultant sparked her interest in vestibular rehabilitation when he returned from a course at Queens Square and asked her to investigate the possibility of using this technique with head injured patients who often complained of dizziness. In 1998 she moved to Hertfordshire securing a lecturing post at Brunel University. This meant she was able to undertake an MSc In Neuro-rehabilitation. Currently she is completing her thesis, which is investigating the sequelae of postural instability, vertigo and anxiety in mild head injured subjects.

HOW DO I KNOW WHERE I AM? ATTENTION, POSTURE AND BALANCE (AND ACTION)

Andrew Bateman PhD MCSP

Graziano and Gross (1998) wrote: 'To understand and represent the space around our bodies, we must put together vision, touch, and proprioception, as well as vestibular sensation and audition. These signals are initially combined in the parietal lobe. Different parietal areas are specialised for different motor outputs, eg eye, arm and hand movements. The projections to the premotor areas in the frontal lobe enable the building up of body-part-centred coordinates that can be used to guide movements toward, away from or around the objects that surround us'.

Introduction

The detailed studies of visual perception mechanisms have sometimes seemed to miss the point that the purpose of vision and perception is to be able to interpret and respond to the world. Likewise, Posture and Balance mechanisms are closely linked to the key functions of preparing and sustaining action. It is from this premise that this paper tackles the topics of attention, posture and balance – as functional components that serve action and motor control.

In recent years there has been considerable progress made in creating a neuroanatomically plausible model for understanding action (eg Bateman and Riddoch 1996). As we move around the world, new visual, auditory, vestibular and somatosensory inputs are continuously presented to the brain. Given such constantly changing input, it is remarkable how easily we are able to keep track of where things are. (Colby 1998). We can reach for an object, or look at it, or even kick it without making a conscious effort to assess its location in space, prepare our posture, and remain balanced. Spatial perception is the faculty that allows us to identify location, and it integrates with multiple motor control systems. Sensory and motor information are used to construct an internal representation of the space we perceive. Attentional resources are understood to influence, and are influenced by, the demands placed on each of these systems. A model for understanding action is needed to draw together these many streams of information.

This paper presents some approaches to the generation of this model.

In tackling this question 'How do I know where I am?' evidence is drawn from reviews and research in neuropsychological, neuroscience and cognitive rehabilitation perspectives. The relationships between attention and posture and action involves a consideration of models of spatial representation that include the interactions between dorsal and ventral visual processing streams, distinctions between egocentric and allocentric spatial processing, interhemispheric inhibitory dynamics, arousal and spatial attention, and finally attention and action selection. Two key neuropsychological disorders, unilateral neglect and dyspraxia are briefly described.

Dorsal and ventral stream processing of visual information

Based on their work with primates Mishkin and Ungerleider (1983) described the 'what' and 'where' visual processing routes referring to the ventral and dorsal processing streams respectively. For the reasons discussed in my opening comments about 'the point' of these streams, Goodale and Milner (1995) investigated the implications of this distinction for movement ability in humans. They reported a series of experiments in brain damaged patients who were incapable of consciously discriminating perceptual features (eg judging orientation of objects) but were able to make appropriate motoric responses (that is, appropriately orienting the hand to the objects). Thus the appropriate grip response must have been directed by the ventral, object based representations. In summary, Milner and Goodale emphasize that their extension of the original Mishkin and Ungerleider conception of the two streams[1] of visual processing is based on consideration of the output requirements of each system. The dorsal stream appears to be responsible for the transformations for visually guided action, and the ventral stream provides the basis for of 'perceptual and cognitive representations of the enduring characteristics of objects and their relations' (Milner and Goodale 1995). That is, respectively, the 'where' and 'what' knowledge about objects in our world.

Egocentric and allocentric representations of space

The coding of location of body parts with respect to objects in the environment has been termed 'egocentric' space. The coding and memory of the relationship of objects to each other, independent of body position is known as 'allocentric' space. The independence and separation of egocentric and allocentric spatial processing abilities is necessary, primarily because egocentric relationships are continually changing as a person moves around the environment. Nonetheless, the two systems may feed one another. For example, approaching Trafalgar Square from the south, I would locate St Martin-in-the-Fields on my right hand side. However, subsequent visits to the square from different directions will change the relative (to self) location of the two landmarks. A stable allocentric representation of their location makes navigation possible. However, it is also possible to represent allocentric space independently of egocentric information, for example, when listening to the cricket commentary field placings, or playing 'blindfold chess', where relative locations of targets are represented even as moving targets.

The posterior parietal cortex and egocentric space.

Stein's (1994) excellent review of the structure and function of the posterior parietal cortex (PPC) firmly placed the role of this so called multimodal sensorimotor association area in determining 'where' an item is located, and its role in transformation of sensory vectors into motor co-ordinates. That is, to facilitate action. He argues that the conversion from one modality to another (eg retinal location, or skin sensation to arm movement), itself produces the perception of the localisation of objects with respect to the egocentre. More recently, this role in egocentric representation has been supported using fMRI while subjects were asked to indicate when a visual target was moving through the mid-sagittal plane of the body, and the two extremities of of a linear horizontal trajectory. A parieto-frontal system was found to characterise the specific processing of the mid-saggital plane. (Vallar et al 1999). Furthermore, Perennou et al (2000) report some convincing experiments on the role of lesions to the temporoparietal junction in maintenance of balance (see notes in reference list). They argue that this area is crucial as a nodal point of the network of regions that build up the multiple representations of space based on the multiple sensory inputs it receives.

The ventral stream, the hippocampus, premotor cortex, and allocentric space

Stein (1994) cites Gaffan and Harrison (1989) as providing evidence for the hippocampal role in encoding relations between one external object and another, perhaps as a map of real space. Milner and Goodale (1995) argue that the medial temporal cortex is also involved: Passingham (1993) traced the projections to the lateral premotor area 8, the premotor area for eye movements, noting major inputs from both dorsal and ventral streams. Ventrally, projections are from the early visual areas, the posterior inferotemporal cortex, and the ventral bank of the superior temporal sulcus. Combined with the parietal (7a

1 Some criticism has been levelled at the term 'stream' in that it could be thought to imply unidirectional flow, which is clearly not the case in this context (see Clark, A,1998).
2 A brief description of object recognition. Extending this line of thought can help us understand the role of the temporal lobe in action. The coding of object locationis one form of conceptual or associative knowledge that is important in object recognition and object related action: Object recognition is likely to be slowed or impaired if the object is in an unusual position or is viewed from an unusual angle. The other major temporal lobe projections are to the ventral prefrontal cortex and amgydala, that are associated with object identity.

and LIP) inputs to area 8, (with functions including representation of object features such as object orientation), the premotor area 8 is able to execute eye movements that use ventral stream (coding object locations) and dorsal stream (object orientations) to examine an object[2].

Unilateral neglect – impaired processing of space.

It is recognised that there are many different presentations of unilateral neglect phenomena, and that they cannot simply be explained in terms of a single underlying mechanism. The failure to attend to stimuli on the contralesional side of space may be seen in examples such as mis-reading words, mis-identifying objects, or failure to act in certain locations in peripersonal space. One account of attention thus incorporates spatial processing of objects and locations, selection and arousal mechanisms (Humphreys and Riddoch, 1992). Another approach described the stages of 'engage', 'disengage' and 'shift' (Posner 1984). Whatever the account, the role of dorsal, parietal cortex and its projections can be emphasized again.

A well described phenomena of unilateral neglect is the difficulty patients have in bisecting a line. The patient neglects the end of the line, and shifts the perceived midpoint accordingly. A modification of this task is described by Robertson (1999). He asked patients to pick up metal rods placed horizontally in front of them. If they pick up the rod off-centre (it would appear visually to be the centre to them) the rod would not balance. The proprioceptive feedback the patients get from this, contradict the visual perception. Repeated exposure to this contradiction was found to reduce the extent of the neglect.

From this experiment, conclusions drawn include the point that visual information was available for motor responses to an object, and that this visual information was not immediately available to awareness. Furthermore, Robertson (1999) reviews this experiment in terms of the dorsal and ventral stream model, arguing that 'the prehensive movements towards objects allow "leakage" of information about their spatial extent, via an unaffected stream of information available for motor-manipulative responses'. It seems to me that this interpretation can be of encouragement to us in our attempts to rehabilitate motor control in these patients, that is that the remaining intact stream can potentially bypass the separate damaged dorsal or ventral stream.

Neglect and interhemispheric inhibition

There is some fascinating evidence that the attentional networks in each hemisphere inhibit one another. For example Sprague's work with cats demonstrated that a strong spatial bias in cats caused by a large unilateral posterior lesion could be ameliorated by destroying the superior colliculus on the side opposite to initial visual input (cited in Robertson 1999). There are also occasional rare cases of unilateral neglect following severe right hemisphere stroke that is abolished by a second contralateral stroke. In the Right Hemisphere Damaged patient reported by Vuilleumier (1996), the subsequent second stroke in the left frontal region resulted in an abrupt disappearance of unilateral neglect.

Different personal spatial frames of reference have also been identified; examples include body/personal space, peripsersonal space, and far space. In primate lesion studies, lesions to premotor areas 6 and 8, involved particularly with hand and eye movements respectively, led to near space or far space impairments. Clearly, in health, navigation and object utilisation requires that these separate reference frames have to be integrated in some way. However, primate lesion studies and brain injured patients have shown selective impairments in any of these reference frames. Furthermore, it has been found that unilateral neglect may be confined within one of these reference frames. Assessment techniques have included line bisection tasks on paper for near peripersonal space, and board at a distance beyond reach (ie far space) marking the midpoint of lines using a light pen, or throwing darts.

There are a number of studies by Robertson that have demonstrated that unilateral left neglect can be significantly reduced by movements of the left hand, but only when the hand is on the left side of the body, even if the hand is out of sight. The effect was abolished if both hands moved.

These experiments have been interpreted in terms of our understanding of the different spatial frames of reference, activation of the 'personal' space representation by hand movements has enhanced activation in the linked 'peripersonal space' regions. This is thought to overcome the disabling inhibition imposed by the healthy left hemisphere on the damaged right hemisphere (Robertson 1999).

Arousal and attention

BANG! PAY ATTENTION! The arousal system and its effect on posture, and readiness for action makes intuitive sense. Unilateral neglect has also been associated with reduced arousal (Samuelsson 1998). The strongest predictor of persisting neglect is lesioning to the paraventricular white matter in the right temporal lobe, the likely location of fibres projecting up to the parietal and frontal lobes from the midbrain and arousal systems. Distinguishing between phasic and tonic alerting, the phasic response , to sudden light or sound, has been used to treat neglect. Left neglect (right hemisphere damage) patients were asked to detect whether a left visual event preceded a right event or vice-versa. The patients were a second slower to detect left events than right events. A warning noise signal was found reverse this, even if the sound came from the right hand side of space (Roberstson et al 1998). This indicates that the phasic increase in alertness not only treats the tonic deficit of alertness in right hemisphere patients, but also their spatial neglect. Robertson also suggests that phasic alerting depends on ascending thalamic-mesencephalic projections.

Dyspraxia

Dyspraxia (or apraxia) is a disorder of motor control that has typically been defined by exclusion. However it is worth considering the various features, that can be summarised as modality specific impairments (visual/verbal inputs), object or non object related problems (transitive/intransitive), and the types of errors the patients make; often predominantly either spatial or semantic errors (see Raade et al, 1991). We can revisit these difficulties in the context of the models I have been discussing. For example, recent work by Rushworth has linked lesions in the left temporal lobe to the sequencing deficits seen in dyspraxic patients. The semantic, or object based errors can be interpreted in the light of the ventral stream processes, and their projections to the frontal lobes mentioned above. The spatial errors, or difficulties integrating visual and other sensory modality information can be considered in the light of our understanding of dorsal stream processes, and their specific projections to the frontal lobes.

I am now going to briefly link this to a patient I have worked with: A preliminary set of experiments explored these issues using sets of everyday objects and some abstract tasks. Demonstrating the use of objects, on careful analysis revealed a variety of error types and with the patient I showed in the video, who had suffered a putamen lesion, the errors were more common for a subset of objects. In particular, she demonstrated a poorer response to objects that required actions toward herself. When tested on a so called 'landmark' test for her ability to judge the relative locations of objects, it was noted that where she scored at ceiling (100%) on allocentric tasks, she was very impaired at the egocentric judgements (which brick is nearer to you?). The interpretation of these observations was that the functional impairment in object use may be understood in terms of this particular form of spatial processing impairment.

Summary and conclusion

So perhaps we have an answer to our title question? Does it help to elaborate on the question? We have briefly addressed questions by looking at various ways of understanding and representing space. Thus the egocentric question might elaborate to:

- *How do I know where I am in relation to myself?* (my body parts),
- or *How do I know where I am, in relation to objects?*, and the allocentric question becomes, *How do I know where things are in relation to each other?*

We are then perhaps able to take a fresh look our patient's problems and join these together with our understanding of motor control balance and the multiple neuroanatomical pathways that are involved in these processes.

In conclusion, our role in addressing these questions, may be to assess the patient asking these kinds of questions, so that we are able to educate the patient in terms of the nature of their impairment, and treat with these issues in mind. I think this overview of the literature demonstrates that attention and balance and posture and action systems show a dependence on each other. The interactions of a person with their environment seem to be analysed by the brain in multiple distinct processing pathways. Potentially we may be able devise rehabilitation strategies that pick up on the various theoretical considerations, as in the work reviewed by Robertson (1999), taking advantage of 'leakage' between processing streams, enhancing arousal, or facilitating orientation to locations in egocentric or allocentric space.

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Slides shown for the lecture are available at http://homepages.uel.ac.uk/A.Bateman/action/

After training in physiotherapy at The London Hospital and North East London Polytechnic, **Dr Bateman** worked at Whipps Cross Hospital before moving to The University of Birmingham to study for a PhD with Professor Jane Riddoch in the School of Psychology. This was completed in 1996, entitled 'The assessment of cognitive deficits following stroke'. It involved a case study approach to understanding the relationship between attention and action. He then moved back to East London (now UEL) to a Senior Research Fellowship, to co-ordinate a multi-centre randomised controlled trial of aerobic training following brain injury. This study has recently been completed and he has now taken up a post as Senior Lecturer in Cardiovascular, Respiratory and Fitness Physiotherapy. This conference has provided a welcome opportunity for him to return to his PhD research, and overview some recent developments in our understanding of motor control.

ALIGNMENT AND POSTURE, THE CLINICAL IMPLICATIONS

Anna Hamer

The creation of posture is dependent upon an appropriate response of the muscles to the pull of gravity. Alignment concerns the ability to place the skeleton in line and produce appropriate interaction and co-ordination of body parts.

All bodily systems may be affected by the inability to create or sustain appropriate posture, or maintain functional alignment. The musculoskeletal, respiratory, circulatory and nervous systems may all be compromised.

The clinical implications of postural instability and malalignment will be considered in relation to the choice of appropriate treatment modalities and the use of walking aids. The use of carers in physiotherapy treatment, carry-over and the use of compensatory movement strategies will also be discussed.

Dynamic stability and co-operative body alignment are key elements in the production of functional movement. Muscle length, strength and alignment are fundamental therapeutic considerations.

Inactivity following neurological deficit often contributes to the inability to maintain alignment and create posture.

Anna Hamer qualified from St Thomas' Hospital in 1982. Since 1987 she has been responsible for setting up the neurological physiotherapy service in the Surrey and Sussex Healthcare district, in particular for the Harrowlands rehabilitation Unit in Dorking. In 1997 she qualified as a Bobath Tutor and set up heads up! a stroke and neurological physiotherapy practice near Dorking.

NEUROMUSCULAR STABILTY IN RELATION TO POSTURE AND BALANCE

Liz MacKay

This short presentation will introduce the topic of neuromuscular stability in relationship to balance and posture. It will consider proprioceptive control, ascending and descending control, the systems and the neuromuscular system. The relevance of muscle properties and classification will be covered and how muscle length change can alter the normal sensory motor experience necessary for posture and balance. It will also briefly consider therapeutic implications and give an overview of strategies for change.

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Liz MacKay is a Senior Lecturer in Physiotherapy at Leeds Metropolitan University, teaching both undergraduate and postgraduate neurology. Since completing her Masters Degree in Sports Medicine she has a particular interest in neuromuscular stability and its links to the neuromuscular system. She also works clinically in neurology and at the present time is coming to the end of her training as a Bobath Tutor.

PUSHER SYNDROME – PATHOLOGICAL OR ACQUIRED?

Professor Ann Ashburn

Physiotherapists working with people in the acute stage after strokes spend a lot of their time rehabilitating balance control. In general, recovery of head and trunk activity takes place within weeks of the stroke event but there are exceptions. Patients know as 'Pushers' have been reported to take longer to recover their postural control and in some cases do not achieve functional independence in daily activities. In recent times a number of causal theories have been proposed but few researchers have data to support their hypotheses. Findings from our recent small study examining and comparing the vestibular function of 'Pushers' and healthy adults show that people with stroke have measurable vestibular function with rate of response similar to those of healthy adults. Evidence of asymmetrical vestibular weakness towards the hemispheric lesion was found (not consistently) among the 'Pushers'.

The implications of asymmetrical vestibular function and the difficulties of defining the movement behaviour will be discussed and placed in the context of methodological difficulties for research.

Professor Ann Ashburn is Head of Research in the School of Health Professions and Rehabilitation Sciences at the University of Southampton, and maintains a clinical session in the Physiotherapy Department at Southampton General Hospital. Her area of specialty is balance control and falling among people with stroke, Parkinson's Disease and multiple sclerosis. She is a member of the Executive Com-mittee of the Stroke Association, is a past president of ACPIN and for many years ran the MSc in Rehabil-itation and Research at the University of Southampton.

OUTCOME MEASURES IN POSTURE AND BALANCE

Fiona Coutts

Measurement of balance in the clinical situation has raised many issues of choice and appropriateness for the clinician. This is especially so given that 'Balance' has no one definition and that this complex state involves input from most of the body systems. Therefore there is no singular test of balance, which can give an outcome, which encompasses all definitions or tests all systems.

The aim of this lecture is to discuss the aspects of balance and to look at the clinical outcome measures which best fits each aspect. Through a literature base the operational definition, reliability, and validity of each test will be explored and the ease of reproducing the test in different clinical situations will be deliberated. The relationships between posture and balance and between function and balance will also be explored and questioned.

At the end of the lecture the participants will have a list of outcome measures, their reliability, ease of use in the clinical situation and applicability to neurological patients. There is no one measure of balance and this lecture may throw up more questions than answers!

Fiona Coutts is the Principal lecturer in physiotherapy at the University of East London. Currently at the end of data collection for a PhD in Bioengineering at the University of Strathclyde, analysing hip and lumbar spine patterning in elderly volunteers at two years post total hip replacement and age matched normals. She teaches on the MSc Physiotherapy and her main research interests are analysis of human movement (clinical and laboratory), biomechanics and measurement of clinical outcomes.

PARKINSON'S DISEASE AND FALLS

Julie Bilclough

Approximately one third of patients aged over 65 suffer a fall each year (Campbell 1981) and it is recognised that patients with Parkinson's Disease (PD) are at greater risk than this of falling (Koller et al 1989). More importantly, these patients have a tendency to multiple falls as shown prospectively in a study looking at falls in general (Nevitt et al 1989).

The chances of people falling increase linearly with the number of risk factors (Tinetti et al 1988). Potential risk factors for falls in PD have been suggested to include: generic factors (longer duration of disease, advanced stages of disease, inability to rise from a chair, postural and gait impairments) and disease specific factors (postural instability, freezing, festinating, dyskinesia and orthostatic hypotension). Disorders of movement and function related to posture, balance and gait in PD are common (Rogers 1996). To date there is no consensus as to the principle reason for falls in PD therefore the relative predictive ability of these generic and specific factors is unclear.

Physiotherapy is often used to address these risk factors (some of which fail to respond to pharmacological management). Little evidence exists to support a physiotherapy assessment tool designed to identify risk factors for falls in PD and/or evaluate the effectiveness of intervention. Northumbria Healthcare Trust are currently undertaking a descriptive multidisciplinary cohort study 'A prospective study of falls in Parkinson's Disease in the catchment area of a district general hospital'. The overall aim of the study is to discover which of the many potential attributable factors that can cause falls in PD are the most important.

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Julie Bilclough is a Senior Physiotherapist in Elderly Care at Northumbria Health Care Trust. Her current post combines clinically based research, clinical input to day hospital and community, along with managing a team of physiotherapists across the elderly care service. Julie has a specialist interest in Parkinson's Disease and falls in the elderly. She is currently involved in two multidisciplinary research projects:

1. Evaluating the impact of a care programme approach in the multidisciplinaiy management of Parkinson's Disease patients and their carers.
2. A prospective study of falls in Parkinson's Disease in the catchment area of a district general hospital.

BIOMECHANICS

Wendy Dickens

Biomechanics is the study of the mechanical laws relating to the movement and structure of living things. Anatomy, physics and mathematics are used to determine and measure the quantities of motion (time, space, force) and to understand movement.

This presentation will focus upon the major biomechanical issues relevant to balance and posture. The principles of equilibrium will be reviewed including centre of mass, gravity, centre of pressure and base of support. Anatomical and anthropometric considerations will be included with particular reference to

the foot. Aspects of postural sway and gait initiation will also be covered.

Patient videos will feature in the presentation. These will be used to illustrate biomechanical principles in the clinical situation and demonstrate how the application of these principles can assist clinical decision making and optimise the biomechanical environment for neuromuscular performance.

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Wendy Dickens qualified in 1982, initially followed a career within the NHS specialising in orthopaedics and musculo-skeletal rehabilitation. She gained an MSc in Rehabilitation Studies at Southampton University, and then worked for IBM developing and implementing a health promotion programme with a focus on heart disease prevention. Following two years of private practice and three years in the USA, she returned to the UK as a research physiotherapist and completed a post-graduate diploma in clinical gait analysis. She has worked for the last three years at the gait analysis laboratory of Sheffield Children's NHS Trust. The laboratory provides clinical gait analysis services for children and young adults with complex neurological and orthopaedic gait pathologies. There is a teaching commitment to staff within the trust and input is given to the undergraduate and post-graduate physiotherapy programme at Sheffield Hallam University. Current research includes talipes, toe walkers and a visual gait analysis tool. She recently registered for a PhD, the focus of which will be the functional impact of improving fitness in children with cerebral palsy.

Free papers

A PRELIMINARY INVESTIGATION OF BALANCE DISORDER IN ADULTS FOLLOWING TRAUMATIC BRAIN INJURY

Maggie Campbell (*Primary author*), Research coordinator, Directorate of Professional Services, Central Sheffield University Hosptials NHS Trust.
Anne Parry, Professor of Physiotherapy, Sheffield Hallam University
Alan Wing Professor of Human Movement, Birmingham University

Introduction

Efficient movement is dependent upon good balance. However, balance systems are not only involved in the regulation of motor performance of the trunk and limbs but also in gaze stability and in synthesising sensory information to assess orientation and safety within the wider environment. Disordered balance following traumatic brain injury (TBI), including complaints of dizziness, is widely reported but other than incidence figures for peripheral vestibular dysfunction, discussion of specific components of dysfunction or assessment parameters is sparse. Clinical assessment procedures within rehabilitation practice are currently underdeveloped. This study aimed to develop a clinical assessment protocol to screen functional balance and associated sensory systems and to apply that protocol to a series of adults recovering from TBI in order to begin to develop a clearer understanding of the scope of balance disorder within this client group.

Method

A systematic search of TBI and wider literature was undertaken. A parallel process of reviewing anatomy, physiology and current developments in knowledge of central nervous system function was also completed. A clinical assessment protocol was developed allowing systematic screening of potential sensory deficits and functional balance. Intra-observer reliability was tested, producing a high level of agreement (Kappa=0.96). The protocol was then applied to a convenience sample gathered from two separate services (one inpatient, one outpatient) within NHS Trent Region.

Results

Analysis of 27 protocols revealed a high level of balance disorder in this subsection of the TBI population. A wide range of deficit profiles were apparent with reports of dizziness and disorientation being associated with visual or neck dysfunction as well as vestibular signs. There was a wide range of sensory systems dysfunction, a high incidence of postural dyscontrol and a high incidence of postural malalignment, particularly in relation to head position.

Discussion

These data suggest that balance disorder post TBI is not a homogenous disorder and that associated sensory dysfunction is not limited to the vestibular system. While this study has limitations of size and self-selection, the incidence of disorder was high across both sub-populations. The collected data raises issues concerning current assessment, diagnosis and treatment of relevance across rehabilitation disciplines. There is a need for further cross-disciplinary work to gain improved understanding of the human balance system, to further assess the utility of the screening protocol and to describe desirable changes to service provision.

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RELATIONSHIP BETWEEN STRENGTH OF LOWER LIMB MUSCLES, WEIGHT SYMMETRY AND BALANCE IN STROKE PATIENTS

OA Oshunniyi (*Primary author*), South Essex Mental Health and Community Care NHS trust,
MC Cramp and **FJ Coutts**,
Department of Health Sciences,
University of East London(UEL)

Various published research studies have identified physical problems arising from stroke including impaired balance, muscle weakness, abnormal muscle tone, weightbearing asymmetry and gait abnormality. Indications are that many of these problems are inter-linked and that there is a relationship between strength of lower limb muscles, weight symmetry and balance in stroke patients. The objective of this study was to investigate this relationship in early stroke patients.

With ethical approval, eighteen subjects with a first incidence of stroke of less than six months standing who were receiving treatment at the stroke unit of the local trust were recruited to the study. Patients were stratified into two groups based on time since onset (0-3 months and >3 months). The key criterion for inclusion in the study was the ability to stand independently for 30 seconds. Weight bearing symmetry was measured with a Balance Performance Monitor (BPM), functional balance with Berg Balance Scale (BBS) and strength of 7 lower limb muscle groups on both sides with handheld Penny & Giles myometer (0-60kg). All tests were conducted during one session.

Weight bearing asymmetry was observed, with a mean weight distribution of 42% (SD=7%) on affected limbs. The results also showed a trend of proximal-to-distal muscle impairment in this group of stroke patients. Significant relationships were established between functional balance and all muscle groups measured except knee extensors ($r=0.558$-0.683, $P<0.05$). Strength of hip extensors, knee extensors and flexors, ankle plantarflexors and dorsiflexors showed significant relationship with weight bearing symmetry ($r=0.493$-0.576, $P<0.05$). The relationship between functional balance and weight symmetry was also significant ($r=0.534$, $P<0.05$).

Thus, a relationship was established between strength of various lower limb muscle groups, weight symmetry, and balance in early stroke patients suggesting that to improve functional balance, treatment needs to address the problems of weight asymmetry and muscle weakness. This study serves as a basis for further investigation of this issue in early stroke patients.

This study was completed in part fulfilment for MSc Physiotherapy at UEL.

Poster presentations

RELATING POSTURE TO PERCEPTION OF VERTICAL FOLLOWING STROKE

Nicola Snowdon, Rotherham General Hospitals NHS Trust
Oona Scott, Department of Health Studies, University of East london

It is known that the ability to recognise whether a straight line is vertical or slanted may be affected by a stroke (Brandt et al 1994). Whereas healthy subjects can estimate vertical to within 3°, many hemiplegic subjects identify lines slanted by 3-15°, as being vertical. Perception of verticality is related to the ability to walk (Bruell et al 1957). This study aimed to investigate whether the size and direction of such errors relate to postural alignment following stroke.

A novel methodology was designed to assess verticality perception. A 2cm wide line was drawn across a 50cm diameter circle. This was attached to a wall so that it could be rotated about its midpoint. A protractor set in the middle of the circle enabled the experimenter to measure the angle of slant of the line. The subject was seated opposite, wearing 'tunnel vision goggles' so that only the circle was within their visual field. A therapy assistant held the subject's head level. The circle was rotated to place the line at least 30° away from vertical, then rotated back according to the subject's verbal instructions. When the subject was certain the line was vertical, the actual angle of slant was recorded. For each subject, ten trials were completed. To validate the methodology, a sample of 20 young, healthy subjects were assessed. They were found to have a mean estimate of 0.2° anticlockwise and a standard deviation of 1°. This was comparable with results obtained using previously published methods (Kerkhoff and Zoelch 1998).

Twelve hemiplegic stroke patients were assessed. All were inpatients on a Stroke Unit and demonstrated a variety of abilities and problems.

Postural alignment was assessed by sight. Patients were judged as upright or leaning to the left or right, in sitting and standing. Head tilt in sitting was assessed by comparing the alignment of facial features with a grid positioned behind the subject.

Our results show that in this small sample there was a relationship between verticality perception and postural alignment. One patient gave responses indicating poor visualisation of the test display. Two had verticality perception within normal limits (mean scores of 0.2° and 1.2° anticlockwise) and consistently upright trunk and head posture. Four patients estimated vertical as being slanted towards their unaffected side (with mean estimates of 2.4°, 2.9°, 3.9° and 4°) and held their heads tilted in the same direction. Five patients estimated vertical as being slanted towards their hemiplegic side (2.8°, 3.3°, 7.3°, 8.5° and 9.1°) and had both a head tilt and some degree of trunk lean in the same direction. There was no clear relationship between patients' functional abilities and the size of errors made, however, no patient whose estimates deviated more than 40 from true vertical, was able to walk without assistance.

These findings indicate that investigation into patients' spatial

perception may enable an improved understanding of abnormal postural responses.

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THE PODIATRON: AN ADJUNCT TO PHYSIOTHERAPY TREATMENT FOR GBS

Penny Bulley

Introduction

Guillain-Barre syndrome (GBS) is the most common cause of acute neuromuscular paralysis in the developed world (Meythaler 1997). Recovery is seldom complete and during rehabilitation, impairments addressed by physiotherapists include weakness and soft tissue shortening. The podiatron is a motorised variable pitch wobble board. It provides distal and proximal sensorimotor feedback/feedforward to the CNS.

This case report aims to discuss the use of the podiatron as an adjunct to conventional physiotherapy for a patient with GBS.

Setting

The study was completed at Harrowlands Neurological Rehabilitation Unit, Dorking, Surrey.

Subject

Mr J (58 years old) was ten months post onset of GBS and presented with:

- decreased postural control and bilateral soft tissue shortening of hip flexors causing poor alignment in standing
- weakness and decreased range of ankle movement resulting in a high stepping toe-heel gait pattern and no visual evidence of ankle strategy for balance

Method

In conjunction with his usual therapy the podiatron was used for 10mins twice a day for a week. Four outcome measures were used at the beginning and end of the week:

- surface area of the foot not in contact with the ground was calculated in a standardised sitting position by sliding a piece of graph paper under the foot until it reached the medial and lateral border in contact with the ground. This part of the foot was traced around and the surface area calculated
- 10m walk test (Wade et al 1997)
- Timed 'up & go' test (Podsiadlo et al 1991)
- Visual analogue scale measuring confidence in walking (Downie et al 1978)

Results

A 93% improvement was achieved in the surface area of Mr J's right foot in contact with the ground and 63% in his left (less affected) foot. The 10m walk and timed 'up & go' tests showed 9% and 13% improvement respectively. The visual analogue scale improved 44.5%. Eight weeks later his 10m walk time was 0.5secs quicker than the 60-69yrs age group normative value (Wade et al 1987).

Conclusion

The podiatron is a useful adjunct to physiotherapy. After one week's use Mr J's feet were significantly more accepting of their base of support, even though minimal functional improvement was found in the outcome measures used. Further research is needed to further investigate these preliminary results on the podiatron's physiotherapeutic potential in similar patients.

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Further information available from: Penny.Bulley@ukgateway.net

Reviews

DEVELOPMENT OF A REGIONAL SERVICE FOR THOSE WITH AN ACQUIRED BRAIN INJURY; WHAT IS REQUIRED?

UKABIF Regional Conference
Newcastle, 13 June 2001

Susan Pattison MCSP, SRP

UKABIF (UK Acquired Brain Injury Forum) is a charity whose objective is to bring together persons with an interest and commitment to the development and improvement of services for children and adults suffering as a result of acquired brain injury (ABI). Its members are persons with ABI victims, their carers, consultant neurologists, neuro psychologists, therapists, nurses, unit leaders, case managers, solicitors and voluntary organisations such as Headway. This years' regional conference 'Development of a Regional Service for those with an Acquired Injury; What is required?' had many eminent speakers producing an informative and thought provoking day.

Professor David Mendelow, Professor of Neurosurgery at Newcastle, author and lecturer talked about the acute service provision. He gave a demographic overview of the scale of incidence in the population and described with CT scan the various types of ABI, and he also focused on the problem of 'bed blocking' throughout the system. A lead time for surgery from injury being two hours for optimum recovery and over six hours as causing severe disability or death in 90% of cases. In his region the average waiting time for a rehabilitation bed was six weeks. His argument was for an intermediate rehabilitation facility with links to the acute and rehabilitation teams was to prevent unnecessary secondary complications due to delay in the initial surgical interventions or the lack of appropriate trained staff.

Dr Ken Barrett, a consultant neuropsychiatrist and lecturer at Keele University, proposed a 'tongue in cheek' list of how to produce a poor ABI service and emphasised the discrimination that often occurs for those with an ABI. He described ABI as hybrid problem falling between physical and mental health nets, and that discrimination had led to the development of 'neuroethnic' community who were unable to access services. He also challenged the delineation of services and the selection process were ABI services do exist, questioning why persons with sub-arachnoid haemorrhage (SAH) or encephalitis are regularly excluded, as are those with a history of alcohol, drug abuse, learning disability or a previous psychiatric background. He claimed if the same parallels were drawn with race or sex this would not be tolerated.

Dr Neil Brooks, a consultant Neuropsychologist and President of the European Brain Injury Society, and Carol Johnson, Case Manager of 'Rehabilitation Without Walls' led a combined presentation on what makes a good ABI unit.

Dr Brooks presented information from a study that looked at the time allocation of patient and therapists in established ABI units. It was emphasised that these units were not necessarily bad examples, which made the digestion of the figures even more frightening. As little as 28% of patient time was spent directly engaging in treatment activities, and a similar percentage was spent socialising. The largest amount of time was spent alone. Psychology students were introduced as surrogate patients and described their interactions in a diary. They identified their frustration at repeating the same information to a variety of faces and described the anxiety they experienced when not engaged in activity. This produced a feeling of rejection and of 'missing out'. In contrast a similar study looked at the allocation of time by the therapist and only 35% was in direct patient contact, the rest whilst not being under evaluated in importance was spent note writing, at meetings, liaison with colleagues, in case reviews and other non patient contact activities.

He then continued with a thought provoking discussion on the complex social interactions within a rehabilitation unit and its primary function not necessarily being in this world of pressure and limited resources, for the maximum benefit of the patient. He emphasised the need for an active inter-disciplinary team (IDT), but suggested to avoid problems, strong leadership of the IDT was essential. Cathy Johnson continued the presentation with a check list of questions for identifying a suitable unit. She emphasised the need to revaluate this over time, and to be mindful of the influence of, for example the loss of key therapy staff, and the impact of a change in leadership on the quality of service provision. Copies of her paper 'How to Choose and Monitor an Organisation providing Services for the individual with Brain Injury' were provided for delegates.

Professor Micheal Barnes, professor of Neurological Rehabilitation at Newcastle and Clinical Lead at Hunters Moor Rehabilitation Unit, then discussed community based rehabilitation and the provision of long term support. He highlighted the success of the recently established community ABI team in Newcastle in following up all persons identified with an ABI, admitted through A&E. The service was flexible and based on good communication facilitated by a team, and regular contact with Hunters Moor and the Acute Neurosurgical Units.

Dr Camilla Herbert, a consultant clinical Psychologist attempted to unravel the psychological assessment and management of persons with ABI. She highlighted the importance of interpretation of results and assisting others to use these findings to optimise the success of a treatment session.

UKABIF is a young but rapidly expanding organisation now in its fourth year. It offers corporate and individual membership which entitles you to a regular newsletter, update on research and parliamentary developments. UKABIF also run two conferences a year, one London and the other in the regions. For more information UKABIF and future conferences contact: Kate Roxburgh, Royal Putney, West Hill, Putney, London, SW15 3SW or telephone 020 8780 4569.

Incomplete spinal injuries

This is a one day course including the ACPIN AGM on **Saturday 9th March 2002** at the **Hilton Hotel** in **Bristol**. The theme of the conference is the management of incomplete spinal injury. It will include lectures on the secondary changes following SCI and the management of spasm. The role of splinting and orthotics, the recent advances in FES and treadmill training, and the medical management of these patients will all be addressed. Recognised national speakers will be invited to share their knowledge and research with us.

The conference price of £60 for ACPIN members and £75 for non-members includes all lectures, refreshments and lunch.

Further information will be available through ***Frontline*** or via the ACPIN website (**www.acpin.net**) in January.

ACPIN STUDY DAY & AGM
NEUROPHYSIOTHERAPY & INCOMPLETE SPINAL INJURIES

Regional reports

EAST ANGLIA

Louise Dunthorne
Regional Representative

East Anglia has enjoyed having a full committee this year, and we organised our usual day courses rather than more frequent evening sessions during 2001. This proves more satisfactory, with better attendance and some good feedback from members.

In March we held our AGM and Martin Watson guided us through ways to bring research into every day clinical practice.

In May Wendy Hendrie ran an excellent study morning, updating us on the current management of Multiple Sclerosis including the use of Botulinum Toxin and insight into how much compliance there is with prescribed exercises!

Other planned events include a study afternoon exploring 'SMART' which is an assessment tool used at The Royal Hospital for Neurodisability, Putney for investigating Persistent Vegatative State. Also in early November Martine Naidler will be running a study day on Neuroplasticity at Ipswich Hospital, which is bound to get our brains working!

Membership stands at around 40, and we always welcome new members, or correspondence from existing members about topics they would like to see covered by the study days.

Do contact any of the committee members with any ideas and don't forget to renew your membership at the end of the year!!

KENT

Janice Champion
Regional Representative

Last year KENT region held an evening lecture in November at the William Harvey Hospital in Ashford. The subject was 'Muscle Imbalance in the Upper Quadrant' by Stuart Hide MCSP and was very well attended. An opening theoretical session was followed by practical time looking at each other which was enjoyed by all.

We held our AGM in March at Maidstone Hospital where Gay Slater a member of ACPIRT gave a lecture and practical demonstration of reflexology.

Our aims for the forthcoming year are to improve the networking of the 'neurophysios' in the region and to support the professional development of our members by providing informative and thought provoking meetings and study days. We are looking for interested members to join the Committee and help us to plan future meetings.

This years programme is still in the planning stage, however we hope to hold a day course on FES and also on MS.

LONDON

Anne McDonnell
Regional Representative

London ACPIN currently has 190 members, and attendance has been good for the majority of the lectures.

Lectures this year have included: Acute stroke management; management of Conversion disorders; Current trends in the management of Multiple Sclerosis; Pilates; Contracture management and 'Why arms don't recover after stroke'. We have had one study morning, which generated some very good discussions, on 'Exercise in Neurology', with speakers discussing their research, which attracted 60 members.

Members will receive a programme for 2002, on renewal of their ACPIN membership in January. If you have any suggestions for lectures/courses, please contact any member of the London committee. Provisional dates for 2002 are:

- 15.01.02 *Different Strokes* Royal Free Hospital
- 12.02.02 TBA and held at St Thomas' Hospital
- 12.03.02 Martine Nadler to speak at the National Hospital for Neurology and Neurosurgery.

MANCHESTER

Louise Rogerson
Regional Representative

This year has been another successful year for Manchester ACPIN. The AGM was held in March, and the committee is now complete with all posts filled for the first time in a few years.

The lecture programme has included Parkinson's disease and medication, splinting in neurology, and a neurophysiology update. We have had good attendance at virtually all the lectures so far, and we would like to take this opportunity to thank all the speakers. We have introduced evaluation forms at the lectures, and the feedback has been very good. The evaluation forms have been comprehensively completed by all those attending the lecture including some excellent suggestions for next years programme, thank you. As yet the programme for next year is only in its earliest forms, but we will have met in October to put together a first draft.

We have also introduced the use of reflective learning prompt sheets printed on the back of the lecture fliers. It is hoped that these will help members to make the most of the lectures, and will provide evidence for continued professional development diaries.

One disappointment for this year was the lack of interest in the critical evaluation course causing it to be cancelled. Hopefully we will be able to arrange another course in the coming year on a more popular subject!

In the latter part of the year we have had a patient demonstration (October), and an open forum on manual handling (November).

MERSEYSIDE

Elizabeth Self
Regional Representative

The committee would like to thank all our members and speakers during the initial months of 2001 for their support and extend our thanks once more to Sharon Williams.

We have a healthy and active committee of 11 and our membership is 45. Towards the latter half of last year our numbers attending the lectures became very low. As a committee we assembled a questionnaire. Variety of reasons for poor attendance:

- Difficulty with child care
- Time of Lectures
- Location
- Tiring after a busy day
- Travel

In light of these results we wrote to therapy managers to consider releasing some staff for half-day study days. Feedback was positive and we are aiming to provide three half day study days and three evening lectures each year with a variety of times and locations.

The highlight of this year's program was sensory rehabilitation presented by Claire Fraser. Other lectures included Strapping techniques and Update in Rheumatology. Forthcoming events include:

- October *Workshop with Sharon Williams*
- November *Incontinence*
- January *Parkinson's* study half day

NORTHERN

Julia Williamson
Regional Representative

I would like to start by thanking Gill Emond for all her stalwart work with ACPIN over the years. Gill has contributed in many ways to the success of the Northern. branch, both as a regular contributor to *Synapse*, course organiser and regional rep. We wish her all the best for her latest venture abroad.

Events-wise things have been brisk with something nearly every month. Topics have ranged from 'Psychological Issues following traumatic brain injury' to 'NAGS and SNAGS for neurophysios' and have drawn good sized audiences for our evening lectures. Courses have also been well-attended especially a gym-ball course with Janice Champion and a senior staff study day (try saying that too quickly) with Mary Lynch-Ellerington.

The year is far from over though, and we have further evening lectures, this time exploring the role of Alternative Therapies and Acupuncture in the treatment of the neurological patient (watch-out for flyers coming soon). The next course will be Neurophysiology and Trophic Stimulation with Nigel Lawes and Diana Farragher, definitely one not to miss.

Finally, the Committee are always keen to hear about ideas for courses, so if anyone wants anything specific, just let us know.

NORTHERN IRELAND

Siobhoan Mac Auley
Regional Representative

The Northern Ireland region has had a busy start to the year with a variety of lectures which have been well attended. These have included Ralph Hammond speaking on 'Outcome Measures', Siobhan Mac Auley on 'Orthotics for the Neurologically Impaired Patient', Rita Walls on 'Why Treatment Works', and a very interesting meeting on 'Therapeutic Handling versus Manual Handling'. The autumn diary has included topics on 'Goal setting' with Suzanne Maguire and a practical session in October run by Carrie Spence.The final event in November will be a weekend course on 'Low tone'.

The diary for 2002 will be confirmed later in the year. However we welcome any suggestions we would also like to take this opportunity to remind everyone to renew their membership in January and that this is no longer by direct debit.

NORTH TRENT

Steve Cheslett
Regional Representative

This is my final regional report as I am handing over my post to Alex Morley and I will be in Denver, Colorado when you read this !

2001 has been a relatively quiet year so far with three evening events with members giving feedback from CSP Congress and the Moving and Handling conference (alongside the AGM) and a lecture on her MSc project on midline and balance by Nicki Snowdon. Two day courses have also taken place: Nigel Lawes discussed the cerebellum and the basal ganglia and Liz Mackay presented a course on muscle imbalance. Planned events for the rest of the year include a lecture by a clinical psychologist and a December Social event.

Membership stands at 41 at present.

I have enjoyed being North Trent representative enormously and hope Alex will enjoy it as much. Please give her feedback and support in her new role!

New Regional Representative
Alex Morley
Physiotherapy
Sheffield Hallam University
Collegiate Crescent
Sheffield
Telephone: 01302 2252239

OXFORD

Jo Forrest
Chair

This year has been a good year for Oxford ACPIN with a membership of 48. There has been good attendance at our monthly meetings. The programme has covered a wide range of topics including posture and posture management, wheelchair ergonomics, and most notably our AGM was accompanied by a thought provoking lecture on 'Neurophysiotherapy into the 21st Century' given by Sue Edwards.

This year's programme will finish with a Patient Practical led by Lou Gatehouse, Charlie Winwood and John Graham, and our final lecture on 'How can we make Assistive and Augmentative Communication work for Adults' will be on November 14th at 7.30pm, at the Rivermead Rehabilitation Centre, Oxford.

There have been several recent changes within the branch committee, as such we say goodbye to Nicky Sharman and wish her well for her future adventures, and we welcome Alison Richards to the post of Treasurer and Liz Lewis to the committee. However, we still require committee members and the post of Regional Representative remains vacant, so please consider joining. A few hours a year is all it takes and many hands make light work!

Some ideas for the 2002 programme include: MS – Cannabis Trial Research, Constraint therapy, patient practicals, Pilates, and a joint ACPIN/NANOT study day on stroke rehabilitation. Any more suggestions are very welcome, so please let us know!

SCOTLAND

Emma Forbes
Regional Representative

The membership now stands at a healthy 89 members but new members are always required.

Our AGM in May saw two committee members resigning and another since so I take this opportunity to thank Sarah McFarlane, Sandra Linn and Lesley Mill for their work and support. Wendy Juner has taken over the role of treasurer and we welcome three new members to the committee, Lorna Melville, Paula Cowan and Catherine Graham.

The AGM was held in Perth Royal Infirmary and ran in conjunction with a study day on 'Perception and Cognition'. Speaking at the study day were two local Occupational Therapists. The study day was interactive and personally enlightening, I believe!

In November our final study day of the year will be held in Ninewells Hospital, Dundee and the topic will be MND. Dates are to be confirmed. Speaking will be a local consultant, speech therapist, specialist nurse and John Innes, Senior Physiotherapist at Ninewells, will be speaking on current physiotherapy issues. All details are available on the ACPIN website.

We are in discussion for next years programme and are hopeful that Debbie Strang will be available to lead a workshop. Also, ideas surrounding goal setting and motor relearning are being considered. All suggestions for study would be gratefully received then, we can be sure we are giving our membership appropriate learning topics.

SOUTH TRENT

Linda Cargill
Regional Representative

The current membership stands at 31. Simon Mockett has just stepped down from the committee, so thank you to him for his work over the last few years. We are always looking for new members, especially from Leicester, so if anyone is interested please contact any of the committee.

So far this year the programme of events has run smoothly with reasonable attendance at all events, although we are always keen to see new faces. We have had mainly evening lectures and one weekend course. Evening lectures have included: Ruth Parry speaking about how physiotherapists should communicate with their patients; Wendy Collingwood presenting the results of her research into the implications of MRI scanning on motor recovery post stroke; Val Hopwood speaking about the use of acupuncture with neurological patients and Lynn Juby speaking about the use of outcome measures in neurology. A weekend course was led by Lynn Fletcher and was on the assessment and treatment of ataxia in MS. It was well attended and had a good mixture of theory, practical and patient demonstrations.

The programme for the next year is almost complete, we are just finalising some dates. We are going for a mixture of evening lectures and weekend days in the hope that this will suit everyone. Future events include:

- November 24th *Practical day on how to communicate with stroke patients led by Ruth Parry*
- February 2002 *Practical day on washing and dressing with stroke patients led by Erica Malcolm*
- March 2002 *Advances in medical management of stroke presented by Tom Robinson, Evening lecture and AGM*
- April 2002 *Evening lecture on vestibular rehabilitation led by Andrew King*

Other plans include a study day with Nigel Lawes, practical workshops on the hip/shoulder complex and an evening lecture on movement dysfunctions. If anyone has any comments or suggestions please contact any of the committee.

SOUTH WEST

Gina Sargent
Regional Representative

In 2001 we started the year successfully with an interesting lecture by a stroke coordinator, followed by the AGM. We have run two half day courses, the first of which was 'Evidenced Based practice' by Bridgit Pearce, and the second on 'Protocols for presenting case studies' which was feedback from the Bobath memorial workshop. Attendance was varied, with communication to the members being a problem, and the committee are looking at this for next year.

We would like to recommend to other regions a course that was held in July, 'A BBTA problem solving workshop-Trunk Stability' with Alan Bass. All who attended found it informative, challenging and applicable to their current practice.

Our next one-day course will now be in April 2002, as it has expanded from the initial programme. It is entitled 'Pain-the management of and implications to Neurophysiotherapy'. Watch out in Frontline for further details.

Again we are appealing for committee members from further afield. The South West covers a large area and the committee are keen to be mobile for meetings and courses. We are currently planning next years programme and would like to hear of any suggestions from the members. Please contact myself (see above) or Jeannie Oakley (secretary) on 01394 884574.

Please support your local ACPIN and come to the meetings and courses. I would like to finish with a big 'thank you' to the committee - please join us; its good fun really!

SUSSEX

Naomi Jones
Regional Representative

This past year has generally seen an improvement in the 'activity' and 'support' for Sussex ACPIN. The committee (now full!) continues to work hard, and has produced a good programme for the coming year for Sussex members.

Helen Constantine conducted a half-day workshop on the 'Vestibulo-spinal system' in April, which proved very successful, provoking much discussion on issues concerning balance and posture. In June, Val Hopwood presented a very informative evening lecture on acupuncture in Neurology' which again received much support. In November there is a talk by the Guillaine Barre support group, and future plans include the AGM and study day in 2002.

Sussex ACPIN will soon be asked to review an article for *Synapse*, and all members have been sent a memo requesting their interest and support for this. Currently, membership stands at 39.

WEST MIDLANDS

Kate Duffield
Regional Representative

2001 has been a very busy year for West Midlands ACPIN. Each study day has been well attended and successfully organised. The committee now has 16 members enabling division of roles and workload, and membership has risen this year to 87.

Courses this year have included: Muscle imbalance with Liz Mackay, Communication problems with Nina Clarke, FES with Christine Singleton, Muscle imbalance (lower limb) with Liz Mackay, and Pilates with Kate Fernyhough.

We are currently arranging the next year, which includes:

- February 16 2002 *Acupuncture* Val Hopwood FCSP
- April 6/7 2002 *Neurology Workshop* Lynne Fletcher followed by AGM
- June 2002 *Motor Relearning Study Day*

We hope the timetable is addressing the interests and needs of its members and should you have any ideas for future lectures and venues we would be most interested to here from you.

I would like to take this opportunity to say thank you to all the committee members for their hard work and commitment to West Midlands ACPIN, and to thank the regional membership for their ongoing support.

YORKSHIRE

Anne-Marie Knowles
Regional Representative

On behalf of the membership I would like to thank Sally Bowles for all her hard work as regional representative and to thank all the committee members for their commitment to producing a stimulating and wide- ranging programme for ACPIN members in the region.

Yorkshire ACPIN currently has 85 members and at the AGM held in May it was agreed that the membership wishes to continue with the existing format of evening lectures, study days and short courses.

The issue of funding members to attend courses was also discussed. It was agreed that the present arrangements, whereby Yorkshire ACPIN study days and short courses which are open to larger numbers of participants are subsidised, would continue.

The autumn programme has included lectures by Alan Bass on 'The upper limb and the corticospinal tracts', and Liz McKay on 'Neuromuscular stability in relation to posture and balance'

The committee is now planning the programme for 2002 and provisional arrangements have been made for a two day course in January on 'Musculoskeletal issues for neurological physiotherapists', Heather McGibbon (tbc), and in February an evening lecture by Mary Lynch-Ellerington (tbc). Other possible future topics include apraxia and Pilates.

Please contact any of the committee members if you have any requests or ideas for the programme in 2002.

Letters

Acknowledegement of work by Hunters Moor Regional Neurological Rehabilitation Centre. Correspondance received:

Northgate & Prudhoe NHS Trust,
Physiotherapy Department,
Regional Neurological
Rehabilitation Centre,
Hunters Moor Hospital
Hunters Road,
Newcastle upon Tyne,
NE2 4NR

12 June 2001

Dear Anthea,
Re: *Guidance on Manual Handling in Treatment*

Along with my colleagues at the Regional Neurological Rehabilitation Centre at Hunters Moor I was pleased to receive the long awaited National ACPIN manual handling document.

We were pleasantly surprised to see the guidelines for 'selection of transfer method within rehabilitation', which were criteria taken directly from the Centres' Minimal Handling Policy (1997). However, reading through the documentation there was no reference made to the authorship (Hunters Moor) of this work within the text.

The acknowledgements suggest that St George's Healthcare Trust were responsible for this as well as other protocols within the document. A great deal of work over a period of time was put into the development of this aspect of our Minimal Handling Policy by our Multi-Disciplinary Team, and especially Lesley Yule. It would appear that the work has been taken verbatim and as such recognition of ownership should have been stated. Although there was a general thank you for 'other ACPIN members that shared information' I feel this is insufficient in this case when such large and important aspects of the document have been quoted.

My colleagues and I are more than willing to share aspects of our practice in the development of professional standards, however it is discouraging when work provided is not recognised.

I look forward to receiving your reply on this matter.

Yours sincerely,
Sue Raine MCSP, SRP

Anthea Dendy,
Vice Chairperson ACPIN,
Physiotherapy Department,
St George's Hospital NHS
Healthcare Trust,
Tooting,
London.

18 June 2001

Dear Sue,
Re: *Guidance on Manual Handling in Treatment*

I am writing in response to your letter, dated 12 June 2001, which I received today and have discussed with Linzie Bassestt, Chair ACPIN. I wish to outline the process by which the ACPIN document was produced and therefore how and why the oversight has occurred of Hunters Moor not being specifically acknowledged.

In late 1997 a member of staff from Hunters Moor gave one of my colleagues, within St George's Healthcare (SGH) Trust, a copy of work they had completed to use as a basis for the development of the ACPIN pilot pack. Unfortunately the response was limited. At that time I gave the group the SGH policy in its entirety to utilise, and the table and supporting protocols became an integral part of the pilot pack. The original document from your department did not form part of the working party's resources. We did however at that time receive a copy of a form entitled *Minimal Handling Procedures* from Hunters Moor, which did form part of the resource pack but was not used. Within our own document, although it is referenced, we have not included acknowledgement of the source of the table, so as development of the ACPIN document has continued the original source reference has been lost.

The pilot pack was used by Regional Groups to form local policies which are included in the final publication. Some of these cross reference to the table. These inclusions are titled to specific departments rather than regional groups as they form part of specific department policies since their production.

In the final format of the document the table was modified by our graphic designer into its current format on page 14.

I can only an extend an apology to yourself and your colleagues for this oversight, for which I take personal responsibility. I can assure you that it was not my intention to in any way take credit for work done by others and publicise it as being our own from SGH. We are obviously unable to change the document now it has been published so I would like to suggest a couple of alternatives to allow your work to be acknowledged.

We are confident that we will receive some correspondence following publication and will probably have a section including this and ACPIN's response in the next *Synapse*. An acknowledgement to Hunters Moor can be included in this section of the next *Synapse* (Autumn 2001). If you would prefer copies of your letter and this response could be included

To date copies of the document have been distributed free to all ACPIN members. As you can imagine its production has been heavily subsidised. We are therefore charging £2.50 plus p&p to people who are not members but, who would like a copy, to recoup some production costs. ACPIN will not be making any profit from the document.

I hope the above fully explains how this oversight has occurred and that you can pass on my personal apologies, and apologies on behalf of ACPIN. I would be grateful if you could write back to me to indicate which alternative you would prefer us to use to allow Hunters Moor to be acknowledged.

Yours sincerely,
Anthea Dendy

Northgate & Prudhoe NHS Trust,
Physiotherapy Department,
Regional Neurological
Rehabilitation Centre,
Hunters Moor Hospital
Hunters Road,
Newcastle upon Tyne,
NE2 4NR

19 July 2001

Dear Anthea,
Re: *Guidance on Manual Handling in Treatment*

Thank you for your prompt reply and apology regarding the publishing of the above document and lack of acknowledgement to the Regional Neurological Rehabilitation Centre at Hunters Moor.

I have discussed your reply with my colleagues and following this it was decided that we would like copies of the letters to be published in the next issue of *Synapse*.

In addition to this we would like the assurance of the following:

1. A note describing the erratum including acknowledgement to be enclosed in any copies of the document still to be distributed.
2. The acknowledgement to be included in any re-prints of the document.
3. Any teaching material in addition to handouts used by yourself or your colleagues to include a written reference for the work.

I hope that the publication of the letters may highlight to others the importance and significance of ownership of work for the producer in addition to the responsibilities of the user. I would like to think that it would not further discourage people from sharing work but to enhance the process where professionals are given the recognition they deserve.

Yours sincerely,
Sue Raine MCSP, SRP

Anthea Dendy,
Vice Chairperson ACPIN,
Physiotherapy Department,
St George's Hospital NHS
Healthcare Trust,
Tooting,
London.

31 July 2001

Dear Sue,
Re: *Guidance on Manual Handling in Treatment*

Thank you for your letter dated 19th July 2001 which was read and discussed at the ACPIN Executive Committee meeting last week.

Following this discussion we have agreed that it would be appropriate to place a loose paper insert into any copies of the document distributed in the future. If and when the document is revised the reference to your original document will be included on the relevant page. Any teaching materials used in the future will also carry the same reference.

The original document given to my colleague in 1997 which I have does not carry a reference or the title of the full document from which it was taken. We would be grateful therefore if you could send us the exact reference for the original document. The note will be similar to the following format which Kevin Wade the graphic designer for the document will design. 'The above table was adapted from…'

I would be grateful if you could reply either to myself or directly to Ros Wade our *Synapse* Co-ordinator so that we can ensure all the relevant letters and the correct reference are included in the Autumn edition of *Synapse*. The cut off date for inclusion is 20 August. I will obviously forward Ros copies of relevant correspondence to date.

Yours sincerely,
Anthea Dendy

Northgate & Prudhoe NHS Trust,
Physiotherapy Department,
Regional Neurological
Rehabilitation Centre,
Hunters Moor Hospital
Hunters Road,
Newcastle upon Tyne,
NE2 4NR

19 July 2001
(*Received by ACPIN 17/8/01*)

Dear Anthea,
Re: *Guidance on Manual Handling in Treatment*

Thank you for your latest reply regarding the above document. The final draught of the Hunters Moor document showing the table information used in the National ACPIN guidelines can be referenced as: 'Regional Neurological Rehabilitation Centre-Hunters Moor (RNRC-HM) Minimal Handling Guidelines 1998. Produced by RNRC-HM multi-disciplinary team working party.'

Thank you for the attention that you have given this matter. If you require any further information please contact me at the above address.

Yours sincerely,
Sue Raine MCSP, SRP

Guidelines for authors

FOR AUTHORS IN *SYNAPSE*

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

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

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

Review paper
A critical appraisal of primary source material on a specific topic related to neurology.

Treatment report/case studies
A report of the treatment of a patient or series of patients which provides a base line description of established treatments, or a new insight into the techniques or treatment of people with a specific problem.

Service development quality assurance report
A report of changes in service delivery aimed at improving quality.

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

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

Product news
A short appraisal of up to 500 words, used to bring new or redesigned equipment to the notice of the readers. ACPIN and *Synapse* take no responsibility for these assessments, it is not an endorsement of the equipment. If an official trial has been carried out this should be presented as a technical evaluation.

Points of view
Articles discussing issues of contemporary interest and any other matters relating to neurological physiotherapy.

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

Copy should be:
- typed or printed
- double spaced
- on one-sided A4 paper with at least a 1" margin all round
- consecutively numbered
- include the name, qualifications, current position, and contact address of the author(s).
- Ideally, a disk copy of the material should also be included. Documents preferred in Microsoft Word for Macintosh or Windows.

References should use the Harvard system. In the text quote the author(s) surname and date (Bloggs 1994). At the end of the article give the full references with the first author/editors name in alphabetical order, eg:
Bloggs A (1994). *The use of bandages in the treatment of people with head injuries* Physiotherapy 67, 3, pp56-58.

Tables and figures should be given appropriate titles and numbered consecutively as they appear in the text. Each should be presented on separate sheets of paper after the text.

Any **photographs** and **line drawings** should be in black and white, in sharp focus with good contrast and at least 5" x 7".

Two copies of each article should be sent to:
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Note: all material submitted to the administrator is normally acknowledged within two weeks of receipt.

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