Background. Since 2007 we focused our attention as EJPRM to the best available clinical evidence offered by the Cochrane Collaboration. Due to the absence of a specific Rehabilitation Group (only a field exists), reviews of PRM interest are in different groups and not easy to find. Consequently, the EJPRM lists and presents all these reviews systematically.

Aim. The aim of the present paper is to systematically review all the new rehabilitation papers published in the Cochrane Library 4th Issue 2009 in order to provide to physicians involved in the field a summary of the best evidence nowadays available.

Methods. The author systematically searched all the new papers of rehabilitative interest in the Cochrane Library 4th Issue 2009. The retrieved papers have been divided in subgroups on the base of the topic and the Cochrane Groups.

Results. The number of included papers was 19: 11 were new reviews. Three new reviews deal with neurological rehabilitation, 6 with musculoskeletal disorders, 3 with pain management. Moreover, 8 reviews have been updated: 4 related to musculoskeletal disorders, 2 to neurological disorders, and 1 to respiratory rehabilitation. All these are listed at the end of the paper.

Conclusion. The Cochrane Collaboration and its product, the Cochrane Library, are really relevant instruments to improve EBM in medical practice and thus also in the Rehabilitation Field. The present paper can help Rehabilitation Specialists to easily retrieve the conclusions of the most relevant and updated reviews in order to change their clinical practice in a more rapid and effective way.

KEY WORDS: Rehabilitation - Physician’s practice patterns - Nervous system diseases.

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The number of papers about rehabilitation has been growing up quite quickly during the last years. Sometimes results are discordant, others are based on small population, thus limiting the strength of the findings. The best way to obviate to these problems and to synthesize results driving clinical indications is to perform systematic reviews on high interest topic. This is the main aim of the Cochrane Collaboration, so that today the Cochrane reviews are considered the most reliable instruments of synthesis. In order to present to our readers the best available evidence in the field of rehabilitation, we continuously perform systematic reviews of the articles regularly published in the Cochrane Library.

In the present article readers can find a list of papers of rehabilitative interest systematically researched and reviewed from the 4th Issue of 2009. At the end of the paper, a list of all the existing systematic reviews of rehabilitation interest is reported.

Materials and methods

The author systematically searched all the new reviews of rehabilitative interest published in the 4th Issue 2009 of the Cochrane Library. Papers have been divided in subgroups, according to their topic. We also continue the update of the list of reviews of inter-
est for PRM specialists in Appendix I that was first published in 2007.1 All new papers have been added to the list of Cochrane reviews of PRM interest, while the withdrawn reviews have been cancelled.

Results

We included 19 papers: 11 of these were new reviews. Three new reviews deal with neurological rehabilitation, 6 with musculoskeletal disorders, 3 with pain management. Moreover, 8 reviews have been updated: 4 related to musculoskeletal disorders, 2 to neurological disorders, and 1 to respiratory rehabilitation. All these are listed at the end of the paper.

The author will find the main results of each single review in the following paragraphs, being the reviews divided into “New” and “Updated”, and further according to the topic and the Cochrane Group.

New reviews

Musculoskeletal rehabilitation

Multidisciplinary rehabilitation for older people with hip fractures.—The 13 included trials involved 2,498 elderly, usually female patients, who had undergone hip fracture surgery.2 Though generally well conducted, some trials were at risk of bias due to imbalances in key baseline characteristics.

There was substantial clinical heterogeneity in the trial interventions and populations. Multidisciplinary rehabilitation was provided primarily in an inpatient setting in 11 trials. Pooled results showed no statistically significant difference between intervention and control groups for poor outcome (risk ratio 0.89; 95% confidence interval 0.78 to 1.01), mortality (risk ratio 0.90, 95% confidence interval 0.76 to 1.07) or hospital readmission. Individual trials found better results, often short-term only, in the intervention group for activities of daily living and mobility. There was considerable heterogeneity in length of stay and cost data. Three trials reporting carer burden showed no evidence of detrimental effect from the intervention. Overall, the evidence indicates that multidisciplinary rehabilitation is not harmful.

The trial comparing primarily home-based multidisciplinary rehabilitation with usual inpatient care found marginally improved function and a clinically significantly lower burden for carers in the intervention group. Participants of this group had shorter hospital stays, but longer periods of rehabilitation. One trial found no significant effect from doubling the number of weekly contacts at the patient’s home from a multidisciplinary rehabilitation team.

While there was a tendency to a better overall result in patients receiving multidisciplinary inpatient rehabilitation, these results were not statistically significant. Future trials of multidisciplinary rehabilitation should aim to establish both effectiveness and cost effectiveness of multidisciplinary rehabilitation overall, rather than evaluate its components.

Dynamic exercise programs (aerobic capacity and/or muscle strength training) in patients with rheumatoid arthritis.—A total of eight studies was included in this updated review (two additional studies).4 Four of the eight studies fulfilled at least 8/10 methodological criteria. In this updated review four different dynamic exercise programs were found: 1) short-term, land-based aerobic capacity training,
whose results show moderate evidence for a positive effect on aerobic capacity (pooled effect size 0.99 [95% CI 0.29 to 1.68]); 2) short-term, land-based aerobic capacity and muscle strength training, whose results show moderate evidence for a positive effect on aerobic capacity and muscle strength (pooled effect size 0.47 [95% CI 0.01 to 0.93]); 3) short-term, water-based aerobic capacity training, whose results show limited evidence for a positive effect on functional ability and aerobic capacity; 4) long-term, land-based aerobic capacity and muscle strength training, whose results show moderate evidence for a positive effect on aerobic capacity and muscle strength. With respect to safety, no deleterious effects were found in any of the included studies.

Based on the evidence, aerobic capacity training combined with muscle strength training is recommended as routine practice in patients with RA.

Doxycycline for osteoarthritis of the knee or hip.— We found one randomised controlled trial that compared doxycycline with placebo in 431 obese women.5 After 30 months of treatment, clinical outcomes were similar between the two treatment groups, with a mean difference of -0.20 cm (95% confidence interval [CI] -0.77 to 0.37 cm) on a visual analogue scale from 0 to 10 cm for pain and -1.10 units (95% CI -3.86 to 1.66) for function on the WOMAC disability subscale, which ranges from 17 to 85. These differences correspond to clinically irrelevant effect sizes of -0.08 and -0.09 standard deviation units for pain and function, respectively. The difference in changes in minimum joint space narrowing was in favour of doxycycline (-0.15 mm, 95% CI -0.28 to -0.02 mm), which corresponds to a small effect size of -0.23 standard deviation units. More patients withdrew from the doxycycline group compared with placebo due to adverse events (risk ratio 1.69, 95% CI 1.03 to 2.75).

The symptomatic benefit of doxycycline is minimal to non-existent. The small benefit in terms of joint space narrowing is of questionable clinical relevance and outweighed by safety problems. Doxycycline should not be recommended for the treatment of osteoarthritis of the knee or hip.

Oral or transdermal opioids for osteoarthritis of the knee or hip.— Ten trials with 2268 participants were included.6 Oral codeine was studied in three trials, transdermal fentanyl and oral morphine in one trial each, oral oxycodone in four, and oral oxymorphone in two trials. Overall, opioids were more effective than control interventions in terms of pain relief (SMD -0.36, 95% CI -0.47 to -0.26) and improvement of function (SMD -0.33, 95% CI -0.45 to -0.21). We did not find substantial differences in effects according to type of opioid, analgesic potency (strong or weak), daily dose, duration of treatment or follow-up, methodological quality of trials, and type of funding. Adverse events were more frequent in patients receiving opioids compared to control. The pooled risk ratio was 1.55 (95% CI 1.41 to 1.70) for any adverse event (4 trials), 4.05 (95% CI 3.06 to 5.38) for dropouts due to adverse events (10 trials), and 3.35 (95% CI 0.83 to 13.56) for serious adverse events (2 trials). Withdrawal symptoms were more severe after fentanyl treatment compared to placebo (SMD 0.60, 95% CI 0.42 to 0.79; 1 trial).

The small to moderate beneficial effects of non-tramadol opioids are outweighed by large increases in the risk of adverse events. Non-tramadol opioids should, therefore, not be routinely used, even if osteoarthritic pain is severe.

S-Adenosylmethionine (SAMe) for osteoarthritis of the knee or hip.— Four trials including 656 patients were included in the systematic review, all compared S-Adenosylmethionine (SAMe) with placebo.7 The methodological quality and the quality of reporting were poor. For pain, the analysis indicated a small SMD of -0.17 (95% CI -0.34 to 0.01), corresponding to a difference in pain scores between SAMe and placebo of 0.4 cm on a 10 cm VAS, with no between trial heterogeneity (I2=0). For function, the analysis suggested a SMD of 0.02 (95% CI -0.68 to 0.71) with a moderate degree of between-trial heterogeneity (I2=54%). The meta-analyses of the number of patients experiencing any adverse event, and withdrawals or drop-outs due to adverse events, resulted in relative risks of 1.27 (95% CI 0.94 to 1.71) and 0.94 (95% CI 0.48 to 1.86), respectively, but confidence intervals were wide and tests for overall effect were not significant. No trial provided information concerning the occurrence of serious adverse events.

The current systematic review is inconclusive, hampered by the inclusion of mainly small trials of questionable quality. The effects of SAMe on both pain and function may be potentially clinically relevant and, although effects are expected to be small, deserve further clinical evaluation in adequately sized randomised, parallel-group trials in patients with knee or hip osteoarthritis. Meanwhile, routine use of SAMe should not be advised.
Psychosocial interventions for the prevention of disability following traumatic physical injury. — Five studies were included, involving 756 participants. Three studies assessed the effect of brief psychological therapies, one assessed the impact of a self-help booklet, and one the effect of collaborative care. The disparate nature of the trials covering different patient populations, interventions and outcomes meant that it was not possible to pool data meaningfully across studies. There was no evidence of a protective effect of brief psychological therapy or educational booklets on preventing disability. There was evidence from one trial of a reduction in both post-traumatic stress disorder (PTSD) and depressive symptoms one month after injury in those who received a collaborative care intervention combined with a brief psycho-educational intervention, however this was not retained at follow up. Overall mental health status was the only disability outcome affected by any intervention. In three trials the psychosocial intervention had a detrimental effect on the mental health status of patients.

This review provides no convincing evidence of the effectiveness of psychosocial interventions for the prevention of disability following traumatic physical injury. Taken together, our findings cannot be considered as supporting the provision of psychosocial interventions to prevent aspects of disability arising from physical injury. However, these conclusions are based on a small number of disparate trials with small to moderate sample sizes and are therefore necessarily cautious. More research, using larger sample sizes, and similar interventions and patient populations to enable pooling of results, is needed before these findings can be confirmed.

Neurological rehabilitation

Constraint-induced movement therapy for upper extremities in stroke patients. — The authors included 19 studies involving 619 participants. The trials included participants who had some residual motor power of the paretic arm, the potential for further motor recovery and with limited pain or spasticity, but tended to use the limb little if at all. Only five studies had adequate allocation concealment. The majority of studies were underpowered (median number of included patients was 15) and we cannot rule out small-trial bias. Six trials (184 patients) assessed disability immediately after the intervention, indicating a significant standard mean difference (SMD) of 0.36, 95% confidence interval (CI) 0.06 to 0.65. For the most frequently reported outcome, arm motor function (11 studies involving 373 patients), the SMD was 0.72 (95% CI 0.32 to 1.12). There were only two studies that explored disability improvement after a few months of follow-up and found no significant difference, SMD -0.07 (95% CI -0.53 to 0.40).

Constraint-induced movement therapy is a multifaceted intervention: the restriction to the normal limb is accompanied by a certain amount of exercise of the appropriate quality. It is associated with a moderate reduction in disability assessed at the end of the treatment period. However, for disability measured some months after the end of treatment, there was no evidence of persisting benefit. Further randomised trials, with larger sample sizes and longer follow up, are justified.

Magnetic resonance imaging versus computed tomography for detection of acute vascular lesions in patients presenting with stroke symptoms. — Eight studies with a total of 308 participants met our inclusion criteria. Seven studies contributed to the assessment of ischemic stroke and two studies to the assessment of hemorrhagic stroke. The spectrum of patients was relatively narrow in all studies, sample sizes were small, there was substantial incorporation bias, and blinding procedures were often incomplete. Amongst the patients subsequently confirmed to have acute ischemic stroke (161/226), the summary estimates for diffusion-weighted MRI were: sensitivity 0.99 (95% CI 0.23 to 1.00), specificity 0.92 (95% CI 0.83 to 0.97). The summary estimates for CT were: sensitivity 0.39 (95% CI 0.16 to 0.69), specificity 1.00 (95% CI 0.94 to 1.00). The two studies on hemorrhagic stroke reported high estimates for diffusion-weighted and gradient-echo sequences but had inconsistent reference standards. We did not calculate overall estimates for these two studies. We were not able to assess practicality or cost-effectiveness issues.

Diffusion-weighted MRI appears to be more sensitive than CT for the early detection of ischemic stroke in highly selected patients. However, the variability in the quality of included studies and the presence of spectrum and incorporation biases render the reliability and generalization of observed results questionable. Furthermore, well-designed studies without method-
ological biases, in more representative patient samples, with practicality and cost estimates, are now needed to determine which patients should undergo MRI and which CT in suspected acute stroke.

**COCHRANE NEUROMUSCULAR DISEASE GROUP**

Duloxetine for treating painful neuropathy or chronic pain.—Six trials were included, identifying 2,220 participants. Three studies included participants with painful diabetic neuropathy and three treated participants with fibromyalgia. Duloxetine at 60 mg daily is effective in treating painful diabetic peripheral neuropathy in the short-term to 12 weeks with a risk ratio (RR) for 50% pain reduction at 12 weeks of 1.65 (95% confidence interval [CI] 1.34 to 2.03), number needed to treat (NNT) 6 (95% CI 5 to 10). Duloxetine at 60 mg daily is also effective in fibromyalgia over 12 weeks (RR 50% reduction in pain 1.57, 95% CI 1.20 to 2.06; NNT 8, 95% CI 5 to 17) and 28 weeks (RR 1.58, 95% CI 1.10 to 2.27). Adverse events were common in both treatment and placebo arms but more common in the treatment arm with a dose dependent effect. Most side effects were minor, but 16% of participants stopped the drug because of side effects. Serious adverse events were rare.

There is moderately strong evidence that duloxetine 60 mg and 120 mg daily are efficacious for treating pain in diabetic peripheral neuropathy and fibromyalgia, but 20 mg daily is not. Minor side effects are common at therapeutic doses but serious side effects are rare. Direct comparisons of duloxetine with other antidepressants and with other drugs already shown to be efficacious in neuropathic pain would be appropriate and should include unbiased economic analyses.

**COCHRANE MOVEMENT DISORDERS GROUP**

Speech therapy for children with dysarthria acquired before three years of age.—No randomised controlled trials or group studies were identified. No firm evidence of the effectiveness of speech and language therapy to improve the speech of children with early acquired dysarthria was found. No change in practice is warranted at the present time. Rigorous research is needed to investigate if the positive changes in children’s speech observed in small descriptive studies are shown in randomised controlled trials. Research should examine change in children’s speech production and intelligibility. It should also investigate the secondary education, health and social care outcomes of intervention, including children’s interaction with family, friends and teachers, their participation in social and educational activities, and their quality of life. Cost and acceptability of interventions must also be investigated.

**Updated reviews**

**Musculoskeletal disorders**

**COCHRANE BACK GROUP**

Electrotherapy for neck pain.—Eighteen small trials (1,043 people with neck pain) with 23 comparisons were included. Analysis was limited by trials of varied quality, heterogeneous treatment subtypes and conflicting results. The main findings for reduction of neck pain by treatment with electrotherapeutic modalities are:

- Very low quality evidence that pulsed electromagnetic field therapy (PEMF), repetitive magnetic stimulation (rMS) and transcutaneous electrical nerve stimulation (TENS) are more effective than placebo;
- Low quality evidence that permanent magnets (necklace) are not more effective than placebo;
- Very low quality evidence that modulated galvanic current, iontophoresis and electric muscle stimulation (EMS) are not more effective than placebo.

Only four trials reported on other outcomes such as function and global perceived effects, but none were of clinical importance.

It is not possible to make any definite statements on the efficacy and clinical usefulness of electrotherapy modalities for neck pain. Since the quality of evidence is low or very low, estimate of the effect remains uncertain. Further research is very likely to change both the estimate of effect and our confidence in the results. Current evidence for PEMF, rMS, and TENS shows that these modalities might be more effective than placebo but not other interventions. Funding bias should be considered, especially in PEMF studies. Galvanic current, iontophoresis, electric muscle stimulation (EMS), and static magnetic field did not reduce pain or disability. Future trials on these interventions should have larger patient samples and include more precise standardization and description of all treatment characteristics.

Neuroreflexotherapy for non-specific low-back pain.—Three RCTs were included, with a total of 125
subjects randomised to the control groups and 148 subjects receiving active neuroreflexotherapy. Neuroreflexotherapy was the same in all three trials, while the control groups received sham-NRT in two trials and standard care in one. Two trials studied patients with chronic LBP, the third studied patients with a mix of chronic and sub-acute Low-back Pain (LBP). Clinical outcomes were measured in the short-term (15 to 60 days) in all three trials; in one trial, resource utilization was measured after one year. Individuals who received active neuroreflexotherapy showed statistically significantly better outcomes than the control groups for measures of pain, degree of mobility, disability, medication use, consumption of resources and costs. No significant differences were observed for quality of life measures. Side effects were more frequently reported in the control groups during short-term follow-up, with no major side effects reported by those receiving active neuroreflexotherapy.

Neuroreflexotherapy appears to be a safe and effective intervention for the treatment of chronic non-specific LBP. The efficacy is less clear for sub-acute LBP. However, these results are limited to three trials conducted by a small number of specifically trained and experienced clinicians, in a limited geographical location. No data are available on the ease and time-frame needed to achieve that level of expertise. RCTs by other practitioners, in other locations, that replicate the effects reported in this review are needed before recommending a broader practice.

Prolotherapy injections for chronic low-back pain.— The authors identified five high quality studies with a total of 366 participants. All measured pain or disability levels at six months, and four measured the proportion of participants reporting a reduction greater than 50% in pain or disability scores. Three randomised controlled trials (206 participants) found that prolotherapy injections alone are no more effective than control injections for chronic low-back pain and disability. At six months, there was no difference between groups in mean pain or disability scores (2 RCTs; 184 participants) and no difference in data that reported over 50% improvement in pain or disability (3 RCTs; 206 participants). These trials could not be pooled due to clinical heterogeneity.

Two RCTs (160 participants) found that prolotherapy injections, together with spinal manipulation, exercise, and other therapies, are more effective than control injections for chronic low-back pain and disability. At six months, one study reported a significant difference between groups in mean pain and disability scores, whereas the other study did not. Both studies reported a significant difference in the proportion of individuals who reported over 50% reduction in disability or pain. Co-interventions confounded interpretation of results and clinical heterogeneity in the trials prevented pooling.

There is conflicting evidence regarding the efficacy of prolotherapy injections for patients with chronic low-back pain. When used alone, prolotherapy is not an effective treatment for chronic low-back pain. When combined with spinal manipulation, exercise, and other co-interventions, prolotherapy may improve chronic low-back pain and disability. Conclusions are confounded by clinical heterogeneity amongst studies and by the presence of co-interventions.

**COCHRANE MUSCULOSKELETAL GROUP**

Glucosamine therapy for treating osteoarthritis.— This update includes 25 studies with 4,963 patients. Analysis restricted to studies with adequate allocation concealment failed to show any benefit of glucosamine for pain (based on a pooled measure of different pain scales) and WOMAC pain, function and stiffness subscales; however, it was found to be better than placebo using the Lequesne index (standardized mean difference (SMD) -0.54; 95% confidence interval (CI) -0.96 to -0.12). Collectively, the 25 RCTs favoured glucosamine with a 22% (change from baseline) improvement in pain (SMD -0.47; 95% CI -0.72 to -0.23) and a 11% (change from baseline) improvement in function using the Lequesne index (SMD -0.47; 95% CI -0.82 to -0.12). However, the results were not uniformly positive and the reasons for this remain unexplained. WOMAC pain, function and stiffness outcomes did not reach statistical significance.

RCTs in which the Rotta preparation of glucosamine was compared to placebo found glucosamine superior for pain (SMD -1.11; 95% CI -1.66 to -0.57) and function (Lequesne index SMD -0.47; 95% CI -0.82 to -0.12). Pooled results for pain (SMD -0.05; 95% CI -0.15 to 0.05) and function using the WOMAC index (SMD -0.01; 95% CI -0.13 to 0.10) in those RCTs using a non-Rotta preparation of glucosamine did not reach statistical significance. Two RCTs using the Rotta preparation showed that glucosamine was able to
slow radiological progression of OA of the knee over a three-year period (mean difference [MD] 0.32; 95% CI 0.05 to 0.58).

Glucosamine was as safe as placebo in terms of the number of participants reporting adverse reactions (relative risk ratio 0.99; 95% CI 0.91 to 1.07).

Pooled results from studies using a non-Rotta preparation or adequate allocation concealment failed to show benefit in pain and WOMAC function while those studies evaluating the Rotta preparation showed that glucosamine was superior to placebo in the treatment of pain and functional impairment resulting from symptomatic osteoarthritis.

Transcutaneous electrostimulation for osteoarthritis of the knee.— In this update the authors identified 14 additional trials resulting in the inclusion of 18 small trials in 813 patients. Eleven trials used TENS, four interferential current stimulation, one both TENS and interferential current stimulation, and two pulsed electrostimulation. The methodological quality and the quality of reporting was poor and a high degree of heterogeneity among the trials (I² = 80%) was revealed. The funnel plot for pain was asymmetrical (P < 0.001). The predicted standardised mean differences (SMD) of pain intensity in trials as large as the largest trial was -0.07 (95% CI -0.46 to 0.32), corresponding to a difference in pain scores between electrostimulation and control of 0.2 cm on a 10 cm visual analogue scale. There was little evidence that SMDs differed on the type of electrostimulation (P = 0.94). The relative risk of being withdrawn or dropping out due to adverse events was 0.97 (95% CI 0.2 to 6.0).

In this update, the authors could not confirm that transcutaneous electrostimulation is effective for pain relief. The current systematic review is inconclusive, hampered by the inclusion of only small trials of questionable quality. Appropriately designed trials of adequate power are warranted.

Neurological rehabilitation
COCHRANE STROKE GROUP

Physical fitness training for stroke patients.— The authors included 24 trials, involving 1,147 participants, comprising cardiorespiratory (11 trials, 692 participants), strength (four trials, 158 participants) and mixed training interventions (nine trials, 360 participants). Death was infrequent at the end of the intervention (1/1 147) and follow-up (8/627). No dependence data were reported. Diverse disability measures made meta-analysis difficult; the majority of effect sizes were not significant. Cardiorespiratory training involving walking, improved maximum walking speed (mean difference [MD] 6.47 metres per minute, 95% confidence interval [CI] 2.37 to 10.57), walking endurance (MD 38.9 metres per six minutes, 95% CI 14.3 to 63.5), and reduced dependence during walking (Functional Ambulation Categories MD 0.72, 95% CI 0.46 to 0.98). Current data include few strength training trials, and lack non-exercise attention controls, long-term training and follow up.

The effects of training on death, dependence and disability after stroke are unclear. There is sufficient evidence to incorporate cardiorespiratory training, involving walking, within post-stroke rehabilitation in order to improve speed, tolerance and independence during walking. Further trials are needed to determine the optimal exercise prescription after stroke and identify any long-term benefits.

Respiratory rehabilitation
COCHRANE AIRWAYS GROUP

Oxygen therapy during exercise training in chronic obstructive pulmonary disease.— Five RCTs met the inclusion criteria. The maximum number of studies compared in the meta-analysis was three (31 on oxy-
For oxygen versus 32 control participants), because all included studies did not measure the same outcomes. When two studies were pooled, statistically significant improvements of oxygen-supplemented exercise training were found in constant power exercise time, Weighted mean differences (WMD) 2.68 minutes (95% CI 0.07 to 5.28 minutes). Supplemental oxygen increased the average exercise time from 6 to 14 minutes; the control intervention increased average exercise time from 6 to 12 minutes. Constant power exercise end-of-test Borg score (on a scale from 1 to 10) also showed statistically significant improvements with oxygen-supplemented exercise training, WMD -1.22 units (95% CI -2.39 to -0.06). One study showed a significant improvement in the change of Borg score after the shuttle walk test, by -1.46 units (95% CI -2.72 to -0.19). There were no significant differences in maximal exercise outcomes, functional exercise outcomes (six-minute walk test), shuttle walk distance, health-related quality of life or oxygenation status. According to the GRADE system most outcomes were rated as low quality because they were limited by study quality.

This review provides little support for oxygen supplementation during exercise training for individuals with chronic obstructive pulmonary disease, but the evidence is very limited. Studies with larger number of participants and strong design are required to permit strong conclusions, especially for functional outcomes such as symptom alleviation, health-related quality of life and ambulation.

**Discussion**

The main topics covered by the 4th Issue 2009 of the Cochrane Database are represented by the knee and the hip rehabilitation. Both new reviews and updated reviews dealt with this topic, so that the reader can have a wide range of information. Another relevant topic in the present issue was spinal pain (back pain and neck pain), with 3 reviews about electrotherapy,13 neuroflexotherapy,14 and prolotherapy.15 Two reviews were about rheumatoid arthritis,3, 4 and this must remember to all rehabilitation professionals that this pathology needs the joined efforts both rheumatologists from one side and physiatrist and physiotherapist on the other, since drugs are only a part of the treatment, that should always be focus on restoring a better quality of life.

Finally its relevant to cite the review about the constraint-induced movement therapy for upper extremities,9 since about this topic relevant research efforts have been focused being the recovery of the upper limb frequently limited.

The other reviews cover other rehabilitative aspects, and all of them are interesting to improve the scientific base of rehabilitation, being the Cochrane Collaboration one of the main instruments to improve medical knowledge.

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Mailuoning for acute ischaemic stroke

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Overground physical therapy gait training for chronic stroke patients with mobility deficits

Physical fitness training for stroke patients

Physiotherapy treatment approaches for the recovery of postural control and lower limb function following stroke

Speech and language therapy for aphasia and dysarthria due to non-progressive brain damage (2 reviews)

Therapy-based rehabilitation services for stroke patients at home

Therapy-based rehabilitation services for patients living at home more than one year after stroke

Treadmill training and body weight support for walking after stroke

Wounds group

Honey as a topical treatment for wounds