



**13 revues** ont été sélectionnées qui concernent les domaines d'application de la physiothérapie suivants :

- Cardio Respiratoire (2)
- Ergonomie et santé du travail (0)
- Musculo squelettique (4)
- Neurologie (2)
- Oncologie (0)
- Orthopédie (2)
- Pédiatrie (1)
- Personnes âgées (0)
- Sports (0)
- Urologie et santé de la femme (0)
- Autres (2)

**La lettre n°24 présente la sélection des revues publiées en mars et avril 2014 dans la *Cochrane Library*.**

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## Non-surgical interventions for the management of chronic pelvic pain

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### Objectives

To assess the effectiveness and safety of non-surgical interventions for women with chronic pelvic pain.

### Authors' conclusions

Evidence of moderate quality supports progestogen as an option for chronic pelvic pain, with efficacy reported during treatment. In practice, this option may be most acceptable among women unconcerned about progestogenic adverse effects (e.g. weight gain, bloatedness—the most common adverse effects). Although some evidence suggests possible benefit of goserelin when compared with progestogen, gabapentin as compared with amitriptyline, ultrasound versus 'wait and see' and writing therapy versus non-disclosure, the quality of evidence is generally low, and evidence is drawn from single studies.

Given the prevalence and healthcare costs associated with chronic pelvic pain in women, RCTs of other medical, lifestyle and psychological interventions are urgently required.

**discipline: Musculo-squelettique**

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## Self management for patients with chronic obstructive pulmonary disease

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### Objectives

1. To evaluate whether self management interventions in COPD lead to improved health outcomes.
2. To evaluate whether self management interventions in COPD lead to reduced healthcare utilisation.

### Authors' conclusions

Self management interventions in patients with COPD are associated with improved health-related quality of life as measured by the SGRQ, a reduction in respiratory-related hospital admissions, and improvement in dyspnoea as measured by the (m)MRC.

No statistically significant differences were found in other outcome parameters. However, heterogeneity among interventions, study populations, follow-up time and outcome measures makes it difficult to formulate clear recommendations regarding the most effective form and content of self management in COPD.

**discipline: Cardio-Respiratoire**

## Rehabilitation after lumbar disc surgery

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### Objectives

To determine whether active rehabilitation after lumbar disc surgery is more effective than no treatment, and to describe which type of active rehabilitation is most effective. This is the second update of a Cochrane Review first published in 2002.

First, we clustered treatments according to the start of treatment.

1. Active rehabilitation that starts immediately postsurgery.
2. Active rehabilitation that starts four to six weeks postsurgery.
3. Active rehabilitation that starts longer than 12 months postsurgery.

For every cluster, the following comparisons were investigated.

- A. Active rehabilitation versus no treatment, placebo or waiting list control.
- B. Active rehabilitation versus other kinds of active rehabilitation.
- C. Specific intervention in addition to active rehabilitation versus active rehabilitation alone.

### Authors' conclusions

Considerable variation was noted in the content, duration and intensity of the rehabilitation programmes included in this review, and for none of them was high- or moderate-quality evidence identified. Exercise programmes starting four to six weeks postsurgery seem to lead to a faster decrease in pain and disability than no treatment, with small to medium effect sizes, and high-intensity exercise programmes seem to lead to a slightly faster decrease in pain and disability than is seen with low-intensity programmes, but the overall quality of the evidence is only low to very low. No significant differences were noted between supervised and home exercise programmes for pain relief, disability or global perceived effect. None of the trials reported an increase in reoperation rate after first-time lumbar surgery. High-quality randomised controlled trials are strongly needed.

**discipline: Orthopédie**

## Therapeutic ultrasound for chronic low-back pain

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### Objectives

The objective of this review is to determine the effectiveness of therapeutic ultrasound in the management of chronic non-specific LBP.

### Authors' conclusions

No high quality evidence was found to support the use of ultrasound for improving pain or quality of life in patients with non-specific chronic LBP. There is some evidence that therapeutic ultrasound has a small effect on improving low-back function in the short term, but this benefit is unlikely to be clinically important. Evidence from comparisons between other treatments and therapeutic ultrasound for chronic LBP were indeterminate and generally of low quality. Since there are few high quality randomised trials and the available trials are very small, future large trials with valid methodology are likely to have an important impact on our confidence in the estimate of effect and may change the estimate.

**Discipline : Musculo-squelettique**

### Objectives

To assess the effects (benefits and harms) of conservative interventions after closed reduction of traumatic anterior dislocation of the shoulder. These might include immobilisation, rehabilitative interventions or both.

### Authors' conclusions

Numerous conservative strategies may be adopted after closed reduction of a traumatic anterior dislocation of the shoulder, and many warrant investigation. However, our review reveals that evidence from randomised controlled trials is only available for a single approach: immobilisation in external rotation versus immobilisation in the traditional position of internal rotation. Moreover, this evidence is insufficient to demonstrate whether immobilisation in external rotation confers any benefit over immobilisation in internal rotation.

We identified six unpublished trials and two ongoing trials that compare immobilisation in external versus internal rotation. Given this, the main priority for research on this question consists of the publication of completed trials, and the completion and publication of ongoing trials. Meanwhile, increased attention to other interventions is required. Sufficiently powered, good quality, well reported randomised controlled trials with long-term surveillance should be conducted to examine the optimum duration of immobilisation, whether immobilisation is necessary at all (in older age groups particularly), which rehabilitative interventions work best and the acceptability to participants of different care strategies.

**Discipline: Orthopédie**

## Exercise for osteoarthritis of the hip

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### Objectives

To determine whether land-based therapeutic exercise is beneficial for people with hip OA in terms of reduced joint pain and improved physical function and quality of life.

### Authors' conclusions

Pooling the results of these 10 RCTs demonstrated that land-based therapeutic exercise programmes can reduce pain and improve physical function among people with symptomatic hip OA.

**Discipline: Musculo-squelettique**

## Exercise-based rehabilitation for heart failure

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### Objectives

To determine the effectiveness of exercise-based rehabilitation on the mortality, hospitalisation admissions, morbidity and health-related quality of life for people with HF. Review inclusion criteria were extended to consider not only HF due to reduced ejection fraction (HFREF or 'systolic HF') but also HF due to preserved ejection fraction (HFPEF or 'diastolic HF').

### Authors' conclusions

This updated Cochrane review supports the conclusions of the previous version of this review that, compared with no exercise control, exercise-based rehabilitation does not increase or decrease the risk of all-cause mortality in the short term (up to 12-months' follow-up) but reduces the risk of hospital admissions and confers important improvements in health-related quality of life. This update provides further evidence that exercise training may reduce mortality in the longer term and that the benefits of exercise training appear to be consistent across participant characteristics including age, gender and HF severity. Further randomised controlled trials are needed to confirm the small body of evidence seen in this review for the benefit of exercise in HFPEF and when exercise rehabilitation is exclusively delivered in a home-based setting.

**Discipline: Cardio-respiratoire**

## Healthcare outcomes assessed with observational study designs compared with those assessed in randomized trials

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### Objectives

To assess the impact of study design (including RCTs versus observational study designs) on the effect measures estimated.  
To explore methodological variables that might explain any differences identified.  
To identify gaps in the existing research comparing study designs.

### Authors' conclusions

Our results across all reviews (pooled ROR 1.08) are very similar to results reported by similarly conducted reviews. As such, we have reached similar conclusions; on average, there is little evidence for significant effect estimate differences between observational studies and RCTs, regardless of specific observational study design, heterogeneity, or inclusion of studies of pharmacological interventions. Factors other than study design per se need to be considered when exploring reasons for a lack of agreement between results of RCTs and observational studies. Our results underscore that it is important for review authors to consider not only study design, but the level of heterogeneity in meta-analyses of RCTs or observational studies. A better understanding of how these factors influence study effects might yield estimates reflective of true effectiveness.

**Discipline:** Autre

## Information provision for people with multiple sclerosis

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### Objectives

To evaluate the effectiveness of information provision interventions for people with MS that aim to promote informed choice and improve patient-relevant outcomes.

### Authors' conclusions

Information provision for people with MS seems to increase disease-related knowledge, with less clear results on decision making and quality of life. There seem to be no negative side effects from informing patients about their disease. Interpretation of study results remains challenging due to the marked heterogeneity of the interventions and outcome measures.

**Discipline:** Neurologie

## Non-invasive brain stimulation techniques for chronic pain

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### Objectives

To evaluate the efficacy of non-invasive brain stimulation techniques in chronic pain.

### Authors' conclusions

Single doses of high-frequency rTMS of the motor cortex may have small short-term effects on chronic pain. It is likely that multiple sources of bias may exaggerate this observed effect. The effects do not meet the predetermined threshold of minimal clinical significance and multiple-dose studies do not consistently demonstrate effectiveness. The available evidence suggests that low-frequency rTMS, rTMS applied to the pre-frontal cortex, CES and tDCS are not effective in the treatment of chronic pain. While the broad conclusions for rTMS and CES have not changed substantially, the addition of this new evidence and the application of the GRADE system has modified some of our interpretation and the conclusion regarding the effectiveness of tDCS has changed. We recommend that previous readers should re-read this update. There is a need for larger, rigorously designed studies, particularly of longer courses of stimulation. It is likely that future evidence may substantially impact upon the presented results.

**Discipline:** Musculo-squelettique

## Physical activity programs for promoting bone mineralization and growth in preterm infants

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### Objectives

The primary objective was to assess whether physical activity programs in preterm infants improve bone mineralization and growth and reduce the risk of fracture.

The secondary objectives included other potential benefits in terms of length of hospital stay, skeletal deformities and neurodevelopmental outcomes, and adverse events.

Subgroup analysis:

- Given that the smallest infants are most vulnerable for developing osteopenia (Bishop 1999), a subgroup analysis was planned for infants with birth weight < 1000 g.
- Calcium and phosphorus intake may affect an infant's ability to increase bone mineral content (Kuschel 2004). Therefore, an additional subgroup analysis was planned for infants receiving different amounts of calcium and phosphorus, along with full enteral feeds as follows.
  - Below 100 mg/60 mg calcium/phosphorus or equal to/above 100 mg/60 mg calcium/phosphorus per 100 mL milk.
  - Supplementation of calcium without phosphorus.
  - Supplementation of phosphorus without calcium.

### Authors' conclusions

Some evidence suggests that physical activity programs might promote short-term weight gain and bone mineralization in preterm infants. Data are inadequate to allow assessment of harm or long-term effects. Current evidence does not support the routine use of physical activity programs in preterm infants. Further trials incorporating infants with a high baseline risk of osteopenia are required. These trials should address adverse events, long-term outcomes, and the effects of nutritional intake (calories, protein, calcium, phosphorus).

**Discipline: Pédiatrie**

## Physical rehabilitation approaches for the recovery of function and mobility following stroke

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### Objectives

To determine whether physical rehabilitation approaches are effective in recovery of function and mobility in people with stroke, and to assess if any one physical rehabilitation approach is more effective than any other approach.

For the previous versions of this review, the objective was to explore the effect of 'physiotherapy treatment approaches' based on historical classifications of orthopaedic, neurophysiological or motor learning principles, or on a mixture of these treatment principles. For this update of the review, the objective was to explore the effects of approaches that incorporate individual treatment components, categorised as functional task training, musculoskeletal intervention (active), musculoskeletal intervention (passive), neurophysiological intervention, cardiopulmonary intervention, assistive device or modality.

In addition, we sought to explore the impact of time after stroke, geographical location of the study, dose of the intervention, provider of the intervention and treatment components included within an intervention.

### Authors' conclusions

Physical rehabilitation, comprising a selection of components from different approaches, is effective for recovery of function and mobility after stroke. Evidence related to dose of physical therapy is limited by substantial heterogeneity and does not support robust conclusions. No one approach to physical rehabilitation is any more (or less) effective in promoting recovery of function and mobility after stroke. Therefore, evidence indicates that physical rehabilitation should not be limited to compartmentalised, named approaches, but rather should comprise clearly defined, well-described, evidenced-based physical treatments, regardless of historical or philosophical origin.

**Discipline: Neurologie**

### Objectives

The objectives of this review were to:

- 1) assess the effects of repositioning on the prevention of PUs in adults, regardless of risk or in-patient setting;
- 2) ascertain the most effective repositioning schedules for preventing PUs in adults; and
- 3) ascertain the incremental resource consequences and costs associated with implementing different repositioning regimens compared with alternate schedules or standard practice.

### Authors' conclusions

Repositioning is an integral component of pressure ulcer prevention and treatment; it has a sound theoretical rationale, and is widely recommended and used in practice. The lack of robust evaluations of repositioning frequency and position for pressure ulcer prevention mean that great uncertainty remains but it does not mean these interventions are ineffective since all comparisons are grossly underpowered. Current evidence is small in volume and at risk of bias and there is currently no strong evidence of a reduction in pressure ulcers with the 30° tilt compared with the standard 90° position or good evidence of an effect of repositioning frequency. There is a clear need for high-quality, adequately-powered trials to assess the effects of position and optimal frequency of repositioning on pressure ulcer incidence.

The limited data derived from one economic evaluation means it remains unclear whether repositioning every 3 hours using the 30° tilt is less costly in terms of nursing time and more effective than standard care involving repositioning every 6 hours using a 90° tilt.

### Discipline: Autre

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Cette sélection a été réalisée par un groupe indépendant de kinésithérapeutes / physiothérapeutes.

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Le centre Cochrane français est organisé sous la forme d'un Groupement d'intérêt scientifique (GIS) qui associe la Haute Autorité en Santé, l'INSERM, l'Ecole des Hautes Etudes en Santé Publique et l'Assistance Publique – Hôpitaux de Paris. Il est financé par le Ministère des Affaires sociales et de la Santé. Le centre Cochrane a mis en place un programme destiné à la traduction de l'ensemble des résumés des revues Cochrane. Ces traductions ont été rendues possibles grâce, outre à la contribution financière du [ministère français des affaires sociales et de la santé](#), et à celle des organismes canadiens suivants ([Instituts de recherche en santé du Canada](#), [ministère de la Santé et des Services Sociaux du Québec](#), [Fonds de recherche du Québec-Santé](#) et [Institut national d'excellence en santé et en services sociaux](#)).