12 revues ont été sélectionnées qui concernent les domaines d’application de la physiothérapie suivants :
- Cardio Respiratoire (2)
- Ergonomie et santé du travail (1)
- Musculo squelettique (3)
- Neurologie (1)
- Oncologie (2)
- Orthopédie (1)
- Pédiatrie (1)
- Personnes âgées (1)
- Sports (0)
- Urologie et santé de la femme (0)
- Autres (0)

La lettre n°22 présente la sélection des revues publiées en novembre et décembre 2013 dans la Cochrane Library.

Different types of intermittent pneumatic compression devices for preventing venous thromboembolism in patients after total hip replacement

Objectives
To assess the comparative effectiveness and safety of different IPC devices with respect to the prevention of venous thromboembolism in patients after THR.

Authors’ conclusions
There is a lack of evidence from randomized controlled trials to make an informed choice of IPC device for preventing venous thromboembolism (VTE) following total hip replacement. More research is urgently required, ideally a multicenter, properly designed RCT including a sufficient number of participants. Clinically relevant outcomes such as mortality, imaging-diagnosed asymptomatic VTE and major complications must be considered.

discipline: Orthopédie

Exercise for the management of cancer-related fatigue in adults

Objectives
To evaluate the effect of exercise on cancer-related fatigue both during and after cancer treatment.

Authors’ conclusions
The findings of the updated review have enabled a more precise conclusion to be made in that aerobic exercise can be regarded as beneficial for individuals with cancer-related fatigue during and post-cancer therapy, specifically those with solid tumours. Further research is required to determine the optimal type, intensity and timing of an exercise intervention.

discipline: Oncologie
Locomotor training for walking after spinal cord injury

**Objectives**
To assess the effects of locomotor training on improvement in walking for people with traumatic SCI.

**Authors’ conclusions**
There is insufficient evidence from RCTs to conclude that any one locomotor training strategy improves walking function more than another for people with SCI. The effects especially of robotic-assisted locomotor training are not clear, therefore research in the form of large RCTs, particularly for robotic training, is needed. Specific questions about which type of locomotor training might be most effective in improving walking function for people with SCI need to be explored.

**discipline: Neurologie**

Preoperative physical therapy for elective cardiac surgery patients

**Objectives**
To determine if preoperative physical therapy with an exercise component can prevent postoperative pulmonary complications in cardiac surgery patients, and to evaluate which type of patient benefits and which type of physical therapy is most effective.

**Authors’ conclusions**
Evidence derived from small trials suggests that preoperative physical therapy reduces postoperative pulmonary complications (atelectasis and pneumonia) and length of hospital stay in patients undergoing elective cardiac surgery. There is a lack of evidence that preoperative physical therapy reduces postoperative pneumothorax, prolonged mechanical ventilation or all-cause deaths.

**Discipline : Cardio respiratoire**

Rehabilitation for ankle fractures in adults

**Objectives**
To assess the effects of rehabilitation interventions following conservative or surgical treatment of ankle fractures in adults.

**Authors’ conclusions**
There is limited evidence supporting early commencement of weight-bearing and the use of a removable type of immobilisation to allow exercise during the immobilisation period after surgical fixation. Because of the potential increased risk of adverse events, the patient’s ability to comply with the use of a removable type of immobilisation to enable controlled exercise is essential. There is little evidence for rehabilitation interventions during the immobilisation period after conservative orthopaedic management and no evidence for stretching, manual therapy or exercise compared to usual care following the immobilisation period. Small, single studies showed that some electrotherapy modalities may be beneficial. More clinical trials that are well-designed and adequately-powered are required to strengthen current evidence.

**Discipline: Musculo squelettique**
Active cycle of breathing technique for cystic fibrosis

Objectives
To compare the clinical effectiveness of ACBT with other airway clearance therapies in cystic fibrosis.

Authors' conclusions
There is insufficient evidence to support or reject the use of ACBT over any other airway clearance therapy. Five studies, with five different comparators, found that ACBT was comparable to other therapies in outcomes such as patient preference, lung function, sputum weight, oxygen saturation, and number of pulmonary exacerbations. Longer-term studies are needed to more adequately assess the effects of ACBT on outcomes important for patients such as quality of life and patient preference.

Discipline: Cardio respiratoire

Early developmental intervention programmes post-hospital discharge to prevent motor and cognitive impairments in preterm infants

Objectives
To review the effectiveness of early developmental intervention post-discharge from hospital for preterm (< 37 weeks) infants on motor or cognitive development.

Authors' conclusions
Early intervention programmes for preterm infants have a positive influence on cognitive and motor outcomes during infancy, with the cognitive benefits persisting into pre-school age. There is a great deal of heterogeneity between studies due to the variety of early developmental intervention programmes trialled and gestational ages of the preterm infants included, which limits the comparisons of intervention programmes. Further research is needed to determine which early developmental interventions are the most effective at improving cognitive and motor outcomes, and on the longer-term effects of these programmes.

Discipline: Pédiatrie

Interventions for preventing falls in older people in care facilities and hospitals

Objectives
To assess the effectiveness of interventions designed to reduce falls by older people in care facilities and hospitals.

Authors' conclusions
In care facilities, vitamin D supplementation is effective in reducing the rate of falls. Exercise in subacute hospital settings appears effective but its effectiveness in care facilities remains uncertain due to conflicting results, possibly associated with differences in interventions and levels of dependency. There is evidence that multifactorial interventions reduce falls in hospitals but the evidence for risk of falling was inconclusive. Evidence for multifactorial interventions in care facilities suggests possible benefits, but this was inconclusive.

Discipline: Personnes âgées
Interventions for treating proximal humeral fractures in adults

Objectives
To review the evidence supporting the various treatment and rehabilitation interventions for proximal humeral fractures.

Authors' conclusions
There is insufficient evidence to inform the management of these fractures. Early physiotherapy, without immobilisation, may be sufficient for some types of undisplaced fractures. It remains unclear whether surgery, even for specific fracture types, will produce consistently better long term outcomes but it is likely to be associated with a higher risk of surgery-related complications and requirement for further surgery.

There is insufficient evidence to establish what is the best method of surgical treatment, either in terms of the use of different categories of surgical intervention (such as plate versus nail fixation, or hemiarthroplasty versus tension-wire fixation) or different methods of performing an intervention in the same category (such as different methods of plate fixation). There is insufficient evidence to say when to start mobilisation after either surgical fixation or hemiarthroplasty.

Discipline: Musculo squelettique

Interventions to prevent injuries in construction workers

Objectives
To assess the effects of interventions to prevent injuries in construction workers.

Authors' conclusions
The vast majority of technical, human and organisational interventions that are recommended by standard texts of safety, consultants and safety courses have not been adequately evaluated. There is no evidence that introducing regulations for reducing fatal and non-fatal injuries are effective as such. There is neither evidence that regionally oriented safety campaigns, training, inspections nor the introduction of occupational health services are effective at reducing non-fatal injuries in construction companies. There is low-quality evidence that company-oriented safety interventions such as a multifaceted safety campaign and a multifaceted drug workplace programme can reduce non-fatal injuries among construction workers. Additional strategies are needed to increase the compliance of employers and workers to the safety measures that are prescribed by regulation. Continuing company-oriented interventions among management and construction workers, such as a targeted safety campaign or a drug-free workplace programme, seem to have an effect in reducing injuries in the longer term.

Discipline: Ergonomie et santé du travail

Multidisciplinary rehabilitation for follow-up of women treated for breast cancer

Objectives
To assess the effects of organised multidisciplinary rehabilitation during follow-up in women treated for breast cancer.

Authors' conclusions
There was 'low level' evidence that multidisciplinary rehabilitation can improve the outcomes of people with breast cancer in terms of functional ability, psychosocial adjustment and participation in social activities. There was no evidence available on functional gain at the level of activity. This review highlights the limitations of RCTs in rehabilitation settings and the need for high-quality trial-based research in this area. Regular evaluation and assessment of breast cancer survivors for rehabilitation is recommended.

Discipline: Oncologie
Rehabilitation for hamstring injuries

Objectives
To evaluate the effectiveness of all rehabilitation strategies employed to promote the return to full strength, range of movement and function of those individuals presenting with all forms of hamstring injury, regardless of site, severity, onset or level of chronicity.

Authors' conclusions
Most proposed physiotherapy techniques for rehabilitation of hamstring injuries have not been assessed using randomised trials. Those that have only have single studies with a limited range of participants and outcomes. There is limited evidence to suggest that time to recovery for elite athletes can be reduced with an increased daily frequency of hamstring stretching exercises. There is preliminary evidence from another small study of mixed ability athletes to suggest that exercise to correct movement dysfunction could reduce time to return to full activity and the risk of re-injury. Further studies are required to check these findings. Until further evidence is available, current practice and widely published rehabilitation protocols cannot either be supported or refuted.

Discipline: Musculo squelettique