



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

- Cardio Respiratoire (5)
- Ergonomie et santé du travail (0)
- Musculo squelettique (5)
- Neurologie (5)
- Oncologie (3)
- Orthopédie (1)
- Pédiatrie (0)
- Personnes âgées (0)
- Sports (0)
- Urologie et santé de la femme (1)
- Autres (4)

La lettre n°26 présente la sélection des revues publiées en septembre et octobre 2015 dans la *Cochrane Library*.

Merci de cliquer sur le titre de la revue pour accéder au résumé complet.

Cardio-respiratoire

Pulse oximeters used to self monitor oxygen saturation levels as part of a personalised asthma action plan for people with asthma

Objectives

To determine whether pulse oximeters used as part of a personalised asthma action plan for people with asthma are safer and more effective than a personalised asthma action plan alone.

Authors' conclusions

We found no reliable data to support or refute patient use of pulse oximeters to monitor oxygen saturation levels when experiencing an asthma attack. People should not use a pulse oximeter without seeking advice from a qualified healthcare professional.

We identified no compelling rationale for home monitoring of oxygen levels in isolation for most people with asthma. Some people have a reduced perception of the severity of their own breathlessness when exposed to hypoxia. If trials on self monitoring of oxygen levels in the blood by pulse oximeter at home by people with asthma are conducted, the pulse oximeter must be given as part of a personalised asthma action plan.

Heliox inhalation therapy for bronchiolitis in infants

Objectives

To assess heliox inhalation therapy in addition to standard medical care for acute bronchiolitis in infants with respiratory distress, as measured by clinical endpoints (in particular the rate of endotracheal intubation, the rate of emergency department discharge, the length of treatment for respiratory distress) and pulmonary function testing (mainly clinical respiratory scores).

Authors' conclusions

Current evidence suggests that the addition of heliox therapy may significantly reduce a clinical score evaluating respiratory distress in the first hour after starting treatment in infants with acute RSV bronchiolitis. We noticed this beneficial effect regardless of which heliox inhalation protocol was used. Nevertheless, there was no reduction in the rate of intubation, in the rate of emergency department discharge, or in the length of treatment for respiratory distress. Heliox could reduce the length of treatment in infants requiring CPAP for severe respiratory distress. Further studies with homogeneous logistics in their heliox application are needed. Inclusion criteria must include a clinical severity score that reflects severe respiratory distress to avoid inclusion of children with mild bronchiolitis who may not benefit from heliox inhalation. Such studies would provide the necessary information as to the appropriate place for heliox in the therapeutic schedule for severe bronchiolitis.

Noninvasive positive pressure ventilation for acute respiratory failure following upper abdominal surgery

Objectives

To assess the effectiveness and safety of noninvasive positive pressure ventilation (NPPV), that is, continuous positive airway pressure (CPAP) or bilevel NPPV, in reducing mortality and the rate of tracheal intubation in adults with acute respiratory failure after upper abdominal surgery, compared to standard therapy (oxygen therapy), and to assess changes in arterial blood gas levels, hospital and intensive care unit (ICU) length of stay, gastric insufflation, and anastomotic leakage.

Authors' conclusions

The findings of this review indicate that CPAP or bilevel NPPV is an effective and safe intervention for the treatment of adults with acute respiratory failure after upper abdominal surgery. However, based on the Grading of Recommendations Assessment, Development and Evaluation (GRADE) methodology, the quality of the evidence was low or very low. More good quality studies are needed to confirm these findings.

Preoperative inspiratory muscle training for postoperative pulmonary complications in adults undergoing cardiac and major abdominal surgery

Objectives

Our primary objective was to assess the effectiveness of preoperative inspiratory muscle training (IMT) on PPCs in adults undergoing cardiac or major abdominal surgery. We looked at all-cause mortality and adverse events.

Authors' conclusions

We found evidence that preoperative IMT was associated with a reduction of postoperative atelectasis, pneumonia, and duration of hospital stay in adults undergoing cardiac and major abdominal surgery. The potential for overestimation of treatment effect due to lack of adequate blinding, small-study effects, and publication bias needs to be considered when interpreting the present findings.

Rescue high-frequency jet ventilation versus conventional ventilation for severe pulmonary dysfunction in preterm infants

Objectives

To compare use of high-frequency jet ventilation (HFJV) versus conventional ventilation (CV) in preterm infants with severe pulmonary dysfunction.

Subgroup analyses include the following.

- Trials with and without surfactant replacement therapy.
- Trials with and without strategies to maintain lung volume.
- Trials with infants of different gestational ages and birth weights (specific subgroups to include < 28 weeks' gestation and < 1000 grams).
- Trials with and without adequate humidification of inspired gases.

Authors' conclusions

Study authors reported no significant differences in overall mortality between rescue high-frequency jet ventilation and conventional ventilation and presented highly imprecise results for important adverse effects such as intraventricular haemorrhage, new air leaks, airway obstruction and necrotising tracheobronchitis.

The overall quality of evidence is affected by limitations in trial design and by imprecision due to the small number of infants in the included study. Existing evidence does not support the use of high-frequency jet ventilation as rescue therapy in preterm infants.

Studies that target populations at greatest risk and that have sufficient power to assess important outcomes are needed. These trials should incorporate long-term pulmonary and neurodevelopmental outcomes.

Musculo-squelettique

Whole-body cryotherapy (extreme cold air exposure) for preventing and treating muscle soreness after exercise in adults

Objectives

To assess the effects (benefits and harms) of whole-body cryotherapy (extreme cold air exposure) for preventing and treating muscle soreness after exercise in adults.

Authors' conclusions

There is insufficient evidence to determine whether whole-body cryotherapy (WBC) reduces self-reported muscle soreness, or improves subjective recovery, after exercise compared with passive rest or no WBC in physically active young adult males. There is no evidence on the use of this intervention in females or elite athletes. The lack of evidence on adverse events is important given that the exposure to extreme temperature presents a potential hazard. Further high-quality, well-reported research in this area is required and must provide detailed reporting of adverse events.

Manipulation and mobilisation for neck pain contrasted against an inactive control or another active treatment

Objectives

To assess the effects of manipulation or mobilisation alone compared with those of an inactive control or another active treatment on pain, function, disability, patient satisfaction, quality of life and global perceived effect in adults experiencing neck pain with or without radicular symptoms and cervicogenic headache (CGH) at immediate- to long-term follow-up. When appropriate, to assess the influence of treatment characteristics (i.e. technique, dosage), methodological quality, symptom duration and subtypes of neck disorder on treatment outcomes.

Authors' conclusions

Although support can be found for use of thoracic manipulation versus control for neck pain, function and QoL, results for cervical manipulation and mobilisation versus control are few and diverse. Publication bias cannot be ruled out. Research designed to protect against various biases is needed.

Findings suggest that manipulation and mobilisation present similar results for every outcome at immediate/short/intermediate-term follow-up. Multiple cervical manipulation sessions may provide better pain relief and functional improvement than certain medications at immediate/intermediate/long-term follow-up. Since the risk of rare but serious adverse events for manipulation exists, further high-quality research focusing on mobilisation and comparing mobilisation or manipulation versus other treatment options is needed to guide clinicians in their optimal treatment choices.

Massage for low-back pain

Objectives

To assess the effects of massage therapy for people with non-specific LBP.

Authors' conclusions

We have very little confidence that massage is an effective treatment for LBP. Acute, sub-acute and chronic LBP had improvements in pain outcomes with massage only in the short-term follow-up. Functional improvement was observed in participants with sub-acute and chronic LBP when compared with inactive controls, but only for the short-term follow-up. There were only minor adverse effects with massage.

Intra-articular corticosteroid for knee osteoarthritis

Objectives

To determine the benefits and harms of intra-articular corticosteroids compared with sham or no intervention in people with knee osteoarthritis in terms of pain, physical function, quality of life, and safety.

Authors' conclusions

Whether there are clinically important benefits of intra-articular corticosteroids after one to six weeks remains unclear in view of the overall quality of the evidence, considerable heterogeneity between trials, and evidence of small-study effects. A single trial included in this review described adequate measures to minimise biases and did not find any benefit of intra-articular corticosteroids.

In this update of the systematic review and meta-analysis, we found most of the identified trials that compared intra-articular corticosteroids with sham or non-intervention control small and hampered by low methodological quality. An analysis of multiple time points suggested that effects decrease over time, and our analysis provided no evidence that an effect remains six months after a corticosteroid injection.

High-intensity versus low-intensity physical activity or exercise in people with hip or knee osteoarthritis

Objectives

To determine the benefits and harms of high- versus low-intensity physical activity or exercise programs in people with hip or knee osteoarthritis.

Authors' conclusions

We found very low-quality to low-quality evidence for no important clinical benefit of high-intensity compared to low-intensity exercise programs in improving pain and physical function in the short term. There was insufficient evidence to determine the effect of different types of intensity of exercise programs.

We are uncertain as to whether higher-intensity exercise programs may induce more harmful effects than those of lower intensity; this must be evaluated by further studies. Withdrawals due to adverse events were poorly monitored and not reported systematically in each group. We downgraded the evidence to low or very low because of the risk of bias, inconsistency, and imprecision.

The small number of studies comparing high- and low-intensity exercise programs in osteoarthritis underscores the need for more studies investigating the dose–response relationship in exercise programs. In particular, further studies are needed to establish the minimal intensity of exercise programs needed for clinical effect and the highest intensity patients can tolerate. Larger studies should comply with the Consolidated Standards of Reporting Trials (CONSORT) checklist and systematically report harms data to evaluate the potential impact of highest intensities of exercise programs in people with joint damage.

Neurologie

Exercise therapy for fatigue in multiple sclerosis

Objectives

To determine the effectiveness and safety of exercise therapy compared to a no-exercise control condition or another intervention on fatigue, measured with self-reported questionnaires, of people with MS.

Authors' conclusions

Exercise therapy can be prescribed in people with MS without harm. Exercise therapy, and particularly endurance, mixed, or 'other' training, may reduce self reported fatigue. However, there are still some important methodological issues to overcome. Unfortunately, most trials did not explicitly include people who experienced fatigue, did not target the therapy on fatigue specifically, and did not use a validated measure of fatigue as the primary measurement of outcome.

Non-pharmacological interventions for people with epilepsy and intellectual disabilities

Objectives

To assess data derived from randomised controlled trials of non-pharmacological interventions for people with epilepsy and intellectual disabilities.

Non-pharmacological interventions include, but are not limited to, the following.

- Surgical procedures.
- Specialised diets, for example, the ketogenic diet, or vitamin and folic acid supplementation.

- Psychological interventions for patients or for patients and carers/parents, for example, cognitive-behavioural therapy (CBT), electroencephalographic (EEG) biofeedback and educational intervention.
- Yoga.
- Acupuncture.
- Relaxation therapy (e.g. music therapy).

Authors' conclusions

This review highlights the need for well-designed randomised controlled trials conducted to assess the effects of non-pharmacological interventions on seizure and behavioural outcomes in people with intellectual disabilities and epilepsy.

Interventions for fatigue in Parkinson's disease

Objectives

To evaluate the effects of pharmacological and non-pharmacological interventions, compared to an inactive control intervention, on subjective fatigue in people with PD.

Authors' conclusions

Based on the current evidence, no clear recommendations for the treatment of subjective fatigue in PD can be provided. Doxepin may reduce the impact of fatigue on ADL and fatigue severity; however, this finding has to be confirmed in high quality studies. Rasagiline may be effective in reducing levels of physical fatigue in PD. No evidence was found for the effectiveness of levodopa-carbidopa, memantine, caffeine, methylphenidate, modafinil or exercise. Studies are needed to investigate the effect of exercise intensity on exercise capacity and subjective fatigue. Future studies should focus on interventions that address the maladaptive behavioural or cognitive aspects of fatigue in people with PD. Characteristics, such as severity and nature of perceived fatigue and underlying mood disorders should be considered to identify responders and non-responders when studying interventions for fatigue. The development of a core-set of self-report fatigue questionnaires with established responsiveness and known minimal important difference values will facilitate the interpretation of change in fatigue scores.

Treadmill training for patients with Parkinson's disease

Objectives

To assess the effectiveness of treadmill training in improving the gait of patients with Parkinson's disease and the acceptability and safety of this type of therapy.

Authors' conclusions

This update of our systematic review provides evidence from eighteen trials with moderate to low risk of bias that the use of treadmill training in patients with PD may improve clinically relevant gait parameters such as gait speed and stride length (moderate and low quality of evidence, respectively). This apparent benefit for patients is, however, not supported by all secondary variables (e.g. cadence and walking distance). Comparing physiotherapy and treadmill training against other alternatives in the treatment of gait hypokinesia such as physiotherapy without treadmill training this type of therapy seems to be more beneficial in practice without increased risk. The gain seems small to moderate clinically relevant. However, the results must be interpreted with caution because it is not known how long these improvements may last and some studies used no intervention in the control group and underlie some risk of bias. Additionally the results were heterogenous and we found variations between the trials in patient characteristics, the duration and amount of training, and types of treadmill training applied.

Objectives

To assess the efficacy of CIMT, modified CIMT (mCIMT), or forced use (FU) for arm management in people with hemiparesis after stroke.

Authors' conclusions

CIMT is a multi-faceted intervention where restriction of the less affected limb is accompanied by increased exercise tailored to the person's capacity. We found that CIMT was associated with limited improvements in motor impairment and motor function, but that these benefits did not convincingly reduce disability. This differs from the result of our previous meta-analysis where there was a suggestion that CIMT might be superior to traditional rehabilitation. Information about the long-term effects of CIMT is scarce. Further trials studying the relationship between participant characteristics and improved outcomes are required.

Oncologie

Non-invasive positive pressure ventilation for prevention of complications after pulmonary resection in lung cancer patients

Objectives

This review demonstrated that there was no additional benefit of using NIPPV in postoperative pulmonary resection for all outcomes analysed (pulmonary complications, rate of intubation, mortality, rate of non-pulmonary complications, postoperative consumption of antibiotics, length of intensive care unit stay, length of hospital stay and adverse effects related to NIPPV). However, the quality of evidence is 'very low', 'low' and 'moderate' since there were few studies, with small sample size and low frequency of outcomes. New well-designed and well-conducted randomised trials are needed to answer the questions of this review with greater certainty.

Authors' conclusions

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Interventions to enhance return-to-work for cancer patients

Objectives

To evaluate the effectiveness of interventions aimed at enhancing RTW in cancer patients compared to alternative programmes including usual care or no intervention.

Authors' conclusions

We found moderate quality evidence that multidisciplinary interventions enhance the RTW of patients with cancer.

Positioning and spinal bracing for pain relief in metastatic spinal cord compression in adults

Objectives

To investigate the correct positioning and examine the effects of spinal bracing to relieve pain or to prevent further vertebral collapse in patients with MSCC.

Authors' conclusions

Since publication of the original version of this review, no new studies were found and our conclusions remain unchanged.

There is a lack of evidence-based guidance around how to correctly position and when to mobilise patients with MSCC or if spinal bracing is an effective technique for reducing pain or improving quality of life. RCTs are required in this important area.

Orthopédie

Rehabilitation for distal radial fractures in adults

Objectives

To examine the effects of rehabilitation interventions in adults with conservatively or surgically treated distal radial fractures.

Authors' conclusions

The available evidence from RCTs is insufficient to establish the relative effectiveness of the various interventions used in the rehabilitation of adults with fractures of the distal radius. Further randomised trials are warranted. However, in order to optimise research effort and engender the large multicentre randomised trials that are required to inform practice, these should be preceded by research that aims to identify priority questions.

Urologie et santé de la femme

Interventions for preventing and treating low-back and pelvic pain during pregnancy

Objectives

To update the evidence assessing the effects of any intervention used to prevent and treat low-back pain, pelvic pain or both during pregnancy.

Authors' conclusions

There is low-quality evidence that exercise (any exercise on land or in water), may reduce pregnancy-related low-back pain and moderate- to low-quality evidence suggesting that any exercise improves functional disability and reduces sick leave more than usual prenatal care. Evidence from single studies suggests that acupuncture or craniosacral therapy improves pregnancy-related pelvic pain, and osteomanipulative therapy or a multi-modal intervention (manual therapy, exercise and education) may also be of benefit.

Clinical heterogeneity precluded pooling of results in many cases. Statistical heterogeneity was substantial in all but three meta-analyses, which did not improve following sensitivity analyses. Publication bias and selective reporting cannot be ruled out.

Further evidence is very likely to have an important impact on our confidence in the estimates of effect and change the estimates. Studies would benefit from the introduction of an agreed classification system that can be used to categorise women according to their presenting symptoms, so that treatment can be tailored accordingly.

Hand washing promotion for preventing diarrhoea

Objectives

To assess the effects of hand washing promotion interventions on diarrhoeal episodes in children and adults.

Authors' conclusions

Hand washing promotion probably reduces diarrhoea episodes in both child day-care centres in high-income countries and among communities living in LMICs by about 30%. However, less is known about how to help people maintain hand washing habits in the longer term.

Interactive telemedicine: effects on professional practice and health care outcomes

Objectives

To evaluate the effects of material incentives and enablers in patients undergoing diagnostic testing, or receiving prophylactic or curative therapy, for TB.

Authors' conclusions

Material incentives and enablers may have some positive short term effects on clinic attendance, particularly for marginal populations such as drug users, recently released prisoners, and the homeless, but there is currently insufficient evidence to know if they can improve long term adherence to TB treatment.

Non-pharmacological interventions for sleep promotion in the intensive care unit

Objectives

To assess the efficacy of non-pharmacological interventions for sleep promotion in critically ill adults in the ICU.

To establish whether non-pharmacological interventions are safe and clinically effective in improving sleep quality and reducing length of ICU stay in critically ill adults.

To establish whether non-pharmacological interventions are cost effective.

Authors' conclusions

The quality of existing evidence relating to the use of non-pharmacological interventions for promoting sleep in adults in the ICU was low or very low. We found some evidence that the use of earplugs or eye masks or both may have beneficial effects on sleep and the incidence of delirium in this population, although the quality of the evidence was low. Further high-quality research is needed to strengthen the evidence base.

Yoga versus standard care for schizophrenia

Objectives

To examine the effects of yoga versus standard care for people with schizophrenia.

Authors' conclusions

Even though we found some positive evidence in favour of yoga over standard-care control, this should be interpreted cautiously in view of outcomes largely based each on one study with limited sample sizes and short-term follow-up. Overall, many outcomes were not reported and evidence presented in this review is of low to moderate quality - too weak to indicate that yoga is superior to standard-care control for the management of schizophrenia.

La sélection des titres a été réalisée par des kinésithérapeutes / physiothérapeutes exerçant en Suisse, Allemagne, France

Cochrane France est le centre national de la collaboration Cochrane, organisation internationale, indépendante (ne recevant en particulier aucun financement de l'industrie pharmaceutique), à but non lucratif, dont l'objectif est de synthétiser les connaissances dans le domaine de la santé. Une de ces activités principales est la production de revues systématiques évaluant l'efficacité des interventions diagnostiques, thérapeutiques, préventives et organisationnelles dans le domaine de la santé. Ces revues sont accessibles dans la banque de données Cochrane.

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.