



EJPRM systematic continuous update on Cochrane reviews in rehabilitation: news from the 4th Issue 2008

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Aim. In 2007 a systematic review about the rehabilitation contents of the Cochrane Collaboration was published. That review was then continuously updated by systematically searching the new papers published in every Cochrane Issue. The aim of the present paper was to systematically review all the rehabilitation papers published in the 4th Issue of 2008 from the Cochrane Library.

Methods. The author systematically searched all the paper of rehabilitative interest from the 4th Issue 2008 of the Cochrane Library. The papers have been divided in 3 groups: new reviews, updated reviews and protocols. Each group have been then divided in subgroups on the base of the topic.

Results. The number of included papers was 27, including 7 new reviews, 11 updated reviews and 9 protocols. About updated reviews, 4 reviews changed conclusions on the base of the most recent RCTs.

Conclusion. The Cochrane Collaboration and its product, the Cochrane Library are really relevant instruments to improve evidence-based medicine (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 - Review literature as topic - Evidence-based medicine.

The EJPRM is a clinical journal of physical and rehabilitation medicine: this has been clearly stated and it's aim is to improve the diffusion of high quality update in this field.¹ With this aim clear in mind the Cochrane

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Collaboration and the current status of Cochrane reviews were first introduced in the Rehabilitation Field.²

2008 was the first year devoted to this new way for this journal to diffuse excellent quality rehabilitation reviews and indications between our readers. A continue update about the general availability of new comprehensive data was started and three articles have been published.³⁻⁵ The authors of the most interesting Cochrane reviews were invited to publish on the EJPRM in order to present their papers a special section of the journal called The Cochrane Corner. The 2008 first issue included the paper by Dumoulin about the pelvic floor treatment⁶ while the third issue included the paper by Takken about exercise therapy in juvenile idiopathic arthritis.⁷

2009 will go on with the same intent, trying to select the most relevant reviews and presenting clinical indication drawn by Cochrane authors.

In the present article readers can find a list of papers of rehabilitative interest systematically researched and reviewed from the fourth issue of 2008.

Materials and methods

The author systematically searched all the paper of rehabilitative interest from the fourth issue 2008

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of the Cochrane Library. The papers have been divided into three groups: new reviews, updated reviews and protocols. The new reviews are those presented in the current issue for the first time; the updated reviews are those that after publication some years ago have undergone a new bibliographic search and have been changed on the base of new randomized controlled trials (RCTs) retrieved; the protocols are ideas for new reviews that have been formally designed and described are in progress and should be completed within one year after acceptance of the title.

Each group have been then divided in subgroups on the base of the topic.

Results

The number of included papers was 27, including 7 new reviews, 11 updated reviews and 9 protocols. As for updated reviews, 4 reviews changed conclusions on the base of the most recent RCTs. The paper by Ostelo about rehabilitation after lumbar disc surgery demonstrates the usefulness of a relatively short exercises period.⁸ The paper by Verdugo states that surgery is currently more effective than splinting in carpal tunnel syndrome.⁹ Hackett reported the efficacy of pharmacotherapy after stroke,¹⁰ whereas McInnes showed that in people at high risk of pressure ulcer development higher specification foam mattresses rather than standard hospital foam mattresses should be used.¹¹

New reviews

NEUROLOGICAL REHABILITATION

*Electromechanical and robot-assisted arm training for improving arm function and activities of daily living after stroke.*¹²—11 trials (328 participants) were included in this review. Electromechanical and robot-assisted arm training did not improve activities of daily living (SMD=0.29; 95% confidence interval [CI] -0.47 to 1.06; P=0.45; I²=85%). Arm motor function and arm motor strength improved (SMD=0.68, 95% CI 0.24 to 1.11; P=0.002; I²=56% and SMD=0.103, 95% CI 0.29 to 1.78; P=0.007; I²=79% respectively). Electromechanical and robot-assisted arm training did not increase the risk of patients to drop out (RD) (fixed-effect model) =0.01; 95% CI -0.05 to 0.06; P=0.77; I²=0.0%) and adverse events were rare.

Patients receiving electromechanical and robot-assisted arm training after stroke are not more likely to improve their activities of daily living, but arm motor function and strength of the paretic arm may improve. However, the results must be interpreted with caution because there were variations between the trials in the duration, amount of training and type of treatment, and in the patient characteristics.

PERIPHERAL VASCULAR DISEASES

*Low molecular weight heparin for prevention of venous thromboembolism in patients with lower-leg immobilization.*¹³—Six randomized RCTs fulfilling the above criteria with a total of 1 490 patients were included. An incidence of venous thromboembolism ranging from 4.3% to 40%, in patients who had a leg injury that had been immobilized in a plaster cast or a brace for at least one week and who received no prophylaxis, or placebo was found. This number was significantly lower in patients who received daily subcutaneous injections of low molecular weight heparin (LMWH) during immobilization (event rates ranging from 0% to 37%; odds ratio [OR] 0.49; fixed 95% CI 0.34 to 0.72; with minimal evidence of heterogeneity with an I² of 20%, P=0.29). Comparable results were seen in the following subcategories: operated patients, conservatively treated patients, patients with fractures, patients with soft-tissue injuries, patients with proximal thrombosis, patients with distal thrombosis and patients with below-knee casts. Complications of major bleeding events were extremely rare (0.3%) and there were no reports of heparin-induced thrombocytopenia.

Use of LMWH in outpatients significantly reduces VTE when immobilization of the lower leg is required.

PELVIC FLOOR

*Pelvic floor muscle training for prevention and treatment of urinary and fecal incontinence in antenatal and postnatal women.*¹⁴—16 trials met the inclusion criteria. Fifteen studies involving 6 181 women (3 040 pelvic floor muscle training, 3 141 controls) contributed to the analysis. Based on the trial reports, 4 trials appeared to be at low risk of bias, 2 at low to moderate risk, and the remaining at moderate risk of bias.

Pregnant women without prior urinary incontinence who were randomised to intensive antenatal pelvic

floor muscle training (PFMT) were less likely than women randomized to no or usual antenatal care to report urinary incontinence in late pregnancy (about 56% less; RR 0.44, 95% CI 0.30 to 0.65) and up to 6 months postpartum (about 30% less; RR 0.71, 95% CI 0.52 to 0.97).

Postnatal women with persistent urinary incontinence 3 months after delivery and women receiving PFMT were less likely than women who did not receive treatment or received usual postnatal care (about 20% less; RR 0.79, 95% CI 0.70 to 0.90) to report urinary incontinence 12 months after delivery. It seemed that the more intensive the programme the greater the treatment effect. Fecal incontinence was also reduced at 12 months after delivery: women receiving PFMT were about half as likely to report fecal incontinence (RR 0.52, 95% CI 0.31 to 0.87). Based on the trial data to date, the extent to which population-based approaches to PFMT are effective is less clear (that is, offering advice on PFMT to all pregnant or postpartum women whether they have incontinence symptoms or not). It is possible that population-based approaches might be effective when the intervention is intensive enough.

There was not enough evidence about long-term effects for either urinary or faecal incontinence. There is some evidence that pelvic floor muscle training in women having their first baby can prevent urinary incontinence in late pregnancy and postpartum. In common with older women with stress incontinence, there is support for the widespread recommendation that pelvic floor muscle training is an appropriate treatment for women with persistent postpartum urinary incontinence. It is possible that the effects of pelvic floor muscle training might be greater with targeted rather than population-based approaches and in certain groups of women (for example primiparous women; women who had bladder neck hypermobility in early pregnancy, a large baby, or a forceps delivery). These and other uncertainties, particularly long-term effectiveness, require further testing.

RESPIRATORY REHABILITATION

*Physical training for interstitial lung disease.*¹⁵—5 studies were included, 3 of which were published as abstracts. Two studies were included in the meta-analysis (43 participants who undertook physical training and 42 control participants). One study used a blinded assessor and intention-to-treat analysis. No

adverse effects of physical training were reported. Physical training improved the 6-minute walk distance with weighted mean difference (WMD) 38.61 metres (95% CI 15.37 to 61.85 metres). Improvement in 6-minute walk distance was also seen in the subgroup of participants with IPF (WMD 26.55 metres, 2.81 to 50.30 metres). No effect of physical training on $\dot{V}O_2$ peak was evident. There was a reduction in dyspnoea (standardised mean difference (SMD) -0.47, 95% CI: -0.91 to -0.04) however this did not reach significance in the IPF subgroup (SMD -0.43, 95% CI: -0.94 to 0.08). Quality of life improved following physical training in all participants (SMD 0.58, 95% CI: 0.15 to 1.02) and in IPF (SMD 0.57, 95% CI: 0.06 to 1.09). Only one study reported longer-term outcomes, with no significant effects of physical training on clinical variables or survival at 6 months. Insufficient data were available to examine the impact of disease severity or training modality. Physical training is safe for people with interstitial lung disease. Improvements in functional exercise capacity, dyspnoea and quality of life are seen immediately following training, with benefits also evident in IPF. There is little evidence regarding longer-term effects of physical training.

PAIN

*Antipsychotics for acute and chronic pain in adults.*¹⁶—A total of 770 participants were involved in the 11 included studies. Data from 5 included randomized double-blind studies showed beneficial effects of antipsychotics in the treatment of acute and chronic pain. Quantitative analysis of these studies showed a significant reduction of mean pain intensity after administration of the antipsychotic compared to placebo or another active compound: Weighted mean difference (WMD) -1.78 (95% CI -2.71 to -0.85) for the continuous data and relative risk (RR) 0.43 (95% CI 0.25 to 0.73), number-needed-to-treat-to-benefit (NNT) 2.6 for the dichotomous data. Nevertheless, the test for heterogeneity was significant for the continuous data ($P=0.0007$) and the dichotomous data ($P=0.04$). The most frequently reported adverse effects were extrapyramidal (*i.e.* involuntary movements, parkinsonism and akathisia) and sedating effects. Antipsychotics might be used as an add-on therapy in the treatment of painful conditions. Nevertheless, extrapyramidal and sedating side effects have to be considered before using antipsychotics for treating painful conditions.

Results for antipsychotics in the treatment of different painful conditions are mixed and most sample sizes in the reviewed RCTs are small. Further studies on atypical antipsychotics in larger double-blind placebo-controlled studies including standardised pain assessment/documentation are warranted.

Touch therapies for pain relief in adults:¹⁷ 24 studies involving 1 153 participants met the inclusion criteria. There were five, sixteen and three studies on Healing Touch, Therapeutic Touch and Reiki respectively. Participants exposed to touch had on average of 0.83 units (on a 0 to ten scale) lower pain intensity than unexposed participants (95% CI: -1.16 to -0.50). Results of trials conducted by more experienced practitioners appeared to yield greater effects in pain reduction. It is also apparent that these trials yielding greater effects were from the Reiki studies. Whether more experienced practitioners or certain types of touch therapy brought better pain reduction should be further investigated. Two of the five studies evaluating analgesic usage supported the claim that touch therapies minimized analgesic usage. The placebo effect was also explored. No statistically significant ($P=0.29$) placebo effect was identified. Touch therapies may have a modest effect in pain relief. More studies on Healing Touch and Reiki in relieving pain are needed. More studies including children are also required to evaluate the effect of touch on children.

WOUNDS

*Honey as a topical treatment for wounds.*¹⁸—19 trials ($N.=2\ 554$) were identified that met the inclusion criteria. In acute wounds, three trials evaluated the effect of honey in acute lacerations, abrasions or minor surgical wounds and 9 trials evaluated the effect the honey in burns. In chronic wounds 2 trials evaluated the effect of honey in venous leg ulcers and one trial in pressure ulcers, infected postoperative wounds, and Fournier's gangrene respectively. Two trials recruited people with mixed groups of chronic or acute wounds. The poor quality of most of the trial reports means the results should be interpreted with caution, except in venous leg ulcers. In acute wounds, honey may reduce time to healing compared with some conventional dressings in partial thickness burns (WMD -4.68 days, 95%CI -4.28 to -5.09 days). All the included burns trials have originated from a single centre, which may have impact on replicability. In

chronic wounds, honey in addition to compression bandaging does not significantly increase healing in venous leg ulcers (RR 1.15, 95% CI 0.96 to 1.38). There is insufficient evidence to determine the effect of honey compared with other treatments for burns or in other acute or chronic wound types.

Honey may improve healing times in mild to moderate superficial and partial thickness burns compared with some conventional dressings. Honey dressings as an adjuvant to compression do not significantly increase leg ulcer healing at 12 weeks. There is insufficient evidence to guide clinical practice in other areas.

Updated reviews

HOME ASSISTANCE

*Care home versus hospital and own home environments for rehabilitation of older people.*¹⁹—In this update, 8 365 references were retrieved. Of these, 339 abstracts were independently assessed by 2 review authors, and 56 studies and 5 review articles were subsequently obtained. Full text papers were independently assessed by two or three review authors and none of these met inclusion criteria. There is insufficient evidence to compare the effects of care home environments versus hospital environments or own home environments on older persons rehabilitation outcomes. Although the authors acknowledge that absence of effect is not no effect. There are three main reasons; the first is that the description and specification of the environment is often not clear; secondly, the components of the rehabilitation system within the given environments are not adequately specified and; thirdly, when the components are clearly specified they demonstrate that the control and intervention sites are not comparable with respect to the methodological criteria specified by Cochrane Effective Practice and Organisation of Care Group (EPOC) group. The combined effect of these factors resulted in the comparability between intervention and control groups being very weak.

MUSCULOSKELETAL REHABILITATION

*Exercise for osteoarthritis of the knee.*²⁰—The 32 included studies provided data on 3 616 participants for knee pain and 3 719 participants for self-reported physical function. Meta-analysis revealed a beneficial treatment effect with a SMD of 0.40 (95% CI 0.30 to

0.50) for pain; and SMD 0.37 (95% CI 0.25 to 0.49) for physical function. There was marked variability across the included studies in participants recruited, symptom duration, exercise interventions assessed and important aspects of study methodology. The results were sensitive to the number of direct supervision occasions provided and various aspects of study methodology. While the pooled beneficial effects of exercise programs providing less than 12 direct supervision occasions or studies utilising more rigorous methodologies remained significant and clinically relevant, between study heterogeneity remained marked and the magnitude of the treatment effect of these studies would be considered small.

There is platinum level evidence that land-based therapeutic exercise has at least short term benefit in terms of reduced knee pain and improved physical function for people with knee osteoarthritis. The magnitude of the treatment effect would be considered small, but comparable to estimates reported for non-steroidal anti-inflammatory drugs.

*Hyperbaric oxygen therapy for promoting fracture healing and treating fracture non-union.*²¹—No trials met the inclusion criteria. The authors excluded one trial that compared hyperbaric oxygen therapy with no treatment because no clinical outcomes were reported. This systematic review failed to locate any relevant clinical evidence to support or refute the effectiveness of hyperbaric oxygen therapy for the management of delayed union or established non-union of bony fractures. Good quality clinical trials are needed to define the role, if any, of Hyperbaric oxygen therapy in the treatment of these injuries.

Massage for low-back pain:²² 13 randomized trials were included, 8 had a high risk and 5 had a low risk of bias. One study was published in German and the rest in English. Massage was compared to an inert therapy (sham treatment) in 2 studies that showed that massage was superior for pain and function on both short and long-term follow-ups. In 8 studies, massage was compared to other active treatments. They showed that massage was similar to exercises, and massage was superior to joint mobilization, relaxation therapy, physical therapy, acupuncture and self-care education. One study showed that reflexology on the feet had no effect on pain and functioning. The beneficial effects of massage in patients with chronic low-back pain lasted at least one year after the end of the treatment. Two studies compared two different

techniques of massage. One concluded that acupuncture massage produces better results than classic (Swedish) massage and another concluded that Thai massage produces similar results to classic (Swedish) massage.

Massage might be beneficial for patients with sub-acute and chronic non-specific low-back pain, especially when combined with exercises and education. The evidence suggests that acupuncture massage is more effective than classic massage, but this need confirmation. More studies are needed to confirm these conclusions, to assess the impact of massage on return-to-work, and to determine cost-effectiveness of massage as an intervention for low-back pain.

Rehabilitation after lumbar disc surgery:⁸ 14 studies were included, 7 of which had a low risk of bias. Most programs were only assessed in one study. Statistical pooling was only completed for three comparisons in which exercises were started 4 to 6 weeks postsurgery: exercise programs versus no treatment, high *versus* low intensity exercise programs, and supervised versus home exercises.

There is low quality evidence (three RCTs, N=156) that exercises are more effective than no treatment for pain at short-term follow-up (WMD -11.13; 95% CI -18.44 to -3.82) and moderate evidence (two RCTs, N=136) that they are more effective for functional status on short-term follow-up (WMD -6.50; 95% CI -9.26 to -3.74). None of the studies reported that exercises increased the reoperation rate.

There is low quality evidence (two RCTs, N=103) that high intensity are slightly more effective than low intensity exercise programs for pain in the short term (WMD -10.67; 95% CI -17.04 to -4.30) and moderate evidence (two RCTs, N=103) that they are more effective for functional status in the short term (SMD -0.77; 95% CI -1.17 to -0.36).

There is low quality evidence (three RCTs, N=95) that there were no significant differences between supervised and home exercises for short-term pain relief (SMD -1.12; 95% CI -2.77 to 0.53) or functional status (three RCTs, N=88; SMD -1.18; 95% CI -2.63 to 0.26).

Exercise programs starting four to six weeks postsurgery seem to lead to a faster decrease in pain and disability than no treatment. High intensity exercise programs seem to lead to a faster decrease in pain and disability than low intensity programs. There were no significant differences between supervised and home exercises for pain relief, disability, or global

perceived effect. There is no evidence that active programs increase the re-operation rate after first-time lumbar surgery.

Surgical *versus* non-surgical treatment for carpal tunnel syndrome:⁹ in this update the authors found 4 RCTs involving 317 participants in total. Three of them including 295 participants, 148 allocated to surgery and 147 to non-surgical treatment reported information on the primary outcome (improvement at three months of follow-up). The pooled estimate favoured surgery (RR 1.23, 95% CI 1.04 to 1.46). Two trials including 245 participants described outcome at 6-month-follow-up, also favouring surgery (RR 1.19, 95% CI 1.02 to 1.39).

Two trials reported clinical improvement at one year follow-up. They included 198 patients favouring surgery (RR 1.27, 95% CI 1.05 to 1.53). The only trial describing changes in neurophysiological parameters in both groups also favoured surgery (RR 1.44, 95% CI 1.05 to 1.97). Two trials described need for surgery during follow-up, including 198 patients. The pooled estimate for this outcome indicates that a significant proportion of people treated medically will require surgery while the risk of re-operation in surgically treated people is low (RR 0.04 favouring surgery, 95% CI 0.01 to 0.17). Complications of surgery and medical treatment were described by two trials with 226 participants. Although the incidence of complications was high in both groups, they were significantly more common in the surgical arm (RR 1.38, 95% CI 1.08 to 1.76).

Surgical treatment of carpal tunnel syndrome relieves symptoms significantly better than splinting. Further research is needed to discover whether this conclusion applies to people with mild symptoms and whether surgical treatment is better than steroid injection.

Transcutaneous electrical nerve stimulation (TENS) versus placebo for chronic low-back pain.^{23–4} 4 high-quality RCTs (585 patients) met the selection criteria. Clinical heterogeneity prevented the use of meta-analysis. Therefore, a qualitative synthesis was completed. There was conflicting evidence about whether TENS was beneficial in reducing back pain intensity and consistent evidence in two trials (410 patients) that it did not improve back-specific functional status. There was moderate evidence that work status and the use of medical services did not change with treatment. Conflicting results were obtained from 2 stud-

ies regarding generic health status, with one study showing no improvement on the modified sickness impact profile and another study showing significant improvements on several, but not all subsections of the SF-36 questionnaire. Multiple physical outcome measures lacked statistically significant improvement relative to placebo. In general, patients treated with acupuncture-like TENS responded similarly to those treated with conventional TENS. However, in two of the trials, an inadequate stimulation intensity was used for acupuncture-like TENS, given that muscle twitching was not induced. Optimal treatment schedules could not be reliably determined based on the available data. Adverse effects included minor skin irritation at the site of electrode placement.

At this time, the evidence from the small number of placebo-controlled trials does not support the use of TENS in the routine management of chronic LBP. Further research is encouraged.

Neurological rehabilitation

*Antioxidant treatment for amyotrophic lateral sclerosis or motor neuron disease.*²⁴—The search identified 23 studies for consideration but only 9 studies met the inclusion criteria. Only 2 studies used the predetermined primary outcome measure as the primary outcome measure, (survival at 12 months of treatment). However, sufficient data were available from four studies to allow analysis of this outcome measure, and a meta-analysis was performed.

In the individual studies no significant effect was observed for vitamin E 500 mg twice daily; vitamin E 1 g 5 times daily; acetylcysteine 50 mg/kg daily subcutaneous infusion; or a combination of L-methionine 2 g, vitamin E 400 International Units, and selenium 0.03 mg 3 times daily (Alsemet). No significant effect on the primary outcome measure was observed in a meta-analysis of all antioxidants combined. No significant differences were demonstrated in any of the secondary outcome measures.

There is insufficient evidence of efficacy of individual antioxidants, or antioxidants in general, in the treatment of people with amyotrophic lateral sclerosis. One study reported a mild positive effect, but this was not supported by the analysis we used. Generally the studies were poorly designed, and underpowered, with low numbers of participants and of short duration. Further well-designed trials of medications such as vitamin C and E are unlikely to be performed.

If future trials of antioxidant medications are performed, careful attention should be given to sample size, outcome measures, and duration of the trial. The high tolerance and safety, and relatively low cost of vitamins C and E, and other considerations related to the lack of other effective treatments for amyotrophic lateral sclerosis, explain the continuing use of these vitamins by physicians and people with amyotrophic lateral sclerosis. While there is no substantial clinical trial evidence to support their clinical use, there is no clear contraindication.

Interventions for treating depression after stroke:¹⁰ 16 trials (17 interventions), with 1 655 participants, were included in the review. Data were available for 13 pharmaceutical agents, and four trials of psychotherapy. There were no trials of ECT. The analyses were complicated by the lack of standardized diagnostic and outcome criteria, and differing analytic methods. There was some evidence of benefit of pharmacotherapy in terms of a complete remission of depression and a reduction (improvement) in scores on depression rating scales, but there was also evidence of an associated increase in adverse events. There was no evidence of benefit of psychotherapy.

A small but significant effect of pharmacotherapy (not psychotherapy) on treating depression and reducing depressive symptoms was found, as was a significant increase in adverse events. More research is required before recommendations can be made about the routine use of such treatments.

PERIPHERAL VASCULAR DISEASES

*Exercise for intermittent claudication.*²⁵—22 trials met the inclusion criteria involving a total of 1 200 participants with stable leg pain. Follow-up period was from 2 weeks to 2 years. There was some variation in the exercise regimens used, all recommended at least two sessions weekly of mostly supervised exercise. All trials used a treadmill walking test for one of the outcome measures. Quality of the included trials was good, though the majority of trials were small with 20 to 49 participants. Fourteen trials compared exercise with usual care or placebo; patients with various medical conditions or other pre-existing limitations to their exercise capacity were generally excluded. Compared with usual care or placebo, exercise significantly improved maximal walking time: mean difference (MD) 5.12 minutes (95% CI 4.51 to 5.72;) with an overall improvement in walking ability of approx-

imately 50% to 200%; exercise did not affect the ankle brachial pressure index (ABPI) (MD -0.01, 95% CI -0.05 to 0.04). Walking distances were also significantly improved: pain-free walking distance MD 82.19 metres (95% CI 71.73 to 92.65) and maximum walking distance MD 113.20 metres (95% CI 94.96 to 131.43). Improvements were seen for up to two years. The effect of exercise compared with placebo or usual care was inconclusive on mortality, amputation and peak exercise calf blood flow due to limited data. Evidence was generally limited for exercise compared with surgical intervention, angioplasty, antiplatelet therapy, pentoxifylline, iloprost and pneumatic foot and calf compression due to small numbers of trials and participants. Angioplasty may produce greater improvements than exercise in the short term but this effect may not be sustained.

Exercise programmes were of significant benefit compared with placebo or usual care in improving walking time and distance in selected patients with leg pain from intermittent claudication.

WOUNDS

*Support surfaces for pressure ulcer prevention.*¹¹—For this second update 11 trials met the inclusion criteria bringing the total number of RCTs included in the review to 52.

Foam alternatives to the standard hospital foam mattress can reduce the incidence of pressure ulcers in people at risk. The relative merits of alternating and constant low pressure devices are unclear. There is one high quality trial comparing the different alternating pressure devices for pressure ulcer prevention which suggests that alternating pressure mattresses may be more cost effective than alternating pressure overlays.

Pressure-relieving overlays on the operating table have been shown to reduce postoperative pressure ulcer incidence, although two studies indicated that foam overlays resulted in adverse skin changes. Two trials indicated that Australian standard medical sheepskins prevented pressure ulcers. There is insufficient evidence to draw conclusions on the value of seat cushions, limb protectors and various constant low pressure devices as pressure ulcer prevention strategies.

A study of Accident and Emergency trolley overlays did not identify a reduction in pressure ulcer incidence. There are tentative indications that foot waffle heel elevators, a particular low air loss hydrother-

apy mattress and two types of operating theatre overlays are harmful.

In people at high risk of pressure ulcer development higher specification foam mattresses rather than standard hospital foam mattresses should be used. The relative merits of higher-tech constant low pressure and alternating pressure for prevention are unclear but alternating pressure mattresses may be more cost effective than alternating pressure overlays. Medical grade sheepskins are associated with a decrease in pressure ulcer development. Organisations might consider the use of some forms of pressure relief for high risk patients in the operating theatre. Seat cushions and overlays designed for use in Accident & Emergency settings have not been adequately evaluated.

Protocols

NEUROLOGICAL REHABILITATION

Multidisciplinary care for adults with amyotrophic lateral sclerosis or motor neuron disease.²⁶

MUSCULOSKELETAL REHABILITATION

— Physical examination for lumbar radiculopathy due to disc herniation in patients with low-back pain;²⁷

— physical tests for shoulder impingements and local lesions of bursa, tendon or labrum that may accompany impingement;²⁸

— professional interventions for general practitioners on the management of musculoskeletal conditions;²⁹

— psychological therapies for the management of chronic pain (excluding headache) in adults;³⁰

— stretch interventions for contractures.³¹

PAIN

— Topical NSAIDs for acute pain in adults;³²

— topical NSAIDs for chronic musculoskeletal pain in adults;³³

— topical rubefacients for acute and chronic pain in adults.³⁴

Conclusions

The Cochrane Collaboration and his 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.

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