

What's new in Cochrane Musculoskeletal reviews?

In the latest issues of the Cochrane Library (published in March, April and May 2010), the Cochrane Musculoskeletal Group (CMSG) published 4 new reviews, 1 updated review and 1 new protocol.

NEW REVIEWS:

- **Pegloticase for chronic gout**

The authors identified only one open-label study (n=41 participants). The trial compared various doses of pegloticase without comparison to placebo or another treatment. Patients were randomised to one of the four doses of pegloticase for 12 to 14 weeks - 4mg every 2 weeks, 8mg every 2 weeks, 8mg every 4 weeks and 12mg every 4 weeks. Percent responders (uric acid below 6 mg/dl 80% or more time) in the four dose groups were 56%, 88%, 52% and 62%. Percent time without hyperuricemia (uric acid below 6 mg/dl) was 78%, 92%, 76% and 76% respectively. No between dose differences were noted. Most common adverse events (10% or more patients) included nephrolithiasis, arthralgia, anaemia, dyspnoea, headache, muscle spasms, nausea and pyrexia. 89% reported one or more gout flares during the study. Pain, function, quality of life, tophus size and radiographic progression were not reported in this study. As there were no published RCTs of pegloticase, the authors concluded that more evidence is needed to assess risks and benefits of pegloticase in patients with chronic gout.

Full review at: Anderson A, Singh JA. Pegloticase for chronic gout. *Cochrane Database of Systematic Reviews* 2010, Issue 3. Art. No.: CD008335. DOI: 10.1002/14651858.CD008335 [www.thecochranelibrary.com]

- **Methotrexate monotherapy versus methotrexate combination therapy with non-biologic disease modifying anti-rheumatic drugs for rheumatoid arthritis**

The authors included 19 trials (2,025 patients). Trials in Disease-Modifying Anti-Rheumatic Drug (DMARD) naive patients showed no significant advantage of the methotrexate (MTX) combined with other non-biologic DMARDs versus MTX monotherapy; withdrawals for lack of efficacy or toxicity were similar in both groups (risk ratio (RR) 1.16, 95% CI 0.70 to 1.93, absolute risk difference (ARD) 5%, 95% CI -3% to 13%). Trials in MTX or non-MTX DMARDs inadequate responder patients also showed no difference in withdrawal rates between the MTX combination versus monotherapy groups with RR 0.86 (95% CI 0.49 to 1.51), ARD -2%, (95% CI -13% to 8%) and RR 0.75 (95% CI 0.41 to 1.35), ARD -10% (95% CI -31% to 11%), respectively. Significant reductions of pain and improvement in physical function (measured by Health Assessment Questionnaire or HAQ) were found in the MTX combination group, but only in MTX-inadequate responders (absolute risk difference -9.72%, 95% CI -14.7% to -4.75% for pain and mean difference (MD) -0.28, 95% CI -0.36 to -0.21 (0-3) for HAQ). The authors concluded, that on balance of benefits and harms, there was moderate evidence of no difference between MTX combination and monotherapy. Trials are needed that compare currently used MTX doses and combination therapies.

Full review at: Katchamart W, Trudeau J, Phumethum V, Bombardier C. Methotrexate monotherapy versus methotrexate combination therapy with non-biologic disease modifying anti-rheumatic drugs for rheumatoid arthritis. *Cochrane Database of Systematic Reviews* 2010, Issue 4. Art. No.: CD008495. DOI: 10.1002/14651858.CD008495 [www.thecochranelibrary.com]

- **Balance training (proprioceptive training) for patients with rheumatoid arthritis**

There were no RCTs identified that investigating the effects of balance training alone or in combination with other therapies in patients with rheumatoid arthritis. Thus the benefits and safety of balance training to improve functional capacity in patients with rheumatoid arthritis is unclear.

Full review at: Silva KNG, Mizusaki Imoto A, Almeida GJM, Atallah ÁN, Peccin MS, Fernandes Moça Trevisani V. Balance training (proprioceptive training) for patients with rheumatoid arthritis. *Cochrane Database of Systematic Reviews* 2010, Issue 5. Art. No.: CD007648. DOI: 10.1002/14651858.CD007648.pub2 [www.thecochranelibrary.com]

- **Joint lavage for osteoarthritis of the knee**

The authors included seven trials with 567 patients, overall the results had risk of bias, due to inadequate methodological quality and poor reporting. Three trials examined arthroscopic joint lavage, two non-arthroscopic joint lavage and two tidal irrigation. There was little evidence for a benefit of joint lavage in terms of pain relief at three months (standardised mean difference (SMD) -0.11, 95% CI -0.42 to 0.21), corresponding to a difference in pain scores between joint lavage and control of 0.3 cm on a 10-cm visual analogue scale (VAS). Results for improvement in function at three months were similar (SMD -0.10, 95% CI -0.30 to 0.11), corresponding to a difference in function scores between joint lavage and control of 0.2 cm on a WOMAC disability sub-scale from 0 to 10. Reporting on adverse events and drop out rates was unsatisfactory, and the authors could not draw conclusions for these secondary outcomes. The authors concluded that joint lavage does not result in a relevant benefit for patients with knee osteoarthritis in terms of pain relief or improvement of function.

Full review at: Reichenbach S, Rutjes AWS, Nuesch E, Trelle S, Juni P. Joint lavage for osteoarthritis of the knee. *Cochrane Database of Systematic Reviews* 2010, Issue 5. Art. No.: CD007320. DOI: 10.1002/14651858.CD007320.pub2 [www.thecochranelibrary.com]

UPDATED REVIEW:

- **Continuous passive motion following total knee arthroplasty in people with arthritis**

Eight new trials were added to the review; a total twenty randomised controlled trials (1335 participants) were included in the review update. There is high-quality evidence that continuous passive motion increases passive knee flexion range of motion (mean difference 2 degrees, 95% CI 0 to 5) and active knee flexion range of motion (mean difference 3 degrees, 95% CI 0 to 6). These effects are too small to be clinically worthwhile. There is low-quality evidence that continuous passive motion has no effect on length of hospital stay (mean difference -0.3 days; 95% CI -0.9 to 0.2) but reduces the need for manipulation under anaesthesia (relative risk 0.15; 95% CI 0.03 to 0.70). The authors concluded that the effects of continuous passive motion on knee range of motion are too small to justify its use.

Full review at: Harvey LA, Brosseau L, Herbert RD. Continuous passive motion following total knee arthroplasty in people with arthritis. *Cochrane Database of Systematic Reviews* 2010, Issue 3. Art. No.: CD004260. DOI: 10.1002/14651858.CD004260.pub2 [www.thecochranelibrary.com]

NEW PROTOCOLS:

- Whole body vibration for preventing and treating osteoporosis

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