More Research Needed!

New in the Cochrane Library

Parenteral versus oral iron therapy for adults and children with chronic kidney disease

Authors' conclusions: The included studies provide low certainty evidence that IV iron compared with oral iron increases haemoglobin, ferritin and transferrin levels in CKD participants, increases the number of participants who achieve target haemoglobin and reduces ESA requirements. However, there is insufficient evidence to determine whether IV iron compared with oral iron influences death (all causes), cardiovascular death and quality of life though most studies reported only short periods of follow-up. Adverse effects were reported in only 50% of included studies. We therefore suggest that further studies that focus on patient-centred outcomes with longer follow-up periods are needed to determine if the use of IV iron is justified on the basis of reductions in ESA dose and cost, improvements in patient quality of life, and with few serious adverse effects.

Systemic corticosteroids for the management of cancer-related breathlessness (dyspnoea) in adults

Authors' conclusions: There are few studies assessing the effects of systemic corticosteroids on cancer-related dyspnoea in adults with cancer. We judged the evidence to be of very low quality that neither supported nor refuted corticosteroid use in this population. Further high-quality studies are needed to determine if corticosteroids are efficacious in this setting.

Surgical interventions for the prevention or treatment of lymphoedema after breast cancer treatment

Authors' conclusions: There is low-certainty evidence that lymphaticovenular anastomosis is effective in preventing the development of lymphoedema after breast cancer treatment based on the findings from two studies. One study providing very low-certainty evidence found that vascularised lymph node transfer is an efficacious option in the treatment of established stage 2 lymphoedema related to breast cancer. Important secondary outcomes in this review were rarely reported in the included studies. More high-quality RCTs are required to further elucidate the effectiveness of surgical interventions in the prevention and treatment of lymphoedema after breast cancer treatment. At the time of this review, no ongoing trials on this topic were identified.

The effectiveness of pain-reducing interventions in newborns can only be determined if pain measurement instruments are responsive; that is, able to detect a decrease in pain intensity after the pain-reducing intervention. This review assesses the methodologic quality of studies on this measurement property—the responsiveness. We searched the literature published until January 2018 for validation studies of pain measurement instruments focusing on responsiveness to pain-reducing treatment in neonates. The methodologic quality of the included studies was rated using the CO Consortia-standardized Standards for the selection of health Measurement Instruments checklist. Nine studies were included involving 10 pain measurement instruments. These studies differed with respect to the population, setting and type of pain-reducing intervention. In all studies, pain scores were significantly lower after a pain-reducing intervention and the instrument used was therefore considered responsive. We rated 4 studies as having poor methodologic quality, 5 as fair quality, and none as good quality. In conclusion, the responsiveness was studied for only 10 of the 43 existing pain measurement instruments for the use in neonates. Because this is an important property of a pain instrument, more research on this topic is needed, with attention for blinding and formulating a specific hypothesis before start of data collection.

PERSPECTIVE: This review focuses on the property of measurement instruments to detect changes in pain intensity after a pain-reducing intervention in neonates. We concluded that this property—the responsiveness—is under studied and that the methodologic quality of the included studies was low. Future high-quality validation studies should focus on responsiveness.

Prevalence and treatment strategies regarding temporomandibular disorders in children and adolescents - A systematic review

CONCLUSION: The general absence of standardised studies concerning children/adolescents with TMD pain states the evident need for further systematic prevalence and treatment evaluations. Considering this, it is not possible to achieve any evidence-based treatment strategies or guidelines for children and adolescents with TMD.

Can Computerized Cognitive Training Improve Cognition in Patients With Heart Failure?: A Review

CONCLUSION: Computerized cognitive trainings show promise in enhancing the cognition of patients with HF. The stability of the current findings would need to be tested in RCTs with larger sample sizes to validate the use of CCTs in targeting cognitive impair-

ment and self-care abilities for patients with HF.

Chest ultrasound for the diagnosis of paediatric pulmonary diseases: a systematic review and meta-analysis of diagnostic test accuracy

Further research should focus on the diagnostic accuracy of chest ultrasound for the diagnosis of paediatric pulmonary diseases, other than pneumonia, comparing against a valid gold standard.

Systematic review of randomized controlled trials on antibiotic treatment for osteomyelitis in diabetes

There is no definitive evidence supporting the superiority of any particular antibiotic agent, dose, or administration duration in the treatment of osteomyelitis in diabetes. As the included studies had some flaws and limitations, further research is necessary.

Endoscopic management of biliary leaks: a systematic review with meta-analysis

We recommend sphincterotomy with stenting if the biliary leak can be bridged. If not, stenting alone with a short stent may be preferred in order to avoid sphincterotomy-related complications. More and larger studies are needed to confirm these findings.
The role of maternal obesity in infant outcomes in polycystic ovary syndrome-A systematic review, meta-analysis, and meta-regression

Polycystic ovary syndrome (PCOS) is associated with worsened pregnancy and infant outcomes, higher body mass index (BMI), and longitudinal weight gain. Despite most of the clinical features of PCOS being risk factors for worsened infant outcomes in the general population, their impact on infant outcomes in PCOS is unknown. We aimed to investigate the association of PCOS with infant outcomes considering maternal adiposity, other known risk factors, and potential confounders. The meta-analyses included 42 studies in 7041 women with PCOS and 63,722 women without PCOS. PCOS was associated with higher gestational weight gain (GWG) and with higher preterm birth and large for gestational age and with lower birth weight with this association varying by geographic continent, PCOS phenotypes, and study quality. However, PCOS was associated with none of these outcomes on BMI-matched studies. Gestational diabetes was significantly associated with an increased preterm birth on meta-regression. We report for the first time that GWG is higher in PCOS. Infant outcomes vary by geographic continent and study quality but are similar in BMI-matched women with and without PCOS. This suggests that infant outcomes in PCOS may be related to maternal obesity. These novel findings warrant future studies in PCOS investigating screening and management of infant outcomes with consideration of maternal obesity.

De-escalation versus standard dual antiplatelet therapy in patients undergoing percutaneous coronary intervention: a systematic review and meta-analysis

Switching from a potent P2Y12 blocker to clopidogrel is not uncommon for antiplatelet therapy in patients undergoing percutaneous coronary intervention. This meta-analysis aimed to investigate the efficacy and safety of this de-escalation strategy. Medical literature databases were searched for analysis comparing continued potent antiplatelet therapy and switching to clopidogrel with no language restrictions from inception to 07/ May/2018. The primary endpoints of major adverse cardiovascular events (MACE) and major bleeding together with additional efficacy outcomes were assessed by random-effects and fixed-effects meta-analysis. A total of 17,896 patients in 13 studies were eligible for analysis, while 17,579 (98.2%) patients presented as acute coronary syndrome and 4105 (23%) patients received the de-escalation therapy. Incidence of MACE was virtually identical in both de-escalation and standard potent antiplatelet therapy groups (odds ratio 0.91, 95% CI 0.73-1.14; P = 0.43). Insignificant difference was also observed in major bleeding (0.99, 0.62-1.60; P = 0.97), all-cause death (0.95, 0.61-1.46; P = 0.81), cardiovascular death (0.66, 0.31-1.42; P = 0.29), myocardial infarction (1.12, 0.80-1.58; P = 0.51), stent thrombosis (1.09, 0.50-2.36; P = 0.83), unplanned revascularization (1.09, 0.83-1.41; P = 0.54), and stroke (1.16, 0.62-2.19; P = 0.64). In conclusion, de-escalation of antiplatelet therapy is associated with nonsignificant differences in both ischemic events and major bleeding compared with standard potent antiplatelet therapy in patients undergoing percutaneous coronary intervention. The feasibility and even superiority of this strategy need to be elucidated by further randomized trials.
Do you know about…

Cochrane Clinical Answers:

- Provides clinicians with a condensed non-statistical overview of the most clinically relevant results of a Cochrane Review
- Focuses on the needs of clinicians in order to aid the decision-making process
- Makes the information a clinician will be most interested in more accessible
- Increases the usage of Cochrane Reviews to inform healthcare decisions

Key Features:

- Question and Answer format
- Outcome-focused presentation of impact of interventions on patient
- GRADE Summary of findings statements of quality of evidence
- Link to full Cochrane Review on which Answer is based
- Narrative statement of number of patients and studies contributing data on each outcome
- Links to forest plots for each outcome

www.cochraneclinicalanswers.com

If you would like to get involved with research or have an idea for a project contact the R&D Department who can offer advice and support on getting started.

The Clinical Research Centre is located on the Second Floor within Area 5 of Blackpool Victoria Hospital.

For general enquiries, please call us on: 01253 65 5547
Or email: bfwh.researchideas@nhs.net

For more information about this newsletter please contact Laura Sims, Electronic Services and Outreach Librarian on 01253 956688 / laura.sims2@nhs.net