TECHNOLOGY ASSESSMENTS & SYSTEMATIC REVIEWS

Antioxidant supplements for prevention of mortality in healthy participants and patients with various diseases

Many people take antioxidant supplements to improve health and prevent disease. This review looked at 67 primary and secondary prevention randomised clinical trials on antioxidant supplements (beta-carotene, vitamin A, vitamin C, vitamin E, and selenium) and concluded that there was no evidence to support antioxidant supplements for primary and secondary prevention.

Bjelakovic G, Nikolova D, Gluud LL, Simonetti RG, Gluud C. Antioxidant supplements for prevention of mortality in healthy participants and patients with various diseases. Cochrane Database of Systematic Reviews 2008, Issue 2.

Abstract available at:

http://www.mrw.interscience.wiley.com/cochrane/clsysrev/articles/CD007176/frame.html

Exercise for the management of cancer-related fatigue in adults

Cancer-related fatigue is a multidimensional subjective experience affecting 70%–100% of people with cancer. It can have a profound effect on a person physically, emotionally and mentally, interfere with daily activities and affect the desire to continue with treatment. Exercise has been demonstrated to be effective in reducing fatigue and improving the exercise tolerance of chronically-diseased individuals. This review identified 28 randomised control trials that investigated the effect of exercise on cancer-related fatigue in adults and found that exercise was beneficial for individuals with cancer-related fatigue during and after cancer therapy. The optimal type, intensity and timing of an exercise intervention and whether the type of cancer alters the beneficial effects of exercise remain to be determined.

Cramp F, Daniel J. Exercise for the management of cancer-related fatigue in adults. Cochrane Database of Systematic Reviews 2008, Issue 2.

Abstract available at:

http://www.mrw.interscience.wiley.com/cochrane/clsysrev/articles/CD006145/frame.html

Podcasts of Cochrane Reviews

You can also download and listen to an audio summary of this Cochrane review from this link:

http://www.cochrane.org/podcasts/review_summaries/mp3/issue2_2008_exercise.mp3

Stapled haemorrhoidectomy (haemorrhoidopexy) for the treatment of haemorrhoids: a systematic review and economic evaluation

Stapled haemorrhoidopexy is an alternative to conventional haemorrhoidectomy, which involves passing a stapling device into the anal canal to simultaneously excise excess prolapse and create a submucosal anastomosis and a closed wound high in the anorectum. Stapled hemorroidectomy is associated with less pain in the immediate postoperative period but a higher rate of residual prolapse, prolapse in the longer term and reintervention for prolapse. Overall, there is no clear difference in the rate or type of complications associated with the two techniques and the absolute and relative rates of recurrence and reintervention are still uncertain. Based on current evidence, the decision on which technique to use should depend on patient and surgeon priorities and preferences.

Burch J, Epstein D, Baba-Akbari A, et al. Stapled haemorrhoidectomy (haemorrhoidopexy) for the treatment of haemorrhoids:

A systematic review and economic evaluation. Health Technol Assess 2008; 12:iii-214.

Full-text article available at:

http://www.ncchta.org/fullmono/mon1208.pdf

Systematic review of the clinical effectiveness and cost-effectiveness of 64-slice or higher computed tomography angiography as an alternative to invasive coronary angiography in the investigation of coronary artery disease Coronary angiography (CA) is the gold standard for diagnosing coronary artery disease (CAD). However, CA is an invasive and expensive procedure and has a small risk of major complications. 64-slice computed tomography (CT) was found to be almost as good as invasive angiography in detecting true positives, but was found to be somewhat poorer in its rate of false positives. The high sensitivity of 64-slice CT avoids the costs and complications of an unnecessary coronary angiogram in those referred for investigation but who do not have CAD. However, it seems likely that diagnostic strategies involving 64-slice CT will still require invasive CA for CT test positives, partly to identify CT false positives, but also because CA provides other information that CT currently does not, notably details of insertion site and distal run-off for coronary artery bypass grafting.

Mowatt G, Cummins E, Waugh N, et al. Systematic review of the clinical effectiveness and cost-effectiveness of 64-slice or higher computed tomography angiography as an alternative to invasive coronary angiography in the investigation of coronary artery disease. Health Technol Assess 2008; 12:iii-164. Abstract available at:

http://www.hta.ac.uk/fullmono/mon1217.pdf

GUIDELINES

Antenatal care: routine care for the healthy pregnant woman

Pregnancy is a normal physiological process, and any interventions should have known benefits and be acceptable to pregnant women. This set of guidelines updates the previous edition published in 2003 and aims to offer information on best practice for baseline clinical care of all pregnancies and evidence-based information for clinicians and pregnant women to make decisions about appropriate treatment in specific circumstances. Key updates have been made in several aspects of antenatal care, such as in screening for gestational diabetes mellitus in the mother, screening for haemoglobinopathies and the use of ultrasonography for gestational age assessments and foetal abnormality screening.

National Collaborating Centre for Women's and Children's Health. Antenatal care: routine care for the healthy pregnant woman. London: RCOG Press, 2008. Full guidelines available at:

http://www.nice.org.uk/nicemedia/pdf/ CG062NICEguideline.pdf

The care and management of osteoarthritis in adults

Osteoarthritis is the most common form of arthritis and one of the leading causes of pain and disability worldwide. This guideline offers best practice advice on the care of adults with osteoarthritis based on the best available evidence. This covers aspects of diagnosis, education, exercise and physiotherapy, pharmacological and alternative therapies and surgery for osteoarthritis.

National Collaborating Centre for Chronic Conditions. Osteoarthritis: national clinical guideline for care and management in adults. London: Royal College of Physicians, 2008.

Full guidelines available at:

http://www.nice.org.uk/nicemedia/pdf/ CG059FullGuideline.pdf

Screening for chronic obstructive pulmonary disease using spirometry: US Preventive Services Task Force recommendation statement

Chronic obstructive pulmonary disease (COPD) is a major cause of mortality and disability worldwide. Spirometry is used for the diagnosis of COPD. In screening, it yields some false positive results and the number of false positives increases with age. Opportunity costs (time and effort required by patients and the healthcare system), anxiety over false-positive results and adverse effects from prescribed medications are potential harms of screening using spirometry. Evidence also suggests that providing smokers with spirometry results does not improve cessation rates. The US Preventive Services Task Force concludes that the

benefits do not outweigh the potential harms of COPD screening using spirometry and recommends against such screening.

Screening for chronic obstructive pulmonary disease using spirometry: U.S. Preventive Services Task Force recommendation statement. Ann Intern Med 2008; 148:529-534.

Clinical Summary of Recommendations available at: http://www.ahrq.gov/clinic/uspstf08/copd/copdrs.pdf

Evidence-based interventions to improve the palliative care of pain, dyspnoea, and depression at the end of life: a clinical practice guideline from the American College of Physicians

End of life, as defined by this guideline, is a phase of life when a person is living with an illness that will worsen and eventually cause death. Symptom control, continuity in care, and reducing caregiver burdens are critical elements of care for managing patients nearing the end of life. In addition, following appropriate treatment strategies for pain, dyspnoea, and depression substantially affect patients' end-of-life experiences. This guideline presents the best available evidence to improve palliative care at the end of life.

Amir Q, Vincenza S, Paul S, et al. Evidence-based interventions to improve the palliative care of pain, dyspnea, and depression at the end of life: a clinical practice Guideline from the American College of Physicians. Ann Intern Med 2008; 148:141-146.

Full guidelines available at:

http://www.annals.org/cgi/reprint/148/2/141.pdf

EVIDENCE-BASED TOPICS

The Cochrane Handbook for Systematic Reviews of Interventions (Version V)

The Cochrane Handbook for Systematic Reviews of Interventions is the official document that provides detailed descriptions in the process of preparing and maintaining Cochrane systematic reviews on the effects of healthcare interventions. The Handbook has undergone major revision and new topics have been added. Among the main changes are the new 'Risk of bias' tool in assessing risk of bias in included studies and the summarising evidence, and its quality, in the 'Summary of findings' tables.

A short summary of some of the main changes in the *Handbook version 5 is available at:*

http://www.cochrane.org/resources/handbook/ Handbook_5_WhatsNew.pdf

Full-text of the Handbook is available at:

http://www.cochrane-handbook.org/

Higgins JPT, Green S, eds. Cochrane Handbook for Systematic Reviews of Interventions Version 5.0.0 [updated February 2008]. The Cochrane Collaboration, 2008.

Available at: www.cochrane-handbook.org

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