

Abstracts

Hormone replacement therapy and risk of cardiovascular disease

According to a recent article in *JAMA*, the timing of the initiation of hormone replacement therapy (HRT) may have an influence on its effect on cardiovascular disease. The authors of this paper set out to examine whether the effects of HRT on risk of cardiovascular disease vary by age or by years since menopause began.

They used a secondary analysis of the Women's Health Initiative (WHI) randomised controlled trials of hormone therapy in which 10 739 postmenopausal women who had undergone a hysterectomy were randomised to conjugated equine estrogens (CEE) or placebo, and 16 608 postmenopausal women who had not had a hysterectomy were randomised to CEE plus medroxyprogesterone acetate (CEE + MPA) or placebo. Women aged between 50 and 79 years were recruited to the study from 40 USA clinical centres between September 1993 and October 1998.

In the combined trials there were 396 cases of cardiovascular disease and 327 cases of stroke in the HRT group compared with 379 cases of cardiovascular disease and 239 cases of stroke in the placebo group.

The authors found that women who started HRT closer to the onset of menopause tended to have a reduced risk of cardiovascular disease compared with an increased risk of cardiovascular disease among women more distant from the onset of menopause, although the trend was not significant. A similar non-significant trend was seen for total mortality, but the risk of stroke was raised regardless of years from the start of menopause. The authors conclude that this study should be considered when thinking about the short-term treatment of menopausal symptoms.

Roussouw JE, *et al. JAMA* 2007; 297: 1465-1477

Zinc supplementation and child mortality

More than 10 million children younger than 5 years die every year in developing countries, mainly from preventable infections. Malnutrition and micronutrient deficiencies are increasingly recognised as the main risk factors for childhood mortality in the developing world. Zinc is a crucial micronutrient because it affects various immune mechanisms and modulates host resistance to several pathogens. It is known that zinc supplementation reduces morbidity from diarrhoea – some studies have shown reduction in morbidity in the subsequent 2 - 3 months without further supplementation.

A recent paper in the *Lancet* reports an overall 7% reduction in mortality in a randomised trial of daily zinc supplementation in children aged 1 - 48 months in Pemba, Zanzibar. A further significant reduction in mortality was seen in children aged 12 - 48 months. The authors enrolled 42 546 children aged 1 - 36 months in a randomised, double-blind, placebo-controlled trial. A total of 21 274 children received daily supplementation with 10 mg zinc (5 mg in children younger than 12 months) for an average of 484.7 days, and 21 272 received placebo. They found that, overall, there was a non-significant 7% reduction in all-cause mortality associated with zinc supplementation.

The authors went on to say that they believe that a meta-analysis of all studies of mortality and morbidity will help to make evidence-based recommendations for the role of zinc supplementation in public health policy to improve mortality, morbidity, growth and development in young children.

Sazawal S, *et al. Lancet* 2007; 369: 927-934.

Use drugs rather than PCI in stable coronary artery disease

The risk of death, myocardial infarction or other major cardiovascular events in patients with stable coronary artery disease is no lower if percutaneous coronary intervention (PCI) rather than optimal drug therapy along with lifestyle changes is used, according to a study published in the *New England Journal of Medicine*.

The trial randomised more than 2 000 patients who had objective evidence of myocardial ischaemia and significant coronary artery disease to PCI or optimal medical treatment. The results showed no difference in mortality from any cause or in the risk of non-fatal myocardial infarction after 4.6 years. These findings should change practice, according to David Taggart, professor of cardiovascular surgery at the University of Oxford. He believes that PCI is overused in the management of patients with stable coronary artery disease.

What is needed is a multidisciplinary approach, offering treatment that is in the best interests of the patient. Revascularisation should be limited to patients whose condition is clinically unstable, who have left main artery disease, or in whom medical treatment has failed to control symptoms. It should not be used as part of a secondary prevention strategy.

Boden WE, *et al.*, published online at www.nejm.org on 27 March 2007.

BRIDGET FARHAM

Single suture

Malaria control by fish

Research in Kenya has found that edible fish (*Oreochromis niloticus*) added to ponds can successfully control mosquito populations. This fish is commonly farmed and eaten, but has not previously been used for mosquito control. The fish were introduced in abandoned fish ponds and the numbers of immature mosquitoes measured over a 6-month period. After the fish were introduced there was an almost immediate reduction in the density of mosquitoes in the treated ponds, compared with an increase in the ponds where fish had not been introduced. It would appear that introducing edible fish into large bodies of water could become a practical and sustainable mosquito control measure.

Howared AFV *et al. BMC Public Health* 2007; 7: 199.