



Heart attack and the pill

It remains unclear whether second-generation oral contraceptives, containing levonorgestrel, or third-generation formulations, containing desogestrel or gestodene, have a more favourable risk profile with regard to myocardial infarction. Third-generation preparations are associated with at least a doubling of the risk of venous thrombosis; however, it has been suggested that they may protect against myocardial infarction by having a more favourable effect on lipid profile. A recent Dutch nationwide, population-based, case-control study enrolled 248 women aged 18–49 years who had a first myocardial infarction (MI) between 1990 and 1995, and 925 matched controls. Use of the OCP was associated with a doubling in MI rates, but the results suggested that second-generation formulations produced a higher risk than the third-generation preparations (OR, 2.5 [95% CI, 1.5–4.1] v 1.3 [95% CI, 0.7–2.0]). However, the authors note that a previous study suggested the reverse, and that neither study was conclusive due to wide confidence intervals. Among women who had used the OCP, the risk of MI was highest among those who smoked (OR, 13.6), had diabetes (OR, 17.4) or hypercholesterolaemia (OR, 24.7).

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One lonely phone

An analysis of the telephone book from the World Health Organization headquarters in Geneva, confirmed by specific enquiry, has revealed that only one of 2184 telephone numbers

is dedicated to staff dealing with prevention of road injuries. The British researchers note that every day about 3000 people die and about 30000 people are seriously injured in road crashes worldwide. Most casualties occur in low- and middle-income countries, and most are vulnerable road users: pedestrians, cyclists and motorcyclists.

BMJ 2001; 323: 1485

Prayer: results of RCTs

Intercessory prayer (IP) is focused, committed and organised prayer on behalf of another person. A recent Cochrane Review¹ concluded that data are too inconclusive to guide those wishing to uphold or refute the effect of IP on healthcare outcomes.

Doctors from the Mayo Clinic² have reported on a double-blind, randomised-controlled trial (RCT) of IP on 799 consenting patients, 18 years and older, discharged from a coronary care unit with a cardiovascular diagnosis.

Intercessors were asked to pray for each person in the intervention group at least once a week for 26 weeks. They had no contact with subjects, just first names and minimal details. Primary endpoints in the study were significant cardiac events, such as rehospitalisation or death. As delivered in this study, IP had no significant effect on medical outcomes.

In its Christmas 2001 edition, the *BMJ* published an RCT from Israel³ on “remote, retroactive” prayer involving 3393 patients with bloodstream infections, treated

between 1990 and 1996. As the authors were not prepared to assume that time is linear, the intervention was carried out four to 10 years later. A list of the first names of the patients in the intervention group was given to a person who said a short prayer for the well being and full recovery of the group as a whole. There was no difference in mortality between the two groups. However, length of stay in hospital and duration of fever were significantly shorter in the intervention group than in the control group ($P=0.01$ and $P=0.04$, respectively). A few dozen *BMJ* readers lodged “rapid responses”. Treatment of the control group was recommended.

1. *The Cochrane Library*, Issue 4, 2001

2. *Mayo Clin Proc* 2001; 76: 1192–1198

3. *BMJ* 2001; 323: 1450–1451

MRI and the heart

Invasive x-ray coronary artery angiography remains the gold standard diagnostic procedure for coronary artery disease. However, a substantial minority of patients referred electively for this test do not have clinically significant disease, so non-invasive alternatives are being investigated. A prospective study conducted at seven institutions in the United States and Europe concluded that three-dimensional coronary magnetic resonance angiography (MRA) reliably identifies (or rules out) left main coronary artery or three-vessel disease. A standard protocol was used to image 109 patients with suspected coronary artery disease, who were scheduled for their first elective x-ray coronary angiography. The results of the two procedures were then compared. The overall accuracy of coronary MRA in diagnosing coronary artery disease was 72% (95% CI, 63% – 81%). However, for patients with disease of the left main coronary artery or three-vessel disease, sensitivity was 100%, specificity 85%, and accuracy 87%. Surgical revascularisation in patients with such disease is associated with a more favourable long-term survival benefit.

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