



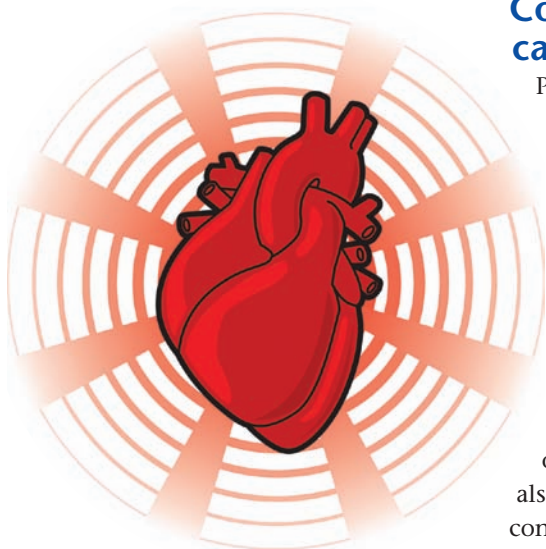
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X-rays and birth defects

There is no evidence that the dose of radiation used in x-rays increases the risk of birth defects or miscarriage for pregnant women. In fact, the risks are “far below” those that a pregnant woman may be exposed to spontaneously, according to Dr. Gideon Koren — Canada’s foremost expert on the impact of toxic substances on pregnant women and their unborn children — from the Motherisk Program at the Hospital for Sick Children in Toronto. Koren and colleagues reviewed the issue of exposure to radiation from diagnostic imaging procedures because many women believe the effects of such exposure to be very harmful. Overall, they noted, the majority of such diagnostic procedures expose the fetus to radiation levels far below the range that will result in birth defects. However, they admit that a recent Canadian survey showed that even many doctors overestimate this risk, which could cause unnecessary anxiety for pregnant women. The physicians concluded that diagnostic tests that involve radiation should not be withheld from a pregnant woman if the test is clearly needed. But, they said, unnecessary tests should be delayed so as not to provoke anxiety.

Commonly used gastrointestinal drugs can impair effectiveness of blood thinner

Proton pump inhibitors — a class of drugs frequently used to treat acid reflux and heartburn — can impair the effectiveness of a common blood thinner used to protect patients after a heart attack. Researchers therefore urged that patients using clopidogrel (Plavix) to reduce their risk of coronary events should avoid taking most proton pump inhibitors at the same time. This finding is important because it calls into question recent guidelines recommending that patients treated with ASA after an acute myocardial infarction also take proton pump inhibitors to protect themselves against the potential gastrointestinal side effects of chronic ASA use, because many of these patients will also be taking clopidogrel. The Toronto researchers based their conclusion on an analysis that found that among a group of patients who had been taking clopidogrel after treatment for an acute myocardial infarction, use of any proton pump inhibitor (except pantoprazole) at the same time was associated with a significant risk of having another infarction.



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Effectiveness of pneumococcal vaccine in adults questioned

A new Swiss analysis of studies assessing the effectiveness of pneumococcal vaccination has questioned its effectiveness in preventing pneumonia in adults. But a commentary on this study, written by two Australian researchers, challenges the conclusion, saying the existing evidence does not support ceasing pneumococcal vaccination of adults. Andrews and Moberley, who had done their own review of the evidence, said their conclusion is supported by the World Health Organization. The difference of opinion between the Swiss-based team and the Australian researchers can be attributed to the original studies that were included in the analyses. By excluding two studies — one conducted in Papua New Guinea and one conducted among the elderly in New York — that they did not feel to be conducted to high enough standards, the Swiss team ended up looking at 22 studies involving 101 507 participants. Their analysis showed little evidence of vaccine protection among elderly patients or adults with chronic illness in preventing pneumonia or death. However, when the Papua New Guinea and New York studies were included in the analysis, the beneficial effects of the vaccination are more apparent.

Home care reduces need for hospital care

For certain patients, avoiding hospital admission by providing care in the home resulted in a comparable quality of care at the same or lower cost. This conclusion comes from a team of British researchers who analyzed 10 studies that had compared the provision of services in the home, as an alternative to admission to an acute care hospital, with those of similar services provided in a hospital. These studies included patients with chronic obstructive pulmonary disease, patients recovering from stroke, and older patients with acute medical conditions. The researchers said “there is no evidence to suggest that avoiding admission through provision of hospital care in the home leads to greater mortality.” In fact, the analysis suggests those cared for in the home had lower mortality rates than those cared for in the hospital. Dr. Bruce Leff, an expert in physician home care from the Johns Hopkins University School of Medicine in Baltimore, commented on the findings. He said, despite the positive findings concerning hospital-at-home care programs, there are problems involved in using them more widely, including the need for dedicated resources and the time required to establish such programs. Dr. Leff said hospital-at-home care must be incorporated into the spectrum of health care without making it another siloed delivery model.



Common diabetes drugs increase risk of fractures in women

Use of thiazolidinediones — rosiglitazone and pioglitazone — in patients with type 2 diabetes can almost double the risk of fractures in women. The study, conducted by researchers from the UK and Wake Forest University School of Medicine in Winston-Salem, NC, looked at 12 studies of thiazolidinediones involving several thousand participants. The analysis showed that, in women, use of the drugs significantly reduced bone mineral density and doubled the risk of fractures in the upper and lower extremities. This effect was not seen in men. Added to the already documented increased risk of cardiovascular events with these drugs, a Canadian expert said these new findings make a case for not using the drugs as the first choice in controlling blood sugar in patients with type 2 diabetes. Dr. Lorraine Lipscombe from the Institute for Clinical Evaluative Sciences and the University of Toronto called the ongoing accumulation of evidence of harm from using thiazolidinediones “unsettling to clinicians and patients.”