

NIGHT SHIFT WORK AND ON-CALLS: A PROBABLE CARCINOGEN?

As reported in the Associated Press, The International Agency for Research on Cancer (IARC) intends to classify overnight shift work as a probable carcinogen from December 2007 onwards. The Associated Press claims that the American Cancer Society is likely to follow suit.

This assessment is based on epidemiological studies of nurses and flight crews, showing a link between night work and cancer of the breast or prostate. At least one recent study in Japan was a prospective cohort study. Further analysis is also published in the December 2007 edition of *Lancet Oncology*.

(Source: American Journal of Epidemiology 2006 164(6):549-555; doi:10.1093/aje/kwj232; Associated Press)

NEW GUIDELINES FOR ST-ELEVATION MYOCARDIAL INFARCTION

The American College of Cardiology and the American Heart Association have updated their previous 2004 Guideline for the management of ST-segment elevation myocardial infarction.

Highlights of the new recommendations include the addition of clopidogrel to aspirin. They also emphasise the need for early thrombolysis if patients are unable to receive timely percutaneous coronary intervention (PCI). There is also a recommendation that for elective PCI of an occluded infarct artery one to 28 days after MI in stable patients, there is no incremental benefit beyond optimal medical therapy in preserving left ventricular function and preventing subsequent cardiovascular events. Issues surrounding the use of selective COX-2 inhibitors and non-aspirin NSAIDs are also discussed.

(Source: J Am Coll Cardiol, doi:10.1016/j.jacc.2007.10.001; (Published online 10 December 2007))

EXPERIMENTAL WEARABLE HAEMODIALYSIS DEVICE

In a pilot study reported in *The Lancet*, eight patients with end-stage renal failure were outfitted with a wearable haemodialysis device for four to eight hours. The device was powered by a standard nine volt

battery and weighed about five kilograms. The authors report successful removal of fluid without adverse effect on cardiovascular measurements. However, of the eight patients, two had clotting of the vascular access, and one had a dislodged fistula needle.

(Source: The Lancet 2007; 370:2005-2010)

NOT HEARD AND NOT SEEN: HIGHER INJURY RISK IN CHILDREN WITH HEARING LOSS

In a study published in the *Annals of Family Medicine*, American researchers analysed medical billing records for over 90,000 children in South Carolina over the 2002 to 2003 duration. Children with hearing loss were more than twice as likely to require treatment for injuries in a hospital setting, compared to the control group.

The authors hypothesise that this increased risk of injury may be due to hearing impaired children's inability to recognise audible signs of danger or verbal warnings. They recommend that doctors should discuss injury prevention with parents of children with hearing loss.

(Source: Annals of Family Medicine 5:528-533 (2007))

LAUGHTER: AN ANALGESIC?

In a preliminary study published in *Evidence-based Complementary and Alternative Medicine*, 18 healthy volunteers between ages seven and 16 had a hand immersed in cold water, up to an unannounced limit of three minutes. Their subjective pain scores were assessed before, during and after watching humorous videos.

Although the pain score intensity was stable from test to test, the children's pain tolerance increased significantly for tests during which the video was watched. A similar study in 2006 found that cartoons lessened the pain of venepuncture.

While the study has limitations, and also has a potential conflict of interest (it was financed by Comedy Central), it is thought-provoking and may inspire further studies in non-pharmacological methods of analgesia.

(Source: eCAM, doi:10.1093/ecam/nem097)