

JOYLESS ON THE JOB

Interpersonal conflict at work can be bad for your health, according to researchers in the Netherlands. In a study of over 10000 men, researchers analysed the effects of conflict with either co-workers or supervisors over a 2-year period. The results showed that conflict with co-workers was a significant risk factor for prolonged fatigue, poor general health, external occupational mobility (ie, changing employers), and an elevated need for recovery from work. Supervisor conflict appeared to be a risk factor for similar problems, with the addition of internal occupational mobility — a job change within the company. The researchers controlled for demographic factors, long-term illness, and other workplace stressors. They comment that one limitation of the study is that it included only men, and suggest that the effect on women, who are more emotionally responsive, may be even more serious.

Occup Environ Med 2009; 66: 16-22

GENES AND HEART DISEASE

A gene linked to the development of cardiomyopathy and subsequent heart failure is carried by millions worldwide, particularly in the Indian subcontinent. A group of Indian and international researchers have focused on cMyBP-C (cardiac myosin binding protein C), a constituent of the thick filaments of the cardiac sarcomere. Through the development of abnormal cardiac muscle fibres, individuals with the genetic defect suffer from late-onset symptoms of dilated or hypertrophic cardiomyopathies, and eventually cardiac failure. In a case-control study of 800 people with the genetic defect and 699 controls, researchers were able to pinpoint the 25-base-pair deletion in MYBPC3, a common variant of the genetic defect in South Asians, as significantly associated with the risk of heart failure. They comment that genotyping may be used for the identification of people at risk of the disease.

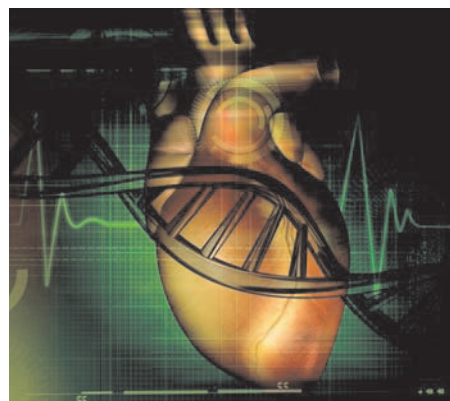
Nat Genet 2009; 41: 187-191



METASTASES LINKED TO INFLAMMATION

The defining ability of malignant tumours to metastasise appears to be related to their surrounding inflammatory environment, say international cancer researchers studying features of metastatic carcinomas. The process of metastasis depends upon both the properties of cancer cells and their environment. According to researchers, the inflammatory microenvironment of malignant tumour cells is partially in response to molecular pathways involving macrophage-activating factors secreted by metastatic carcinomas. Macrophages produce cytokines, growth factors, and matrix-degrading enzymes, which assist metastasis. The authors, who studied a human lung cancer cell line, identified a factor, versican, which appeared to induce macrophage cytokine production. Versican is a protein of the extra-cellular matrix, which the researchers comment is often upregulated in many human lung cancers.

Nature 2009; 457: 102-106



CT ANGIOGRAPHY — A VIABLE ALTERNATIVE?

Computed tomography angiography (CTA) is becoming increasingly attractive as an alternative imaging modality for patients with lower extremity peripheral arterial disease. The accuracy of this method compared with digital subtraction angiography (DSA) was the subject of a recent systematic review and meta-analysis of 20 studies including over 900 participants. Most patients included in the studies suffered from intermittent claudication. The overall sensitivity of CTA for detection of greater than 50% stenosis or occlusion was 95%, and specificity was 96%. The authors discuss the limitations of the analysis in detail, listing problems with the quality of the available studies, the small sample sizes, possible overestimation of sensitivity due to how stenosis was measured, and potential publication bias as possible confounders. Nonetheless, they conclude that, compared with intra-arterial DSA, computed tomography angiography is a reliable modality in patients with predominantly intermittent claudication.

JAMA 2009; 301: 415-424

DYING FOR A TAN

New, self-administered “tanning drugs” are now available without regulation over the Internet. Melanotan I and II are analogues of α -melanocyte stimulating hormone. Dermatologists and a pathologist in the United Kingdom have noted rapidly changing moles in patients using the drugs, raising further concerns about the safety of these compounds. In a letter to the Editor, the doctors describe rapid hyperpigmentation and growth of moles in two women self-administering the drugs. Despite concurrent use of sunbeds by both patients, the authors comment that the clinical picture may be confused by rapid changes in pigmented lesions in people using these unregulated drugs.

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