

In other journals

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ALEXANDER ALLEVIATES PAIN

Low back pain is common, can be difficult to treat and causes significant morbidity, particularly when it becomes chronic. The Alexander technique aims to develop skills that help people avoid poor habits which affect postural tone and neuromuscular coordination. Promisingly, the technique appears to be effective in treating patients with low back pain, according to the results of a UK randomised controlled trial. A total of 579 patients with chronic recurrent low back pain were randomly assigned to groups receiving either normal care, massage, or six or 24 Alexander technique lessons from registered teachers. After the lessons, half of each intervention group received a prescription for exercise by a doctor, with behavioural counselling from a nurse. The outcome measure was based on a score measuring impairment by pain. Either six or 24 lessons in the Alexander technique and prescription of exercise remained effective at 1 year, but massage did not show long-term benefit. The authors suggest that the technique may limit muscle spasm, strengthen postural muscles, and improve coordination and flexibility, thus leading to a reduction in back pain.

BMJ 2008; 337: a884

FREE RADICALS AND FOOD INTAKE

Another piece of the puzzle of weight gain and appetite control may have been found by Chinese and US researchers who have studied the phenomenon in mice. The gut-derived hormone ghrelin, which promotes food intake, affects the brain by regulating neuronal activity in the hypothalamus. A previously poorly understood intracellular mechanism has been revealed to be dependent on protein-uncoupling in the mitochondria of certain hypothalamic neurons, driven by the burning of fat and the production of free radicals, which are used in the uncoupling process. This in turn triggers ghrelin-induced food intake. The authors speculate that free radical-induced damage to surrounding vulnerable neurons over time may be associated with age-related onset of obesity.

Nature 2008; 454: 846-851

FACIAL TRANSPLANTATION — THE FOLLOW-UP

The recipient of a partial facial allotransplant in China 2 years ago has survived and the graft has proved to be successful long term, according to a follow-up and review of the procedure. The 30-year-old man suffered severe facial injuries after being attacked by a bear in the remote Yunnan province. The wound was initially repaired by a forearm pedicle flap, which was only partially successful. The subsequent partial face transplant consisted of anastomosis of the right mandibular artery, facial nerve and facial vein; and whole repair of the nose, upper lip, parotid gland, front wall of the maxillary sinus, infraorbital wall, and zygoma. Immunomodulatory therapy included tacrolimus, corticosteroids and monoclonal antibody. Despite three episodes of acute rejection, controlled by methylprednisolone and tacrolimus, the authors note that the graft is now functioning well and that the patient is in the process of re-integration into society. They comment that the success of this procedure holds promise for the management of serious facial disfigurement.

Lancet 2008; 372: 631-638

DIVERTICULAR DIVERSIONS

Do you advise your patients with diverticular disease to avoid eating nuts, corn, popcorn, and seeds in order to reduce the risk of complications? You may no longer need to do so, according to the results of a large, long-term US study involving over 47000 men. The participants, who were free of diverticulosis at baseline, were followed for 18 years and completed regular surveys collecting medical and dietary information. The researchers found no association between corn, nut or popcorn consumption and the risk of diverticulosis or diverticular complications. Interestingly, nut and popcorn consumption appeared to be inversely associated with the risk of diverticulitis, independent of other known risk factors. The authors comment that they adjusted for total fibre intake and took into account the normal eating habits of the subjects, strengthening the validity of the results.

JAMA 2008; 300: 907-914

COSMETIC NEUROLOGY?

Improving learning, memory and attention skills well beyond the normal range is a seductive proposition, and one which may soon become a reality, according to the proponents of neurocognitive enhancement, or "cosmetic neurology". A discussion of the potential ethical minefield resulting from the use of these techniques forms the basis of a recent review article proposing protection for those who do not wish to take part in such enhancements. Neurocognitive enhancement may lead to the treatment of healthy individuals with brain-enhancing drugs, with the aim of improving performance in attention, learning and memory. The potential exists for employees who choose not to engage in such enhancements to suffer discrimination from employers and insurers. Apart from the complex ethical issues, the author comments that legislation and policy need to keep pace with science, just as they have been forced to in the field of genetics.

J Med Ethics 2008; 34: 616-618



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