



B S Dhillon, M C Nuttall, N Coull and T S O'Brien

BMJ 2008;336:898-
doi:10.1136/bmj.39548.521852.47

Updated information and services can be found at:
<http://bmj.com/cgi/content/full/336/7649/898>

These include:

Rapid responses

2 rapid responses have been posted to this article, which you can access for free at:

<http://bmj.com/cgi/content/full/336/7649/898#responses>

You can respond to this article at:

<http://bmj.com/cgi/eletter-submit/336/7649/898>

Email alerting service

Receive free email alerts when new articles cite this article - sign up in the box at the top left of the article

Notes

To order reprints follow the "Request Permissions" link in the navigation box

To subscribe to *BMJ* go to:

<http://resources.bmj.com/bmj/subscribers>

MINERVA

Medical use of intravenous saline solution is thought to originate from the European cholera pandemic in 1831, but a literature search found that the fluids used during that time show little resemblance to 0.9% or “normal” saline. Indeed the routine use of normal saline has little scientific basis. There’s nothing “normal” or physiological about 0.9% saline—and its continued use may be based on a historical fallacy (*Clinical Nutrition* 2008;27:179-88).

Population studies have suggested that gum disease is a risk factor for heart disease, but the findings aren’t consistent. A study that looked at the link between clinical and radiographic measures of periodontitis, toothlessness, and the incidence of coronary heart disease reports a significant dose dependent association between periodontitis and coronary heart disease in men under 60. The association is independent of all the usual risk factors, such as smoking, diabetes, and cholesterol levels (*Circulation* 2008;117:1668-74).

Conventional wisdom is that any sort of exogenous oestrogen should be avoided in women who have had breast cancer, but a review in the *Oncologist* points out that as the prognosis for breast cancer patients improves, what to do about the gynaecological side effects from hormone treatment becomes more critical (2008;13:222-32). Lifestyle changes rarely help, and many women now claim they’d rather try oestrogen treatments with care, or discontinue endocrine therapy altogether.

Magnesium deficiency seems to accelerate ageing processes in human cells, and a chronic lack of magnesium may promote age related diseases, according to the *Proceedings of the National Academy of Sciences* (published online 7 April 2008). A study of magnesium depleted fibroblasts found that although the cells survived and divided normally, they grew older more quickly than cells grown in normal magnesium concentrations. Premature senescence is linked to shorter telomeres, the genetic sequences which protect the ends of chromosomes.

The curveball in baseball is said to be dangerous for the ulnar collateral ligaments of young pitchers, but are they at less risk when pitching fastballs? A laboratory biomechanical study using three dimensional motion analyses reports that the fastball produces the greatest values in



A 27 year old man with a history of ketamine use presented with acute right loin pain and a history of lower urinary tract symptoms. Discontinuing ketamine relieved symptoms temporarily. Intravenous urography showed distension suggesting bilateral obstruction, not present six months before, and a small contracted bladder. Previous bladder biopsies showed ulcerative cystitis with neutrophilic and eosinophilic infiltration. On further questioning, the patient said that several friends who used ketamine had similar symptoms. These findings suggest ketamine associated cystitis. The clinical course in this newly described condition is unknown, but over six months our patient’s urinary function deteriorated.

B S Dhillon (benjeev@doctors.net.uk), foundation year 2 doctor, **M C Nuttall**, specialist registrar, **N Coull**, specialist registrar, **T S O’Brien**, consultant, department of urology, Guy’s Hospital, London SE1 9RT
Patient’s consent: Obtained.

elbow varus torque, shoulder internal rotation torque, elbow proximal force, and shoulder proximal force, followed by the curveball and lastly the “change-up” pitch. These data are consistent with research that suggests that it’s the amount of pitching, not the type of pitching, that represents the higher risk factor (*American Journal of Sports Medicine* 2008;36:686-92).

It’s often been said that women get investigated less aggressively than men when they have strokes, and that they receive clot busting

drugs less often. But a Canadian cohort study conducted over 10 years has found that most sex differences in stroke can be put down to confounding. More research is needed, though, to explore the remaining gender differences in stroke pathophysiology and the use of thrombolytic therapy (*Stroke* 2008;39:1090-5).

A pilot trial using polyurethane cuffed endotracheal tubes to prevent early postoperative pneumonia after cardiac surgery found this was an effective intervention. In a prospective, single blind, randomised study of polyurethane versus the routine polyvinyl chloride cuffed tubes in 134 patients, mortality was similar in both groups, but the incidence of early pneumonia and empirical prescribing of antibiotics were significantly lower in the polyurethane group. One theory is that polyurethane creates a better tracheal seal, reducing the risk of breathing in small particles of contaminated upper airway material (*Journal of Thoracic and Cardiovascular Surgery* 2008;135:771-6).

The greatest risk for married women for contracting HIV, research in several countries suggests, is having sex with their husband. In Hanoi, Vietnam’s political agenda seems unintentionally to contribute to this marital HIV risk by “silently condoning and facilitating opportunities for men’s extramarital sexual relations” and by encouraging wives to acquiesce to their husbands’ infidelities. A lesser known tension is the pressure married men experience to have extramarital sex, even when they set out with no intention of looking for it. The social risk of refusing outweighs the risks of participating in it (*American Journal of Public Health* 2008;98:650-60).

Minerva feels her decision making is sometimes slow, but it may not be as slow as she thinks. A functional brain imaging study in *Nature Neuroscience* suggests that the brain is ahead of its owner (published online 13 April 2008). Brain activity was tracked while people viewed a stream of letters on a screen, deciding when to press one of two buttons. Researchers used pattern recognition to match brain activity with each choice, and found that the section of brain involved in executive control and self reflection went into action up to 10 seconds before participants were conscious of having made a decision.