NEWS

Spanish chemists will offer HIV tests to members of public in pilot project.
de Lago, M.

Screening for bowel cancer is set to save 2500 lives a year in UK.
Kmietowicz, Z.

Memory clinics could improve dementia care, say experts.
Kmietowicz, Z.

Colleagues call for doctor acquitted of bomb plots to be released from custody.
Kmietowicz, Z.

Researchers refine in vitro test that will reduce the risk of “first in humans” drug trials.
Mayor, S.

English government launches initiative to cut obesity.
Mayor, S.

Indian doctors demand better second line treatment for patients with drug resistant tuberculosis.
Mudur, G.

Perinatal mortality in Netherlands third worst in Europe.
Sheldon, T.

German paediatricians want law changed to make it easier to report child abuse.
Stafford, N.

Medicine takes two of top three places in research assessment exercise.
Watts, G.

RESEARCH

Elbow extension test to rule out elbow fracture: multicentre, prospective validation and observational study of diagnostic accuracy in adults and children.

Detecting implausible social network effects in acne, height, and headaches: longitudinal analysis.
Cohen-Cole, E., and Jason M Fletcher.

Dynamic spread of happiness in a large social network: longitudinal analysis over 20 years in the Framingham Heart Study.
Fowler, J.H., and Nicholas A Christakis.

Minimal access surgery compared with medical management for chronic gastro-oesophageal reflux disease: UK collaborative randomised trial.
Grant, A.M., Samantha M Wileman, Craig R Ramsay, N Ashley Mowat, Zygmunt H Krukowski, Robert C Heading, Mark R Thursz, and Marion K Campbell.

Exercise on prescription for women aged 40-74 recruited through primary care: two year randomised controlled trial.

Patients’ preferences within randomised trials: systematic review and patient level meta-analysis.
Preferences Collaborative Review Group.

Risk of Parkinson’s disease after hospital contact for head injury: population based case-control study.
Rugbjerg, K, Beate Ritz, Lise Korbo, Nick Martinussen, and Jorgen H Olsen.

Comprehensive warm-up programme to prevent injuries in young female footballers: cluster randomised controlled trial.

CLINICAL REVIEW

Management of low back pain.

Blood pressure self monitoring: questions and answers from a national conference.
McManus, R.J., Paul Glassziou, Andrew Hayen, Jonathan Mant, Paul Padfield, John Potter, Emma P Bray, David Mant.

Thirty five pharmacies in the province of Barcelona will carry out rapid HIV tests for free, in a pilot project aiming to increase access to tests for people from vulnerable groups and to avoid delay in diagnosis. The project, to start in the first quarter of 2009, will run for at least six months in 23 municipalities with populations from 30 000 to 50 000, most of them around Barcelona city. It is being organised by Rafael Borràs, a member of the governing council of the Barcelona Pharmacists’ Association, and Albert Giménez, director of AIDS prevention and assistance in the health department of the Catalonian government. The project is targeted at anyone over 16 years old whose behaviour puts them at a higher than normal risk of contracting HIV—mainly injecting drug users and people with multiple sexual partners who engage in risky sex practices without taking preventive measures. Their sexual . . .


An estimated 2500 lives will be saved every year in the United Kingdom by 2025 because of screening for bowel cancer, research has shown. A study, funded by Cancer Research UK, predicted the impact of kits to test for faecal occult blood on mortality rates. A computer simulation was based on mortality and incidence of bowel cancer between 1975 and 2004 and the number of people who attended screening in early trials. It found that deaths from bowel cancer are set to drop by about 16%. By 2025 between 2200 and 2700 lives in the UK are expected to be saved, says the study (J Med Screen 2008;15:163-74, doi:10.1258/jms.2008.008024). More than 36 500 people are diagnosed as having bowel cancer a year in the UK, and 16 000 people die from the disease. If detected at an early stage treatment is simpler and more effective, with four . . .


The government’s proposals to set up memory clinics in every town to improve the care given to people with dementia and their families could help to improve dementia care in England provided that they are not set up simply as diagnostic centres, experts have said. The proposal is part of the five year national dementia strategy to be launched in January. Medical students and GPs are also to receive training in the diagnosis of dementia to improve the early recognition of the disease. A spokeswoman for the Department of Health said, “We want to make sure that every GP is trained to spot the first signs of dementia, and to refer patients to specialists. The Department of Health will work with all relevant medical and nursing organisations, including the Royal College of GPs, Skills for Care, and the NHS, to make sure that appropriate training is provided for medical students, . . .


Colleagues of a doctor who was cleared of any involvement in terrorist activities in the United Kingdom have called for him to be released from custody while he awaits a decision on whether he will be deported. Mohammed Asha, a neurologist from Jordan, was arrested on 30 June 2007 after attempted car bomb attacks in London on 29 June and at Glasgow airport a day later. At the time of his arrest Dr Asha was working for the University Hospital of North Staffordshire in Stoke-on-Trent and was due to take up a post in neurosurgery at Walsgrave Hospital in Coventry after a holiday in Jordan in mid-July. During the nine week trial Dr Asha admitted knowing Bilal Abdulla, who was found guilty of conspiracy to murder by planning car bomb attacks, and Kafeel Ahmed, who died of his injuries at Glasgow airport. But he denied any knowledge of the . . .


UK researchers investigating what went wrong in the drug trial with the immunomodulator TGN1412 in 2006, in which six healthy volunteers became critically ill, have developed an in vitro test that could have predicted the drug’s serious side effects before it was tested in humans. The six men had catastrophic multiorgan failure when they took part in a “first in humans” trial of TGN1412—a monoclonal superagonist of the CD28 T cell surface receptor, which was being tested for use in autoimmune conditions. The drug triggered a systemic inflammatory response with rapid induction of proinflammatory cytokines; this caused a life threatening “cytokine storm,” which had not been predicted from preclinical testing (BMJ 2006;333:570; 10.1136/bmj.333.7568.570). The UK Medicine and Healthcare Products Regulatory Agency (MHRA) commissioned the government funded National Institute for Biological Standards and Control (NIBSC) to investigate why in vitro human cell tests and in vivo animal tests failed . . .


A large advertising campaign to encourage families, and particularly children, to eat more healthily and be more active was launched last week by the English . . .
government as part of a three year programme that aims to achieve a “lifestyle revolution” to halt the growing epidemic of obesity. The Change4Life programme will include education, individualised support, and activities to encourage people to understand the impact of obesity on their health and to make changes to achieve and maintain a healthy body weight. Its central message is that 90% of today’s children will be overweight or obese and at risk from serious diseases by 2050 without intervention. Launching the initiative, Dawn Primarolo, the public health minister, said, “We are trying to create a lifestyle revolution on a huge scale—something that no government has attempted before.” She explained that the scale of obesity in the United Kingdom needs an ambitious and innovative approach. . . .


India’s national tuberculosis control programme is providing inappropriate drugs to thousands of patients, amplifying the public health hazard posed by multidrug resistant tuberculosis, sections of India’s medical community have said. Doctors campaigning for change want drug sensitivity tests given to patients when initial treatment fails so that individualised treatment can be given. The initial course of treatment given to patients in India consists of rifampicin, isoniazid, pyrazinamide, and ethambutol. If these fail patients are given a regimen that consists simply of adding streptomycin to the original four. The programme, managed by the health ministry and based on the directly observed treatment, short course strategy, provides drugs each year to about 1.5 million patients and has a success rate of 85%. But among 19 436 patients who received the retreatment course in 2006 after failing previous treatment, the cure rate was only 50%. About 8% died during retreatment, and 14% were . . .


Researchers in the Netherlands fear that Dutch babies “may not be getting the start they should” after data have shown that perinatal mortality continues to compare badly with the country’s European neighbours. The comparative study of mothers’ and babies’ health outcomes in 26 European countries, Peristat II, showed that the Netherlands had the third worst figures, after France and Latvia (www.europeperistat.com). The findings reinforce the findings of the Peristat I study, in which the Netherlands had some of the worst rates among 15 European Union countries. Perinatal mortality has dropped from 10.9 to 10 per 1000 births, but it has fallen faster in other countries, including Greece and Spain. Researchers think that the results of Peristat II make it less likely that the Peristat I figures were a result of chance or poor data collection. The Dutch researchers are urging more insight into the risks compared with other . . .


German paediatricians are asking the government to relax confidentiality laws to give them the legal power to report cases of suspected child abuse without informing parents. The matter has been discussed for the past year and is on the agenda of a federal cabinet meeting in January as part of a child protection initiative. Ulrich Fegeler, a Berlin based doctor who is spokesman for the German Association of Paediatricians, says that under current confidentiality laws doctors are legally required to notify police or the local department of youth only in cases where there is proof of physical or sexual abuse or neglect. But in cases where a doctor just suspects abuse or neglect, they are legally required to first ask for parental permission before talking to authorities. “The problem now is not when there is obvious proof of abuse,” he said. “The problem is when we have a strong feeling . . .


An unofficial ranking of the results of the 2008 research assessment exercise has allocated two of the top three places to medical research institutions. Heading the list of 132 UK higher education bodies is the Institute of Cancer Research. In third place is the London School of Hygiene and Tropical Medicine. The analysis, which was commissioned by the Times Higher Education and is in its issue of 18/25 December, was greeted with delight by both institutions. “It’s the result of many years of hard work in fostering methodological rigour, supporting junior staff in achieving excellence, and publishing in high impact journals,” said Andrew Haines, director of the School of Hygiene. “It shows that among our peers, nationally and internationally, the quality of our work is rated very highly.” Speaking for the Institute of Cancer Research, the chief executive, Peter Rigby, said that to have moved up from its previous ranking . . .
RESEARCH


Presence of elbow fracture on radiograph, or recovery with no indication for further review at 7-10 days. Of 1740 eligible participants, 602 patients were able to fully extend their elbow; 17 of these patients had a fracture. Two adult patients with olecranon fractures needed a change in treatment. In the 1138 patients without full elbow extension, 521 fractures were identified. Overall, the test had sensitivity and specificity (95% confidence interval) for detecting elbow fracture of 96.8% (95.0 to 98.2) and 48.5% (45.6 to 51.4). Full elbow extension had a negative predictive value for fracture of 98.4% (96.3 to 99.5) in adults and 95.8% (92.6 to 97.8) in children. Negative likelihood ratios were 0.03 (0.01 to 0.08) in adults and 0.11 (0.06 to 0.19) in children. The elbow extension test can be used in routine practice to inform clinical decision making. Patients who cannot fully extend their elbow after injury should be referred for radiography, as they have a nearly 50% chance of fracture. For those able to fully extend their elbow, radiography can be deferred if the practitioner is confident that an olecranon fracture is not present. Patients who do not undergo radiography should return if symptoms have not resolved within 7-10 days.


Significant network effects were observed in the acquisition of acne, headaches, and height. A friend’s acne problems increased an individual’s odds of acne problems (odds ratio 1.62, 95% confidence interval 0.91 to 2.89). The likelihood that an individual had headaches also increased with the presence of a friend with headaches (1.47, 0.93 to 2.33); and an individual’s height increased by 20% of his or her friend’s height (0.18, 0.15 to 0.26). Each of these results was estimated by using standard methods found in several publications. After adjustment for environmental confounders, however, the results become uniformly smaller and insignificant. Researchers should be cautious in attributing correlations in health outcomes of close friends to social network effects, especially when environmental confounders are not adequately controlled for in the analysis.


Happiness measured with validated four item scale; broad array of attributes of social networks and diverse social ties. Clusters of happy and unhappy people are visible in the network, and the relationship between people’s happiness extends up to three degrees of separation (for example, to the friends of one’s friends’ friends). People who are surrounded by many happy people and those who are central in the network are more likely to become happy in the future. Longitudinal statistical models suggest that clusters of happiness result from the spread of happiness and not just a tendency for people to associate with similar individuals. A friend who lives within a mile (about 1.6 km) and who becomes happy increases the probability that a person is happy by 25% (95% confidence interval 1% to 57%). Similar effects are seen in coresident spouses (8%, 0.2% to 16%), siblings who live within a mile (14%, 1% to 28%), and next door neighbours (34%, 7% to 70%). Effects are not seen between coworkers. The effect decays with time and with geographical separation. People’s happiness depends on the happiness of others with whom they are connected. This provides further justification for seeing happiness, like health, as a collective phenomenon.


Randomised participants had received drugs for GORD for median of 32 months before trial entry. Baseline REFLUX scores were 63.6 (SD 24.1) and 66.8 (SD 24.5) in the surgical and medical randomised groups, respectively. Of those randomised to surgery, 111 (62%) actually had total or partial fundoplication. Surgical complications were uncommon with a conversion rate of 0.6% and no mortality. By 12 months, 38% (59/154) randomised to surgery (14% (14/104) among those who had fundoplication) were taking reflux medication versus 90% (147/164) randomised medical management. The REFLUX score favoured the randomised surgical group (14.0, 95% confidence interval 9.6 to 18.4; P<0.001). Differences of a third to half of 1 SD in other health status measures also favoured the randomised surgical group. Baseline scores in the preference for surgery group were the worst; by 12 months these were better than in the preference for medical treatment group. At least up to 12 months after surgery, laparoscopic fundoplication significantly
increased measures of health status in patients with GORD.


Mean age was 58.9 (SD 7) years. Trial retention rates were 93% and 89% at 12 and 24 months, respectively. At baseline, 10% of intervention participants and 11% of control participants were achieving 150 minutes of at least moderate intensity physical activity a week. At 12 months rates increased to 43% and 30% and at 24 months to 39.3% and 32.8% (P<0.001), respectively. SF-36 physical functioning (P=0.03) and mental health (P<0.05) scores improved more in intervention compared with control participants, but role physical scores were significantly lower (P<0.01). There were no significant differences in clinical outcomes. More falls (P<0.001) and injuries (P=0.03) were recorded in the intervention group. This programme of exercise on prescription increased physical activity and quality of life over two years, although falls and injuries also increased. This finding supports the use of exercise on prescription programmes as part of population strategies to reduce physical inactivity.


Patients who were randomised to their preferred treatment had a standardised effect size greater than that of those who were indifferent to the treatment assignment (effect size 0.162, 95% confidence interval 0.011 to 0.314; P=0.04). Participants who received their preferred treatment also did better than participants who did not receive their preferred treatment (effect size 0.152, -0.035 to 0.339), although this was not statistically significant (P=0.11). Participants allocated to their undesired treatment had outcomes that were no different from those who were indifferent. Participants who were allocated to their undesired treatment were less likely to be lost to first follow-up compared with indifferent participants (odds ratio 1.70, 1.076 to 2.693; P=0.02). No difference was found in attrition between patients allocated to their preference and those who were indifferent. Preferences among patients in musculoskeletal trials are associated with treatment effects. In open randomised trials, preferences should be ascertained before randomisation.


Hospital contacts for head injuries ascertained from hospital register; frequency of history of head injury. An overall 50% increase in prevalence of hospital contacts for head injury was seen before the first registration of Parkinson’s disease in this population (odds ratio 1.5, 95% confidence interval 1.4 to 1.7). The observed association was, however, due almost entirely to injuries that occurred during the three months before the first record of Parkinson’s disease (odds ratio 8.0, 5.6 to 11.6), and no association was found between the two events when they occurred 10 or more years apart (1.1, 0.9 to 1.3). The steeply increased frequency of hospital contacts for a head injury during the months preceding the date at which Parkinson’s disease was first recorded is a consequence of the evolving movement disorder rather than its cause.


During one season, 264 players had relevant injuries: 121 players in the intervention group and 143 in the control group (rate ratio 0.71, 95% confidence interval 0.49 to 1.03). In the intervention group there was a significantly lower risk of injuries overall (0.68, 0.48 to 0.98), overuse injuries (0.47, 0.26 to 0.85), and severe injuries (0.55, 0.36 to 0.83). Though the primary outcome of reduction in lower extremity injury did not reach significance, the risk of severe injuries, overuse injuries, and injuries overall was reduced. This indicates that a structured warm-up programme can prevent injuries in young female football players.

CLINICAL REVIEW


Summary points
Most people will at some time experience an episode of serious low back pain, but most cases resolve with minimal intervention
The main value of a history and physical examination is to determine which patients should be referred for imaging and interventions
Early magnetic resonance imaging has not been shown to improve outcomes for low back pain. The risk factors for progression to chronic back pain are predominantly psychosocial and occupational. Most treatments for chronic low back pain have a small effect and/or afford transient benefits.

Back pain is the leading cause of occupational disability in the world and the most common cause of missed workdays. As the population ages and our lives become more sedentary, this situation is unlikely to change. We aim here to provide an evidence based overview of low back pain aimed at primary care physicians.


Summary points
Self monitoring of blood pressure is useful in the diagnosis and management of hypertension
Multiple measurements of blood pressure allow a better estimation of “true” blood pressure
Systematic reviews show that blood pressure is lower when self monitored
Self monitored blood pressure correlates better with risk of stroke than office readings
Patient education and clinically validated sphygmomanometers are prerequisites for effective self monitoring

Self measurement of blood pressure was introduced in the 1930s and is now practised by almost 10% of the general population of the United Kingdom.1 2 Because blood pressure monitors are now readily available and cheap (as little as £10; $15), self monitoring is likely to increase—in the United States and Europe up to two thirds of people with hypertension self monitor.3 At present we have insufficient evidence to make use of multiple blood pressure readings generated from home monitoring in clinical care. This review—which is based . . .