

Patients with hypertensive osteoarthritis who took rofecoxib (Vioxx) had a twofold increase in edema and 20 mm Hg or higher increases in systolic blood pressure compared with those taking celecoxib (Celebrex), say researchers from Johns Hopkins University School of Medicine.

The 6-week randomized study of 800 patients aged 65 years or older with hypertensive osteoarthritis who took antihypertensive medication compared Celebrex (200 mg/d) with Vioxx (25 mg/d). Results showed that 60% more patients who received Vioxx had elevated systolic blood pressure than patients receiving Celebrex.

The report was presented at the XV European United League Against Rheumatism Congress.

Ten patients with type I diabetes who underwent beta cell transplants 1 year ago continue to not require a regimen of insulin, say researchers at the University of Alberta, Edmonton, Canada. Although the pancreatic-cell transplant is a breakthrough in type I diabetes, the procedure, which has succeeded where other attempts have failed, has broader applications in disease prevention, particularly asthma and autoimmune disorders, and the possibility of organ transplants where anti-rejection drugs may no longer be required.

Control of the immune system, as demonstrated in this procedure, is being attributed to three new drugs that suppress organ rejection and autoimmune reaction with few side effects—daclizumab (Zenapax), tacrolimus, and sirolimus. Scientists will now test whether treatment with antibodies allows patients who had organ transplants to stop taking anti-rejection drugs and whether it is possible to retrain T-cells to tolerate beta cells.

The National Institute on Allergy and Infectious Diseases and the Juvenile Diabetes Foundation set up the Immune Tolerance Network with two goals: prevent

transplanted organ rejection while retaining protective elements, and prevent problems that occur when the immune system malfunctions, causing conditions such as asthma. The network will fund further research of the Canadian researchers' technique.

The report can be found in the July 2 issue of the *Chicago Tribune*.

Girls who maintain a high level of physical activity and drink colas are five times more likely to have bone fractures than girls who avoid drinking soda pop, according to researchers at the Harvard School of Public Health. From an analysis of activity levels, carbonated beverage consumption, and bone fracture history of 460 high school girls, scientists concluded that drinking carbonated beverages increased the likelihood of bone fracture and that most fractures occurred in girls who drank colas and had the highest level of physical activity.

Previous studies by the team showed a strong relationship between consumption of carbonated beverages and number of bone fractures. Researchers point to the phosphoric acid in colas and the replacement of milk with soda pop in the diet as possible attributable factors.

The report can be found at <http://archpedi.ama-assn.org>.

Lung volume reduction surgery for patients with severe emphysema may improve some patients' ability to breathe and walk, say scientists from the Royal Brompton Hospital in London who conducted a study of 48 patients with emphysema. Each patient was randomly assigned to a group receiving medical treatment or surgery. After 6 months, measure of the median forced expiratory volume in 1 second as well as the distance patients could walk showed increases in the group that had lung volume reduction surgery and decreases in the group that received only medical care. Similar changes

were observed at 12 months. A large federal study under way will determine the long-term benefits of the surgery.

The report can be found in the July 27 issue of the *New England Journal of Medicine*.

Results of a study by the Harvard School of Public Health indicate that women who exercise daily, eat a particular healthy diet, avoid smoking, and drink alcohol in moderation or not at all are 80% less likely to develop heart disease compared with women in the general population. The 14-year Nurses' Health Study examined how a combination of risk factors affects susceptibility to heart disease in a group of 84,129 women. Scientists found that 82% of heart attacks were attributable to lifestyle habits.

Researchers defined moderate alcohol consumption as one-half to two drinks per day, overweight as a body mass index of 25 or more, and the particular diet as one that contains cereal fiber, folate, and fish, as well as reduced refined carbohydrates and trans fatty acids from partially hydrogenated oil, and replacement of saturated fats with unsaturated fats. Patients' diet and lifestyle information was continually updated.

The report can be found in the July 6 issue of the *New England Journal of Medicine*.

A heart disorder, long QT syndrome, may account for 25% to 30% of deaths caused by sudden infant death syndrome (SIDS), say researchers from Italy who found genetic evidence linking the two conditions. As a result, they suggest that all newborns be given electrocardiograms, with preventive treatment provided to those found to be at risk.

Long QT syndrome is a rare electrical abnormality of the heart caused by genetic

mutations. Results of a previous study of 24 babies who died of SIDS who had electrocardiograms at birth indicated that half had long QT syndrome. Further, infants with the syndrome are 41 times more likely to die of SIDS.

The current study includes a baby who was revived when his pulse and breathing stopped. Tests showed that the baby had long QT syndrome as well as a gene defect known to cause the heart problem, although neither of his parents had the defect. This led researchers to conclude that a random mutation could occur in anyone and that family history cannot be the sole determinant in identifying babies at risk.

The development of software to analyze electrocardiograms, say researchers, may help to make testing of all newborns for this condition less impractical.

The report can be found in the July 27 issue of the *New England Journal of Medicine*.

Two studies showed that half the patients who were found by colonoscopy to have precancerous lesions in the upper colon had no abnormalities in the lower third, leading researchers to the conclusion that patients 50 years or older should be screened by colonoscopy rather than sigmoidoscopy. This is contrary to the belief that if sigmoidoscopy reveals no abnormalities in the lower colon, none are likely to be found higher up.

Results of the studies, involving more than 5000 healthy adults, have led researchers to urge that patients 50 years and older be given a colonoscopy and that insurers pay for the procedure.

Colorectal cancer is the second cause of cancer death. Fewer than one third of adults 50 years and older are screened for colon cancer.

The report can be found in the July 20 issue of the *New England Journal of Medicine*.

Results of a study indicate that younger men with high cholesterol levels have a greater long-term risk of heart disease than men diagnosed with the condition in middle age, say researchers at Northwestern University Medical School who evaluated the findings of previous studies involving

81,488 men between the ages of 18 to 39 years. They found that men whose total cholesterol levels at outset were above 200 were 2 to 3.5 times more likely to die of a heart disease-related death and died on average 4 to 9 years earlier than men with healthy cholesterol levels. Specifically, for every 40 points of increased cholesterol level, young men were at twice the risk of heart attack.

The report can be found in the July 27 issue of the *Journal of the American Medical Association*.

Kaletra, an experimental drug for treatment of patients with HIV, is effective at suppressing the virus in 70% of cases in which patients previously failed to respond to other drugs. Scientists attribute the effectiveness of the protease inhibitor—taken in combination with other AIDS drugs—to the fact that it is better tolerated than earlier drugs.

Results of a 72-week study involving 170 adults and a 24-week pediatric study indicate that participants had few side effects from the drug. Treatment with other protease inhibitors on the market often become ineffective over time, or patients may stop following a treatment regimen because of side effects.

The US Centers for Disease Control and Prevention estimates that 43 million people worldwide have HIV, including 1 million Americans.

Results of the study were presented at the World AIDS Conference in Durban, South Africa.

A trial conducted by researchers from Belgium shows that nonoxynol-9 may actually increase a woman's risk of HIV infection rather than lowering the risk, a characteristic widely attributed to the spermicide. Of 990 women assigned to one of two groups using nonoxynol-9 or a vaginal moisturizer, 15% using nonoxynol-9 became infected, compared with 10% in the group using the moisturizer. Experts now warn that the safety of nonoxynol-9 as a contraceptive should also be studied.

The report, published in the July 12 issue of the *Chicago Tribune*, was presented at the 13th International AIDS conference in Durban, South Africa.

A follow-up study of 12-month-old babies at high risk for asthma showed that the risk was reduced by 34% with the introduction of an intervention program before birth. The study tracked 492 infants, randomly assigned to an intervention or control group, identified as high risk for asthma because of relatives with asthma or other immunoglobulin E allergic diseases.

Intervention by the Canadian researchers included avoidance of allergens, for example, dust mites, pets, and tobacco smoke. The program also included home visits at different stages where water damage, types of heating, and air control appliances were checked. Mothers were advised to breast-feed to 1 year, if possible. Finally, both parents were given asthma questionnaires to fill separately.

A report can be found at www.docguide.com.

People who drink excess calories do not compensate by decreasing other calories, while people who consume excess calories in solid form decrease intake of other calories, say researchers from Purdue University.

Seven men and eight women with an average age of 23 years consumed 450 extra calories per day of either jelly beans or soda for 4 weeks, switching to the opposite food for a second 4-week period. Participants who ate jelly beans reduced intake of other calories to compensate, thereby maintaining normal caloric levels, while participants who drank soda made no change in caloric intake to compensate for excess calories. The group consuming excess liquid calories had significant weight gain.

Researchers point out that Americans have significantly increased their liquid calorie consumption with an increase of 40% in soda since 1978 and large increases in juices, sports drinks, and special coffees. They speculate that liquids fail to elicit the body's signal that it is full.

The report can be found in the July issue of the *International Journal of Obesity*. ♦