

Patients infected with human immunodeficiency virus (HIV) who are also infected with GB virus C (GBV-C) live longer than patients who are HIV-positive without GBV-C infection. Further, cultured human T-cells infected with HIV and GBV-C produced 30% to 40% less HIV than cells infected only with HIV, according to scientists who conducted studies that demonstrate the inhibitory effect of GBV-C on HIV. Researchers note that these findings may explain why a portion of HIV-infected patients remain healthy.

The study involved analysis of blood samples and mortality rates of 362 patients infected with HIV, 144 of whom also had GBV-C—a 40% GBV-C infection rate, similar to that found in previous studies of HIV patients. Fifty-six percent of HIV-infected patients died, compared with a 28% mortality rate for HIV-infected patients that were co-infected with GBV-C.

The findings may guide development of new modes of therapy, such as using the GBV-C virus itself, or using GBV-C proteins, to activate immune response for HIV inhibition.

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

Women who underwent hysterectomies had a threefold increased risk of having Parkinson's disease (PD), according to researchers at Mayo Clinic in Minnesota who conducted a retrospective study. Further, postmenopausal women who received estrogen decreased by half their risk of having PD. Results imply that early loss of estrogen may increase women's risk of PD.

Researchers analyzed the records of 72 women with PD for data concerning menopause—whether natural or surgical, and age of occurrence—and use of estrogen-replacement therapy.

Previous Mayo studies indicated that men were 1.5 times more likely to have PD than women, a fact which was attributed to men's greater exposure to environmental toxins due to their greater numbers in the workforce. This study presents the possibility that women are protected from Parkinson's disease by estrogen.

The report, which is the first study of its kind to link PD with hysterectomies, can be found in the September issue of *Movement Disorders*.

Diagnostic treatment levels of ultrasonography produced acute lung hemorrhages in animal models, leading researchers to suggest that the potential for ultrasound-induced lung damage is greater than previously believed. Similar patches of lung damage were found regardless of species or size of animal; however, thickness of the lung's air-blood barrier was common to all animals and is similar to the thickness in the human air-blood barrier.

Researchers note that lung damage is dependent on ultrasound beamwidth, pulse duration, and exposure duration. The lungs of older animals were the most sensitive to ultrasound exposure.

The report was presented at the 17th International Congress on Acoustics.

Patients who received the Alteon, Inc, experimental drug, ALT-711, had a reversal of the vascular stiffening that accompanies aging—considered the most important predictor of mortality from heart disease—according to scientists at Johns Hopkins Medical Institutions. Further, the thiazolium-based compound improved patients' large artery compliance (artery wall flexibility and blood volume capacity) by 15%, compared with no improvement for patients in the control group.

The study involved 93 patients aged 50 years and older with stiffened blood vessels and systolic blood pressure greater than 140 mm Hg. Patients were randomly assigned to 2 groups, one of which received ALT-711 daily for 8 weeks, while the other group was given placebos. After 56 days, arterial pulse pressure was significantly reduced in patients receiving the drug.

The compound works by breaking up cross-links created in arteries and other tissues when glucose attaches to collagen. Arterial stiffness is a common effect of aging, but it is particularly present in patients with glucose intolerance.

The report can be found in the September 25 issue of *Circulation*.

Nearly half of patients in a study identified as having systemic contact dermatitis resulting from consumption of balsam-related foods reported complete or significant improvement when placed on a balsam-restricted diet. Balsam of Peru-related foods include tomatoes, citrus, spices (including vanilla), colas and soda, and chocolate.

Patients with systemic contact dermatitis from balsam-related foods were placed in one of three groups determined by positive reactions to food and spice allergens in patch tests. Patients in the two groups that followed a balsam of Peru-restricted diet eliminated restricted foods for 3 to 6 weeks, then reintroduced one food at a time every 1 to 2 days. Forty-seven percent in these two study groups had significant improvements in the three most frequently reported sites for dermatitis: hands, face, and anogenital areas. In particular, in the first of the two groups, 10 of 14 patients followed the balsam-restricted diet. Of these 10 patients, all 10 reported complete or significant improvement. Patients in the third group, while testing positive to balsam/fragrance allergens, did not follow the

diet because other allergens were believed to play a greater role in their dermatitis.

The report can be found in the September issue of the *Journal of the American Academy of Dermatology*.

Patients who use complementary and alternative modes of therapy (CAM) in addition to conventional medicine value both approaches, according to a national survey. Rather than choosing CAM because of dissatisfaction with conventional care, most patients perceive a combination of providers to be superior to either one alone. Further, confidence in both types of providers is not substantially different. Although patients with hypertension who use both modes of therapy believe that conventional care is more effective for that condition, they also believe that CAM modes of therapy are more effective for treatment of headaches and back conditions.

Among the 831 survey respondents who reported consulting both types of providers, 70% consulted a medical provider before or concurrent with visits to CAM providers, and 15% consulted a CAM provider before seeing a medical provider. However, most respondents (63% to 72%) reported not informing their medical providers about their use of CAM modes of therapy for various reasons, including fear of physician disapproval (14%).

The report can be found in the September 4 issue of *Annals of Internal Medicine*

Blood pressure readings taken while patients exercise test more accurately for early heart disease than readings taken while patients are at rest, according to scientists at The Johns Hopkins University School of Medicine in Baltimore. Further, high arterial pulse pressure during exercise is linked to the inability of endothelial cells lining blood vessels to dilate, an indicator of blood vessel stiffness.

The study involved 35 participants between the ages of 55 and 75 years with untreated mild hypertension. Participants' basic blood pressure, taken each week during the study, was compared with readings taken during maximal effort physical activity, in conjunction with ultrasonographic readings of participants' blood vessels. The higher a patient's pulse pressure during exercise, the greater the resistance of blood flow through the arteries.

The report was presented September 14 at the annual meeting of the American Association of Cardiovascular and Pulmonary Rehabilitation in Minneapolis.

Patients infected with human immunodeficiency virus (HIV) who have a form of amyotrophic lateral sclerosis (ALS), also known as Lou Gehrig's disease, may have improvement of ALS symptoms with anti-HIV treatment—which suggests that some forms of ALS may be caused by viral infection and that ALS may be treatable, according to two studies in the September 25 issue of *Neurology*.

In a 13-year study, French researchers followed up 1700 HIV-infected patients with neurologic symptoms, 6 of whom had ALS that was determined to be caused by HIV and not by other factors. After receiving anti-HIV drugs, two patients recovered from symptoms of ALS, three improved, and one stabilized.

In another case, a New York woman with ALS-like symptoms was diagnosed as HIV-positive. After receiving anti-HIV drugs, symptoms of ALS resolved and HIV levels were undetectable.

According to scientists, who cite these AIDS-related cases as variants of classic ALS disease, mechanisms by which HIV may cause motor neuron disease include neuronal infection, secretion of toxic viral substances, immune system secretion of cytokines, or induction of an autoimmune disease.

It is feasible and safe to implant human embryonic tissue in people with spinal cord injuries, according to University of Florida researchers who conducted a trial to test the procedure.

Surgeries were performed on 8 patients with syringomyelia, a condition characterized by pain and loss of sensation and movement found in 20% of people with spinal cord injuries. It was hoped that transplanted tissue would grow to fill cavities and prevent further deterioration; however, although the cavities have shown evidence of remaining full after the transplant, no conclusive proof indicates that growth occurred. Scientists note that the procedure could lay the groundwork for future efforts to treat spinal cord injury with other types of cell transplants.

The report can be found in the September issue of the *Journal of Neurotrauma*.