

Using convergent combination therapy, researchers stopped the human immunodeficiency virus (HIV) from reproducing in test tubes. Investigators at Harvard Medical School and Massachusetts General Hospital combined three available drugs—AZT, dideoxyinosine, and pyridinone—to treat the HIV infection.

The three drugs were used to prevent the virus from becoming resistant to any one of the drugs. After 1 week, the convergent combination therapy was administered to infected blood cells. Thirty-five days later, no infection could be detected. After 49 days of treatment, the cells had no signs of infection. This apparent infection-free state persisted for the remainder of the experiment. (Complete results of this study are reported in the February 18 issue of *Nature*.)

"We can prevent infection of new cells by this technique better than we have been able to do with any other strategy we've studied over the past 6 or 7 years," says researcher Martin Hirsch, MD, "[but] it would be a mistake to say we can eradicate the virus when it's present already within a cell."

At presstime, this convergent combination therapy was expected to be tested on HIV-infected human beings in the spring.

Immigrants infected with the human immunodeficiency virus (HIV) may be prevented from entering the United States. By a 76-to-23 vote, the US Senate passed an amendment to the National Institutes of Health (NIH) spending bill that would prevent HIV-

infected persons from immigrating to the United States. The amendment is sponsored by Sen Don Nickles (R-Okla).

In mid-March, the House endorsed the ban as well, this time by a 356-to-58 vote. Unlike the Senate version, however, the House bill did not include the ban as an addendum to the NIH spending bill.

Among those infectious diseases, besides HIV, that prevent individuals from entering the United States are syphilis, infectious tuberculosis, and a form of leprosy.

Senator Nickles says that the medical costs associated with caring for an HIV-infected person could start at \$100,000 a year and that the nation's money should not be spent on caring for foreigners with an expensive, fatal disease.

During the campaign, President Clinton had pledged to lift the ban barring these persons from entering the United States.

Now that the President has a clear message from Congress, he will "wait and see how the bill ultimately comes to him," said White House Press Secretary De De Myers in an Associated Press story, carried in the March 12 issue of the *Chicago Tribune*.

Regular aspirin therapy may prevent colon and rectal cancers, investigators report in the February 16 issue of the *Journal of the National Cancer Institute*.

American and Swedish researchers found that patients with rheumatoid arthritis taking non-steroidal anti-inflammatory drugs

(NSAIDs) regularly were as much as 40% less likely to have colon and rectal cancers develop than persons not on such therapy. Women in the study also had a lower risk of the development of cancer of the stomach, esophagus, gall bladder, pancreas, and breast. The researchers theorize that aspirin and other NSAIDs slow tumor growth, improve the immune system, and prevent prostaglandin production.

Despite these positive findings, Clark Heath, MD, of the American Cancer Society, did not advocate that physicians begin to prescribe daily NSAID therapy for their patients. Further large-scale studies are needed that compare different dosages of other drugs with aspirin and other NSAIDs.

The link between vasectomy and prostate cancer has been reaffirmed, according to two studies reported in the February 17 issue of *JAMA*.

In a retrospective cohort study involving 14,607 men who had had a vasectomy before 1978, researchers found an elevated age-adjusted relative risk of prostate cancer of 1.56, compared with the 14,607 men who did not have a vasectomy. The relative risk increased to 2.06 when stage A and B cases of prostate cancer were not included. The increased relative risk persisted even when investigators considered smoking, alcohol consumption, the patient's education level, body mass index, and the place of residence.

The second study included 10,055 men in the Health Profes-

sionals Follow-up Study who had had a vasectomy and 37,800 men who had not had a vasectomy at the time of study entry. Between 1986 and 1990, researchers found 300 new cases of prostate cancer in men who were cancer-free at the time of admission to the study. Those men who had undergone a vasectomy at least 22 years before study entry had an even greater relative risk of developing prostate cancer: 1.85.

The researchers in this last study hypothesize that decreased secretion of the prostate gland, in part because of a reduction in seminal plasma volume, may play a role here. They also postulate that an immune response to sperm after vasectomy may be linked to the incidence of cancer.

With these recent findings, the American Urological Association (AUA) is recommending that "many men who have had a vasectomy undergo medical procedures used for the early detection of prostate cancer."

"Right now, I think it's important to emphasize that men who have had a vasectomy should not panic and run out to reverse the procedure," says AUA President H. Logan Holtgrewe, MD. In calling for follow-up studies, Dr Holtgrewe also says that the AUA advises that results from these latest studies be included in presterilization counseling.

Intensive care treatment for critically ill cancer patients costs much and does not extend the patient's life significantly, conclude researchers at the H. Lee

Moffitt Cancer Center and Research Institute and the University of South Florida College of Medicine and School of Public Health, Tampa.

Eighty-three patients with solid tumors and 64 patients with hematologic cancer were included in this study. Overall, patients spent no more than 3 months living at home before dying after being released from the hospital. The cost for year of life gained was \$82,845 for patients with solid tumors and \$189,339 for persons with hemotologic cancer. The cited figures do not encompass physicians' fees and other expenses.

"Apart from the global aspect, the cost to the nation, there's the personal cost, the cost to the family," explains lead researcher David V. Schapira, MBChB. "The medical costs can decimate the savings of the family, three or four decades of savings. They may lose their house, and the kids may have to come out of college [for the patient's few weeks of added survival.]"

Given the extraordinary expenses involved, the researchers strongly recommend that oncology physicians discuss the potential treatment outcomes with the patient and family before embarking on any treatment course.

Complete study results appear in the February 10 issue of *JAMA*.

Body shape may *not* have any relationship to a woman's risk for having breast cancer develop, according to the latest research. Previous studies had suggested that women carrying most of their weight in the middle (apple shape) had a greater risk of breast can-

cer developing than women with body fat concentrated in their hips and thighs (pear shape).

The latest research, the results of which are published in the March 1 issue of *Annals of Internal Medicine*, included 313 white women who were to undergo diagnostic breast surgery. One day before the surgery, waist-to-hip ratio measurements were obtained from the women. After the surgery, the women were grouped accordingly: breast cancer patients, high-risk women, and control subjects. The researchers found no increased risk of breast cancer in women with greater waist-hip circumference.

"The difference in where your fat is located seems to be less related to breast cancer than the amount of body fat," explains Jean A. Petrek, MD, one of the study's authors.

Although a study last year at the University of Minnesota found that postmenopausal, apple-shaped women with a family history of breast cancer were at an increased risk, Dr Petrek says that most breast cancers are not familial. Furthermore, she notes that most women do not have all three characteristics (being postmenopausal, apple-shaped, and having a family history of breast cancer).