HEALTH

Cell injections appear successful in suppressing HIV

Associated Press

Targeting HIV in hard-to-reach lymph nodes, researchers for the first time have curbed the AIDS virus by injecting patients with cells made from their own natural defense systems.

The research published in the January issue of *Nature Medicine* could lead to new ways of attacking the AIDS virus in parts of the body where it has eluded standard drug treatment.

Researchers were able to suppress HIV by giving a patient injections of cells fashioned from his own immune system. Though scientists say the new method can't be used immediately to treat large numbers of patients, it is encouraging because it appears to curb the virus at least temporarily in lymph nodes.

"An area we want to consider is: Is it possible to rid somebody of infection?" said the study's chief author, virologist Scott

Brodie of the University of Washington.

. HIV propagates by attacking a kind of immune cell known as a helper T-cell.

The researchers chose three patients and isolated from their bodies another type of white blood cell, known as a killer T-cell, which destroys HIV.

By cloning and other means, they grew huge numbers of each patient's killer T-cells in a laboratory and genetically engineered some with markers to trace their movement within the body. They then reinjected massive amounts back into each patient and traced the migrating cells to lymph nodes.

There, the new killer T-cells knocked down the number of infected helper T-cells, in some cases to undetectable levels, according to the researchers. The effect was temporary; the new cells disappeared within three weeks.

Still, Dr. Roger Pomerantz, chief of infectious diseases at Jefferson Medical

College in Philadelphia, who is familiar with the research, called it an exciting early step toward eradicating HIV "where it hides."

While praising the long-term value of the work, Dr. Anthony Fauci, who is working on his own treatment to eradicate virus remnants, cautioned that the University of Washington technique is so advanced that it limits immediate practical use.

"It's too expensive, it's too timeconsuming, it's too complicated," he said.

Another AIDS study appearing in *Nature Medicine* points to a second approach in replenishing the immune system.

Researchers found that an HIV infection shortens the life span of both killer and helper T-cells to less than a third of normal, and production of replacement cells lags behind.

Many researchers have theorized that HIV irreparably breaks down the body's cell-replacement capacity through overuse.

This study, however, suggests that the replacement capacity survives intact and seems to be refreshed by a standard HIV treatment, known as a drug cocktail.

The researchers said the drug therapy seems to increase the production of immune cells by an average of three or four times.

Some scientists say this research will intensify the search for ways of reviving the body's ability to fight disease once it is damaged by AIDS.

The chief author, Dr. Marc Hellerstein of the University of California, San Francisco, said such research should ultimately show whether later-stage AIDS patients largely cleared of infection through drug therapy can "really regenerate normalcy in their immune systems."

Michael McCune, another member of the research team, suggested such approaches also might apply to cancer and other diseases.

Doctors best suited to answer questions about pre-teen obesity

Special to Sentinel-Voice

Q: My 10-year-old son used to be thin, but now has rolls of fat around his middle and chest which are making him quite self-conscious. He is very active, watches very little television, and eats fast food only on occasion. What else can we do?

A: Most children grow very quickly during adolescence and rapid growth requires plenty of extra calories. What may appear to be excessive weight gain in a pre-teen, may be their body's way of preparing for a major growth spurt. Barring any major changes in your son's diet or activity level, this is most likely what he is experiencing.

The best advice is to see your health care professional. He or she can help your son better understand developmental stages and anticipate future growth.

Even if your son is overweight for his height and age, dieting is not recommended. Restrictive diets can deprive a child of the calories, vitamins, and minerals needed for proper growth and development.

Instead, encourage your son to continue his good habits: stay physically active, eat a healthy well-balanced diet that includes at least five servings of fruits and vegetables per day, and avoid high-fat, high-calorie foods.

Q: My 5-week-old breast-fed baby has not stooled in 6 days. He is growing like a weed, happy and vigorous. Should I be worried?

A: Infrequent stools are normal in breast-fed infants and usually are not cause for concern. Newborn breast-fed infants may stool after every feeding, or at least two to three times per day. Older breast-fed babies stool less often, and even two to three weeks between stools is not uncommon.

Since your baby is vigorous and growing well, don't be overly concerned at this time. Just work closely with your pediatrician, and let nature take its course.

Q: What are phytonutrients? I keep hearing that they can prevent diseases like cancer. Is this true?

A: Phytonutrients are naturally occurring components of plants that may have a role in human health. Vitamin C and E, folate, and beta-carotene, are just some of the phytochemicals universally recognized as playing an important role in the maintenance of health in humans.

However, it's the possible link between cancer prevention and many less understood phytonutrients, such as lycopene in tomatoes and flavonoids in soy beans, that has generated interest among consumers.

While nutrition scientists welcome an increased awareness of the role of plantbased foods in health, they are concerned that publicity these 'new' over phytonutrients is far ahead of the science. They caution that the beneficial compounds must be clearly identified, their mode of action understood, and a safe and effective dose established before dietary recommendations can be made.

Fortunately it is easy for most Americans to increase their intake, of disease-preventing phytonutrients by simply eating at least the recommended five servings of fruits and vegetables and six servings of whole grain foods and cereals per day. These low-fat foods are not

only packed with phytonutrients, but also provide dietary fiber, protein, and carbohydrates essential to good health.

Q: My doctor said I shouldn't put honey in the food I prepare for my 6-month-old baby. Why is it fine for me to eat honey, but not my daughter?

A: While honey is a favorite sweetener for many adults and children, it should not be fed to children under one year of age. Honey may contain the dormant spores of a bacteria that causes arare but very serious condition called infant botulism.

Adults and older children have a high level of acid in their stomachs and protective bacteria in their intestines.

with This prevents potentially also harmful spores from growing otein, and producing a poison that causes botulism.

The digestive system of infants less than one year of age is still immature and unable to prevent any spores they ingest from growing and producing the poison.

Because spores can exist in dirt and dust as well as honey, be sure all vegetables fed to your baby are washed and cooked thoroughly.

Sendyour questions about children's nutrition via U.S. mail to: Kids' Nutrition Q & A, USDA/ARS Children's Nutrition Research Center at Baylor College of Medicine, 1100 Bates Street, Houston, TX 77030; or via e-mail to: cnrc@bcm.tmc.edu.

Baylor, Star of Hope counsel homeless women, families

Special to Sentinel-Voice
HOUSTON — Psychotherapy, a form of mental-health treatment seldom available to the poor, is now offered to homeless women and families in Houston who are preparing to re-enter

society.

Therapists from Baylor College of Medicine conduct individual, group, marital and family counseling for residents of the Star of Hope's Transitional Living Center, a facility for homeless women and families.

"Most women referred to the Transitional Living Center have a history of physical or sexual abuse," said Dr. Warren Holleman, director of the Baylor/Star of Hope Family Counseling

Center. "Many of them have used drugs and alcohol to medicate their suffering. Without counseling to address the emotional impact and to establish new patterns of behavior, they're at risk of repeating the cycle of abuse, addiction and violence."

The Baylor/Star of Hope Family Counseling Center opened in September with a 3-year \$636,825 grant from Episcopal Health Charities.

In addition to counseling, the center offers psychological testing and classes that help individuals understand the impact their family background had on their development and personality.

"The family-of-origin class can be very emotional because many of our clients

have family backgrounds that are extremely painful to talk about," Holleman said. "We are hopeful that over time, the people in the class will overcome their fears and feel more comfortable dealing with family relationship."

Two marriage and family therapists, two clinical psychologists, two family-practice physicians and a social worker, all from Baylor, provide services at the center. Nearly 50 people receive counseling, instruction, or diagnostic evaluation there each week.

"Our clients have very basic needs and little or no money, so we have to adapt our approach to therapy," said Holleman, associate professor of family and community medicine at Baylor. "Recommending that a couple take a weekend trip away from their children or buy a self-help book might be standard options for a counselor in private practice with middle-class patients, but we have to find other resources to help our clients."

Patients at the Transitional Living Center are likely to experience depression and anxiety. Baylor family-practice residents can prescribe medication to complement the psychotherapy. Holleman noted that several family-practice residents who have completed their rotation at the Star of Hope now volunteer on their own time to help run therapy groups there.

