



chronic, active course. "There is a group of cardiac patients who perhaps don't clear the infection as effectively."

He chose azithromycin for the study because of its effectiveness against *C. pneumoniae* and its high tissue levels, and particularly high intramacrophage levels, achieved with a short (3-day) course. The study was funded by the British Heart Foundation, and the drug manufacturer was involved only in supplying the drug and placebo. Although the study sample was small (213 patients), Gupta said larger studies involving 2000 to 3000 patients are planned.

He cautioned that it is premature to start screening patients or prescribing antibiotics. "At this point, there is no way we are prescribing antibiotics to any of our cardiac patients. Antibiotic regimens have to be carefully thought out — the best drug, the correct dosage." He estimates that the value of antibiotic treatment will be determined in about 2 years, when results from larger studies are in. Positive results will have widespread implications for patients around the world. — *Carolyn Brown*

In the news . . .

Growth-hormone therapy and breast size

To duplicate the effect of growth-hormone therapy on aging women, researchers provided growth hormone or insulin-like growth factor I to aging female rhesus monkeys (*Nature Med* 1997;3[10]). They found that the 2 hormones resulted in twofold to fivefold increases in mammary glandular size and the epithelial proliferation index. The study suggests that the use of growth-hormone therapy in older

women carries a serious risk of breast hyperplasia.

Genetic immunity to HIV leading to new therapy

Some people are naturally immune to HIV infection, thanks to a genetic defect in CC-chemokine receptors (CCR)-5, the principal coreceptor for HIV. Researchers have found a way to "knock out" CCR-5 in human cells, mimicking the natural resistance found in people with the genetic defect (*Proc Natl Acad Sci USA* 1997;94:11567-72). They have invented a modified CC-chemokine called an "in-trakine" that may form the basis of a new form of therapy for HIV.

Viral cause of MS?

Researchers are wondering whether multiple sclerosis (MS) may be kick-started by a viral infection. In a mouse model of MS, a viral infection has been shown to cause the

demyelination characteristic of MS (*Nature Med* 1997;3[10]). Theiler's murine encephalomyelitis virus causes the MS-like disease through a process called "epitope spreading," which may be the mechanism in other virus-induced autoimmune diseases.

Key clue to Alzheimer's disease

Amyloid-beta plaques that form in the brains of patients with Alzheimer's disease are believed to cause the neurodegeneration associated with the disease. However, it is unclear how the plaques are involved. Now researchers have found that amyloid-beta binds a newly discovered polypeptide, endoplasmic-reticulum-associated binding protein (ERAB), in neurons (*Nature* 1997;389:689). The toxic effect of amyloid-beta on neurons is enhanced by ERAB, thereby contributing to the neuronal dysfunction in Alzheimer's disease.

Herbal remedy for dementia proven effective

In its contribution to the global theme issue on aging, *JAMA* reported the results of a placebo-controlled, double-blind, randomized trial of a plant extract that is in common use in Germany in the treatment of dementia (*JAMA* 1997; 278:1327-32). Patients given an extract of *Ginkgo biloba* known as EGb showed modest but statistically significant improvement, as measured by 3 objective tests of cognition and caregivers' impressions of change. The study is one of the first to evaluate a herbal remedy scientifically. Researchers believe that the compound delays progression of dementia by 6 months to a year.

Tanis Stolar photo



Ginkgo trees like this may soon do more than provide shade