

## BIOMEDICINE

From Washington, D.C., at the Experimental Biology '99 conference, a meeting of 26 scientific societies

### Cells link headache to heart disease

The head and the heart are more closely connected than even bad poets claim, researchers reported this week.

Margaret Chandler and her colleagues at the University of Oklahoma in Oklahoma City have demonstrated in two monkeys that nerve cells at the top of the spinal cord can respond both to head and heart stimulation. This area in the monkey's neck has been known to contain neurons that receive signals from the heart. Out of 19 such neurons tested, 10 also fired when the researchers activated the nerve that communicates with the blood vessel running along the top of the monkey's brain. In people, this nerve registers headache pain.

A nervous-system link between the head and the heart could account for anecdotal reports of people whose only sign of heart disease is a splitting headache, Chandler suggests. In the September 1997 *NEUROLOGY*, Richard B. Lipton and his colleagues at Albert Einstein College of Medicine in New York reported on two men who developed severe headaches while exercising. Subsequent testing revealed that the men were suffering from heart disease. When the heart disease was treated, the exertion-triggered headaches cleared up.

However, "headaches are not a very sensitive or specific reason to target heart disease," cautions A. Michael Lincoff of the Cleveland Clinic Foundation. If headaches occur exclusively while exercising, however, a stress test to reveal heart disease might be in order, he says.

—L.H.