



NEWSLINE

Gum disease linked to heart illness

By Tim Friend USA TODAY

PHILADELPHIA — The most common strain of bacteria in dental plaque can cause blood clots that induce heart attacks when they escape into the bloodstream, researchers reported Monday.

Mark Herzberg of the University of Minnesota said the findings are the first to link bacteria to the formation of potentially fatal blood clots.

Previous studies had found the incidence of heart disease is about twice as high in people with periodontal disease, but scientists didn't know why.

"Now we show a potential biological reason." Herzberg told the 150th annual meeting of American Association for the Advancement of Science.

In lab tests, Herzberg and colleagues injected bacteria from dental plaque into the bloodstream of rabbits. The bacteria caused blood clots to form within minutes. Rabbits are a proven model for testing hypotheses about human heart disease and heart attacks.

Chronic inflammation of the gums due to plaque also could be involved in the inflammation of the lining of the blood vessels that is known to lead to the build-up of plaque in the arteries, Herzberg said.

Additional studies presented at the meeting show that bacteria in plaque also are linked to:

- ➤ A potentially fatal disease called infective endocarditis in which the sac around the heart becomes inflamed.
- ➤ Lung infections in people with chronic lung diseases such as chronic obstructive pulmonary disease.
- ➤ A weakened immune system that can slow wound healing and diminish a person's response to vaccines against hepatitis B and influenza.
- ➤ A higher risk of giving birth to premature, low-birth weight infants.

Reducing risk of diseases linked to dental bacteria is a common lesson preached by dentists: Have the teeth cleaned regularly and floss daily. If necessary, have bone implants to replace dental bone lost from periodontal disease, says researcher, Frank Scannapieco, State University of New York, Buffalo. Bacteria reside in pockets caused by bone loss where the teeth are attached.

