Oral infection and heart disease

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(PhysOrg.com) -- Science previously suggested oral infections might trigger the immune system, causing inflammation in other parts of the body and contributing to heart disease. It was thought that all antibodies worked the same way and that elevated antibody levels would increase the risk of heart disease if the “oral infection and heart disease” hypothesis were true.

In a new study, Dr. Sok-Ja Janket of Boston University Henry M. Goldman School of Dental Medicine disproves this notion and shows that two salivary antibodies are associated with heart disease in different ways.

"Our results indirectly suggest that oral infection may play a role in the initiation of heart disease but we have to look at the right antibody,” Dr. Janket says. “Not all antibodies represent the same pathway."

The first antibody studied was positively associated with heart disease risk. As oral infection worsened, the antibody dubbed sIgA indicated a greater chance of heart disease.

The second antibody, IgG, which reflects systemic immunity, suggested protection from heart disease.

Still to be determined is whether there is a causal relationship between each antibody and the likelihood of developing heart disease. This study was not designed to determine cause, but Dr. Janket hopes her future studies sponsored by the American Heart Association will find the

answer.

The study appears in the April 1 issue of *Journal of Dental Research*.

Provided by Boston University