

The cancer-saliva link

By Rachel Champeau

UCLA study pinpoints types of bacteria in saliva associated with pancreatic cancer.

Findings:

A UCLA study has found variations in the types of bacteria found in the saliva of patients with pancreatic cancer and pancreatitis, compared with healthy controls. The findings may offer a new non-invasive biomarker to diagnose and track the development of these diseases. Pancreatic cancer is extremely deadly - only 5% of patients survive five years after diagnosis.

Previous studies have highlighted periodontal disease, which is related to inflammation of the gums, as playing a possible role in the development of systemic diseases such as heart disease. The current study demonstrates a possible link between this type of inflammation and pancreatic cancer and pancreatitis.

Researchers found that 31 types of bacterial species were increased in the saliva of patients with pancreatic cancer, compared with healthy controls, and that 25 types of bacteria were reduced. For example, a type of bacteria known as *Granulicatella adiacens*, which is associated with systemic inflammation, was found to be elevated in pancreatic cancer patients. Also, a bacteria called *Streptococcus mitis*, which may play a protective role against inflammation, was lower in patients with pancreatic cancer.

Impact:

The findings add to growing evidence that saliva may be a credible biomarker source to track and diagnose non-oral diseases. The study also offers new research directions for focusing on inflammation as a contributor to pancreatic diseases.

Source: UCLA