

Oral Systemic Connection

How we Talk

- **What we know now....**
- Periodontal disease is worse than bad breath, receding gums and losing teeth- we've known that for 100 years.
- That's not what makes me worried about what I'm finding with you.
- Now, Recent studies over the past 5-10 years show that it's **much bigger than that. Gum infections** are **highly connected** to heart attacks, strokes, diabetes, and Alzheimer's
- 99% of brains with Alzheimer's- have gum infections in their brain
- 95% of diabetics have gum infections
- You're twice as likely to have a heart attack, and 3 times as likely to have a stroke.
- To get rid of this infection, w
- Now- what questions can I answer about how we get rid of this infection?

Cardiovascular Disease (CVD)

Heart disease is the leading cause of death for men, women, and people of most racial and ethnic groups in the United States. One person dies every 33 seconds in the United States from cardiovascular disease. About 695,000 people in the United States died from heart disease in 2021—that's 1 in every 5 deaths. (CDC 2023)

- 200 Million Americans have MI and Strokes Annually
- Cardiovascular Disease kills 10X more women than breast cancer
- Generally - 50% of CVD most likely caused by oral conditions!!!!!!
- Periodontal disease increases Heart attack risk 2X, Stroke by 3X

Strokes (Still part of CVD)

Stroke is the second leading cause of death and the third leading cause of disability worldwide, following heart disease. (AHA 2023)

"significant associations between periodontitis and CVD, the mechanistic links and the impact of periodontal therapy on cardiovascular and surrogate outcomes"

([J Clin Periodontol](#). 2020 Mar; 47(3): 268–288.
Published online 2020 Feb 3. doi: [10.1111/jcpe.13189](#))

“Periodontal diseases appeared to be associated with an increased risk of developing cardiovascular, cardiometabolic, autoimmune diseases and mental ill health. Periodontal diseases are very common; therefore, an increased risk of other chronic diseases represent a substantial public health burden.”

(Zemedikun DT, Chandan JS, Raindi D, *et al*/Burden of chronic diseases associated with periodontal diseases: a retrospective cohort study using UK primary care data *BMJ Open* 2021)

Dr. Pessi - 2016 AHA

- Published in Circulation (AHA)
- 101 Patients
- Blockages contained 16X more oral pathogens than any other
- 75% of those bacteria were from tooth infections

Periodontal therapy helps CVD

- Comparable to a 30% drop in LDL lipid levels
- Comparable to a BP drop of 13 systolic, 10 diastolic

Chronic Inflammation of Perio

Research has shown that chronic inflammation is associated with heart disease, diabetes, cancer, arthritis, and bowel diseases like Crohn's disease and ulcerative colitis. (Harvard Medical School 2020)

Diabetes

- 95% of diabetics have perio, and vice versa (even pre-diabetes/hyperinsulinemia, etc)
- Inflammation of the pancreas
- Perio treatment can lower HbA1C from 9.4 → 5.1 in 8 week with oxidation/rinsing alone

Alzheimers

- Plaques found in Alzheimer's patients
- 99% had p. Gingivalis
- 91% had spirochetes (In the 'control' group without Alzheimer's - 0%)
- Treponema Denticola (spirochete) - found in 93.7% of patients.
- Periodontal disease - 70% more likely to develop Alzheimers (Alzheimer's Research Therapy Journal 2017)

Other

- Men with Perio have a 63% higher chance of pancreatic cancer
- 7x more likely to have a low-preterm birth for mothers (AAOSH)
- Perio is contagious - WHO ARE YOU KISSING?