

Periodontal Disease and C-Reactive Protein (CRP)

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Periodontal (gum) disease is an infection of the tissues that hold your teeth in place. It's typically caused by poor brushing and flossing habits that allow plaque—a sticky film of bacteria—to build up on the teeth and harden.

Periodontitis is a chronic inflammatory disease, initiated by the presence of a bacterial biofilm, called dental plaque, which affects both the periodontal ligaments and bone surrounding teeth.

Signs and symptoms of periodontitis can include:

- Swollen or puffy gums
- Bright red, dusky red or purplish gums
- Gums that feel tender when touched
- Gums that bleed easily
- Pink-tinged toothbrush after brushing
- Spitting out blood when brushing or flossing your teeth
- Bad breath
- Pus between your teeth and gums
- Loose teeth or loss of teeth
- Painful chewing
- New spaces developing between your teeth
- Gums that pull away from your teeth (recede), making your teeth look longer than normal
- A change in the way your teeth fit together when you bite

Relationship between periodontitis and C-Reactive Protein

There are many studies showing an increase in CRP and periodontitis.

C-reactive protein (CRP) elevation is a part of the acute phase response to acute and chronic inflammation. Many clinical studies have shown that serum CRP levels were elevated in patients with chronic periodontitis. CRP levels increase to hundreds of µg/ml within hours following infection.

CRP and Increased Risk For Heart Disease (CVD) and Diabetes

In the last decades, several lines of evidence have supported the existence of a relationship between periodontitis and systemic health.

For instance, periodontitis acts within the same chronic inflammatory model seen in cardiovascular disease (CVD), or other disorders, such as diabetes.

It is now evident that cardiac disorders are worsened by periodontitis, both experimentally and in humans. For all these reasons, it is very plausible that preventing periodontitis has an impact on the onset or progression of CVD and diabetes.

It is recommended to be checked for periodontitis in the event you have an **elevated CRP**.

In the event you find you in fact have periodontitis, it is necessary to see your dentist for immediate treatment.

The best way to prevent periodontitis is to follow a program of good oral hygiene.

- **Good oral hygiene.** That means brushing your teeth for two minutes at least twice daily — in the morning and before going to bed — and flossing at least once a day. Flossing before you brush allows you to clean away the loosened food particles and bacteria.
- **Regular dental visits.** See your dentist or dental hygienist regularly for cleanings, usually every six to 12 months.

Summary

In the event you have an elevated C-Reactive Protein, I recommend getting your teeth check for periodontal (gum) disease.

References:

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4149169>

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3783784>

<https://www.hindawi.com/journals/mi/2015/564858>

<https://bmcinfectdis.biomedcentral.com/articles/10.1186/1471-2334-2-30>

<https://www.sciencedirect.com/science/article/pii/S1991790217300715>

<https://pubmed.ncbi.nlm.nih.gov/11577954/>

<https://pubmed.ncbi.nlm.nih.gov/30897827/>

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