



Home  
 Topics  
 Practice Management  
**Dental Exam**  
 Cases  
 CE  
 Forums  
 Conferences  
 More  
 Sign Out

### Hygiene Sponsored by Keystone Industries

Dental therapists

Hygiene

Oral care products



## Perio treatment mix helps lower glucose levels

By Melissa Busch, DrBicuspid.com assistant editor

August 8, 2019 -- Scaling and root planing plus adjuvant treatments effectively lower blood glucose levels in nonsmoking patients with type 2 diabetes and chronic periodontitis, according to a meta-analysis of more than a dozen studies.



Researchers from China found that patients with type 2 diabetes and chronic periodontitis had improved glycemic levels when their periodontal disease was treated with scaling and root planing (SRP) plus antimicrobial photodynamic therapy (aPDT) and the antibiotic doxycycline, according to a meta-analysis published in *BMC Oral Health* (August 6, 2019).

Periodontal disease is a known complication of diabetes. Patients with diabetes are more likely to also have periodontal disease, and inflammation of the gums can complicate controlling blood sugar levels, the authors noted.

The researchers wanted to determine which periodontal treatment best controlled glycemic levels in patients diagnosed with type 2 diabetes and chronic periodontitis. They searched medical and scientific databases for randomized controlled trials through May 2018 and included 14 trials in their analysis.

The trials involved 629 patients with both periodontitis and type 2 diabetes who had severe gum disease treated with scaling and root planing. The patients had no other systemic diseases. The patients had type 2 diabetes for between four and almost 12 years, and their treatments primarily included diet and insulin supplementation or oral antidiabetic medications. The baseline of hemoglobin A1c levels in the patients varied between 6.2 to 10.4.

The use of SRP with photodynamic therapy and doxycycline improved levels of hemoglobin A1c, an indicator of how well diabetes is being controlled, better than SRP alone or SRP with antibiotics, the researchers found. The treatment combination was most effective for patients who didn't smoke or had severe type 2 diabetes complications.

The authors noted some limitations to their research. The quality of the evidence from the included studies was low or very low, and almost 36% of the studies did not report the details of their randomized methods. In addition, only English studies were used, sample sizes were small, and the follow-up duration of the trials were short.

While longer-term well-executed, multicenter trials are needed to corroborate the results, the findings of the meta-analysis seemed to support that SRP with photodynamic therapy plus the use of doxycycline had the best efficacy in lowering glycemic levels, the researchers concluded.

"Among the different treatments, SRP and aPDT and [doxycycline] ranked best," wrote the authors, led by Ruoyan Cao of the department of prosthodontics at the Xiangya Stomatological Hospital & School of Stomatology at Central South University in Changsha, China.

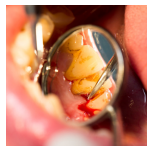
♥ [If you like this content, please share it with a colleague!](#)

## Related Reading



### **New studies focus on diabetes link with perio disease**

New research on the relationship between periodontal disease and diabetes was presented on June 8 and 9 at the American Diabetes Association's Scientific...



### **Study links glucose disorders and perio disease**

Patients with undetected glucose disorders (dysglycemia) have a higher risk of both periodontitis and myocardial infarction, according to a study published...



### **Study links metabolic syndrome, middle-aged tooth loss**

Patients with at least one sign of metabolic syndrome may be at an increased risk for tooth loss, according to the findings of a recent study. The research...



### **Is there a link between periodontitis and metabolic syndrome?**

Periodontitis and metabolic syndrome are manifestations of chronic inflammation. Could there be a causal relationship between the chronic inflammation...



### **New studies link perio health to kidney health**

Periodontal health has again been linked to kidney health in two new studies presented at the recent 2018 International Association of Dental Research...

Copyright © 2019 DrBicuspid.com

Last Updated hh 8/8/2019 9:27:16 AM

## Forum Comments

Post your comment ...



## VENDOR ANNOUNCEMENTS

### Some Bioactivity Has Been Spotted In California Parkell

Vendor Connect >>>>


**PROPHECTION**  
in cleaning

Use the best Prophecy products

[Learn More](#)

keystone  
industries

- [About Us](#)
- [Advertising](#)
- [Blog](#)
- [Cases](#)
- [Case Library](#)
- [Dental CE](#)
- [Conferences](#)
- [Contact Us](#)
- [Facebook](#)
- [Forums](#)
- [Home](#)
- [Jobs](#)
- [Links](#)
- [Media Kit](#)
- [More](#)

-  [Pay an Invoice](#)
- [Practice Management](#)
- [Privacy Policy](#)
- [Sign Out](#)
- [Thought Leaders](#)
- [Topics](#)
- [Twitter](#)
- [User Options](#)
- [Valuation](#)
- [Vendor Connect](#)
- [XML/RSS](#)

Copyright © 2019 DrBicuspid.com. All Rights Reserved.