

# Four Keys to the Future of Periodontal Treatment

Periodontal disease may be the most prevalent disease that's the least talked about in healthcare. More commonly known as gum disease, [periodontal disease affects nearly 50 percent of the adult population worldwide](#). There are two forms of periodontal disease: the milder form, gingivitis, and the advanced form, periodontitis.

Periodontists are specialists in the world of dentistry, working on prevention, as well as diagnosis and treatment of gum disease alongside general dentists and dental hygienists. There are a number of trends and topics that predict a future where more patients receive the critical treatment they need, particularly with regard to prevention, so that they maintain healthier teeth for longer periods of time, in line with increased life expectancy overall.

## Photodisinfection

While photodisinfection, achieved via photodynamic therapy, has been used across medicine for decades, it's new to the world of dentistry. [Periodontists are using PDT to identify and eliminate the bacteria most responsible for the progression of gum disease](#). As PDT gains greater traction alongside more traditional non-surgical periodontal therapy like perio scaling and deep cleaning, periodontists will add yet another tool in their arsenal of therapies to slow the advance of gum disease or eliminate it entirely.

## 3-D printing

Used in many professions for prototyping to advance innovation, 3-D printing is now on the dental scene, coupled with another technology, cone-beam computed tomography (also known as C-arm CT).

By combining X-ray technology with 3-D printing, a periodontist's diagnosis can

more precisely inform implant manufacturers details from dental crowns to bridges. This greater precision will lead to better patient outcomes across the board.

## **Periodontal Regeneration**

The [dental profession has studied the concept of periodontal regeneration](#)-the regeneration of tissue damaged by forms of periodontitis-for decades. The last major advancement, guided tissue regeneration, happened in the 1980s, but professionals remained largely unsatisfied by the clinical unpredictability of these procedures, due to multiple patient and disease variables.

In recent years, cell-based therapies have given researchers optimism, with higher frequencies of positive outcomes. Industry leaders expect that new developments in the delivery of cell-based regeneration, such as biocompatible scaffolding, must take shape before periodontal regeneration becomes more commonplace.

## **Intra-professional Collaboration**

Depending on the therapeutic area for treatment in US medical facilities, receiving care, especially among both general and specialty providers, can be disjointed and time-consuming, often leading patients to suffer more and for longer periods of time. The same lack of collaboration can be observed in dentistry, where periodontists and general dentists have often lacked formal partnerships.

With gum disease prevalence continuing to rise and now affecting about half of the general population, the demand for periodontal treatments, ranging from perio laser treatments to perio scaling and root planing, has never been greater. While the industry has heretofore relied upon informal referrals of services, patient education is key. Many of those suffering from periodontal disease don't even know that there are specialists trained in treating bones and tissues in the gums. Also of critical importance is the consolidation among industry

professionals into chains and large group practices. While no general dentists and periodontists literally hold joint appointments, practicing side-by-side literally in the same practice or virtually in a large DSO, can't help but fuel greater collaboration and better patient outcomes.

## **Conclusions**

The periodontal space is one that receives constant attention with regard to innovation, whether in dental devices or treatments like cell-based therapies for tissue regeneration. As the profession and its offerings continue to advance, periodontists will be indispensable allies for general dentists addressing the epidemic prevalence of gum disease in the American population.

Working together, the dental community will have the tools necessary to educate and treat more patients, bringing down the rate of incidence gum disease and heading off the more severe effects of the disease for many patients in the years to come.