

Drugs and the Periodontium

Many drugs can have primary or secondary effects on the periodontium (gums and bone about the teeth).

Primary effects result from drugs specifically used in the treatment of the periodontal diseases. Most commonly these are antibiotics and analgesics. In addition, several host-modulating agents have been proposed for use in patients with periodontitis. Further, a large number of drugs used to treat other conditions can have secondary effects on the periodontium.

Various systemically administered antibiotics have been used in the treatment of periodontal disease, especially aggressive periodontitis or for patients who have proven refractory to treatment. There has also been interest in the use of drugs that modify the body's response to the infection. Nonsteroidal anti-inflammatory drugs (NSAIDs) have been shown to reduce periodontal pathology, and low-dose doxycycline, which blocks the effect of degradative enzymes, has been shown to reduce tissue inflammation in patients with periodontitis. In another approach, a bisphosphonate, which is used to reduce bone loss from osteoporosis, was tested for its effects on periodontal disease.

A large number of drugs used to treat a variety of illnesses have been shown to have oral/periodontal side effects. The most common side effect is reduced salivary flow, also known as, xerostomia or dry mouth syndrome. This can be seen with more than 400 drugs, and is associated with increased tissue inflammation due to excessive plaque accumulation and caries. Another side effect of a number of drugs (e.g., dilantin-an antiepileptic agent, calcium channel blockers used to treat hypertension and the antirejection drug cyclosporin) is gingival overgrowth.