

# Periodontal Disease; Complementary/Alternative Medicine

Gingivitis: inflammation of the gums characterized by redness, contour changes, and bleeding

Periodontitis: localized pain, loose teeth, demonstration of dental pockets, redness, swelling, and/or signs of infection

X ray may reveal alveolar bone destruction

## QUICK REVIEW

- Periodontal disease is best treated with combined expertise: a dentist or periodontist and a nutritionally minded physician.
- Although oral hygiene is of great importance in treating and preventing periodontal disease, it is not sufficient in many cases.
- The patient's immune system and other defense mechanisms must be normalized if development and progression of the disease are to be controlled.
- Faulty dental work is a common cause of gingival inflammation and periodontal destruction.
- Tobacco smoking is associated with increased susceptibility to severe periodontal disease and tooth loss.
- Vitamin C plays a major role in preventing periodontal disease. Sugar is known to significantly increase plaque accumulation while decreasing white blood cell function. Vitamin E has been demonstrated to be of considerable value in treating patients with severe periodontal disease.

A review of seven studies using Coenzyme Q10 found that seventy percent of the 332 patients involved responded favorably to supplementation.

Flavonoids are extremely effective in reducing inflammation and stabilizing collagen structures of the gums. Folic acid, either as a mouthwash or a pill, has produced significant reductions of gingival inflammation in double-blind studies

Sanguinarine, an alkaloid derived from bloodroot, demonstrates useful properties in preventing dental plaque formation.

As discussed above, many factors are involved in the initiation and promotion of periodontal disease. Effective therapy requires that all relevant factors be controlled. Since there are as yet no clear guidelines for determining which factors are most important for a given patient, a general approach is recommended here. If you are a smoker, we strongly encourage you to stop, as continued smoking greatly decreases the success of any therapy for periodontal disease.

## Hygiene

Visit a dentist periodically to eliminate plaque and calculus accumulation as needed. Brushing after meals and daily flossing are necessary.

## Diet

A diet high in dietary fiber may have a protective effect via increased salivary secretion. 18 Avoidance of sucrose and all refined carbohydrates is extremely important.

## Nutritional Supplements

- Vitamin C: 3-5 grams per day in divided doses
- Vitamin E: 400-800 IU per day

Beta-carotenes: 250,000 IU per day (higher doses if indicated) for up to six months (although not clinically tested in this condition, beta-carotenes are recommended instead of vitamin A due to their similar effects and greater safety)

Selenium: 400 mcg per day

Zinc: 30 mg of zinc picolinate per day (60 mg per day if another form); or wash mouth with 1/2 ounce of a 5% zinc solution twice per day

- Folic acid: 2 mg per day; or wash mouth with 1/2 ounce of a 0.1% solution of folic acid twice per day

Quercetin: 500 mg three times per day

#### Botanical Medicines

High-flavonoid-content extracts, such as those from bilberry (*Vaccinium myrtillus*), hawthorn (*Crataegus sp.*), grape seed (*Vitis vinifera*), or green tea (*Camellia sinensis*) can be used at a dosage of 150 to 300 mg per day. Of these extracts, green tea extract, or the liberal consumption of green tea as a beverage, may be the most cost-effective. For a green tea extract with a fifty-percent polyphenol content, the dosage would be 200 to 300 mg twice per day.

- *Sanguinaria canadensis*: use toothpaste containing extract
- *Centella asiatica triterpenoids*: 30 mg twice per day of pure triterpenoids