



Your Monthly Update

Dear Colleague

Welcome to the March 2013 newsletter from Pure Bio Ltd.

Upcoming Pure Bio Seminar

Pure Bio are pleased to announce a One-Day seminar on **25th May 2013** introducing the *extended Alfa Omega range of products* and how to integrate them into your practice, in a way that is both clinically relevant and far-reaching; and yet **simple** to both understand and apply - this seminar is not to be missed!

Presented by Tracy S Gates, in Southwater, West Sussex.

For more information, click [here](#), or call us on 01403 730342, or email us on info@purebio.co.uk

Did you know:

Research has shown that flaxseed has the most dramatic effect of any food investigated for reducing blood pressure - reducing the risk of stroke by 50% and heart attack by 30%. (*American Heart Association 2012 Scientific Sessions, Nov 5, 2012*)

Don't forget our website on www.purebio.co.uk. We always welcome feedback and suggestions.

Periodontal (Gum) Disease

Protocol Summary

Ranking	Nutritional Supplements	Botanical Medicine
Primary	Folic Acid rinse Vitamin C	

	Vitamin D	
Secondary	Bloodroot and Zinc toothpaste CoQ10 Folic Acid (halitosis) Hyaluronic acid Pycnogenol	Neem Tea tree oil
Other	Calcium Vitamin E	Chamomile Echinacea

Primary – Reliable and relatively consistent scientific data showing a substantial health benefit.

Secondary – Contradictory, insufficient, or preliminary studies suggesting a health benefit or minimal health benefit.

Other – An herb is primarily supported by traditional use, or the herb or supplement has little scientific support and/or minimal health benefit.

Definition

Gum disease, also known as periodontal disease, is a condition in which the gums, deeper supporting tissue, and potentially the bone surrounding teeth become infected and inflamed. Gum disease starts with plaque on the teeth - a sticky white substance that coats teeth. Plaque forms when bacteria in the mouth mix with saliva and residues from starchy foods and sugar from dietary intake.

If plaque isn't properly removed from teeth by brushing and flossing, it accumulates and hardens underneath the gumline into tartar (calculus). Tartar build-up is much more difficult to remove than plaque and usually requires professional removal.

Left untreated, it can lead to inflamed gums, or gingivitis - a mild form of gum disease. One of the most common symptoms is darker red gums that bleed with brushing or flossing. Professional cleaning can reverse gingivitis.

If there is bleeding with pain, it is a symptom that the infection and inflammation has spread to the deeper tissues and bone, indicating a state of periodontitis. After the age of 30, periodontitis is more responsible for loss of teeth than cavities.

Causes

- Poor toothbrushing technique
- Irregular shape and placing of the teeth, providing stagnation areas
- Fillings or appliances that cause stagnation areas

Gingivitis can also be caused by systemic factors which include:

- Pregnancy
- Down's syndrome
- Poorly-controlled diabetes mellitus

Symptoms

- Red, swollen gums
- Bleeding while brushing or flossing
- Receding gums
- Chronic bad breath
- Loose teeth or widening space between gums and teeth

Lifestyle Modification

- **Quitting smoking** – smoking impairs blood flow to the gums and exacerbates gum disease
- **Stress reduction** - Stress contributes to gum disease by increasing plaque accumulation. A University of Dusseldorf study examined how exam stress would impact plaque and gum bleeding. All students had a professional tooth cleaning 4 weeks prior to exams and then 4 weeks after exams. They found that students had significantly higher rates of plaque and gingivitis after exams compared to a control group of students that hadn't taken exams.
- **Cranberry** - Cranberry may help gum disease by preventing bacteria from sticking to teeth. Be sure to only buy and drink cranberry juice with no added sugar! A typical therapeutic daily intake is 125ml. Consult your doctor if you are taking a blood thinner warfarin or have kidney stones.
- Some dentists may encourage patients to “irrigation” tools that deliver herbal antiseptics (like the lavender-based Tooth & Gums Tonic) to the deep pockets below the gum line, where anaerobic (oxygen-hating) bacteria thrive. Another recommendation is to pour hydrogen peroxide onto a toothbrush, then scrub the gum line to eliminate bacteria.
- **Prevention** - To prevent periodontal disease in the first place, brush, floss, and scrape the tongue twice a day, and have teeth professionally cleaned twice a year.

Integrative Options

Mouthwash of Sage Oil, Peppermint Oil, Menthol, Chamomile Tincture, Echinacea Juice, Myrrh Tincture, Clove Oil, and Caraway Oil - 0.5 ml in half a glass of water
TID swished slowly in the mouth before spitting out

A mouthwash combination that includes sage oil, peppermint oil, menthol, chamomile tincture, expressed juice from echinacea, myrrh tincture, clove oil, and caraway oil has been used successfully to treat gingivitis. In cases of acute gum inflammation, 0.5 ml of the herbal mixture in half a glass of water TID is recommended by some herbalists. This herbal preparation should be swished slowly in the mouth before spitting out. To prevent recurrences, slightly less of the mixture can be used less frequently.

Of the many herbs listed above, **chamomile**, **echinacea**, and **myrrh** should be priorities. These three herbs can provide anti-inflammatory and antimicrobial actions critical to successfully treating gingivitis.

Bloodroot and Zinc Toothpaste - Use a toothpaste containing .075% sanguinaria extract and 2% zinc chloride BID.

Bloodroot contains alkaloids, principally sanguinarine, that are sometimes used in toothpaste and other oral hygiene products because they inhibit oral bacteria. Sanguinarine-containing toothpastes and mouth rinses should be used according to manufacturer's directions. A six-month, double-blind trial found that use of a bloodroot and zinc toothpaste reduced gingivitis significantly better than placebo. However, concerns exist about the long-term safety of bloodroot.

Use a Waterpik or similar device to massage the gums, thus increasing circulation. Some holistic dentists suggest making a paste of baking soda and hydrogen peroxide (mixed to the consistency of toothpaste) and applying it to the gums to kill the active bacteria and remove plaque. (*N.B. Avoid this if you have stitches from oral surgery.*)

Dietary Modification

- Eat foods like mushrooms and garlic and drink green tea—all have been shown to have powerful antiviral and antibacterial benefits. Take daily probiotics and eat plenty of fruits and vegetables (high in antioxidants) and anti-inflammatory herbs and spices such as turmeric, ginger, cumin, and rosemary.
- Also, consume plenty of whole grains and vitamin C from foods like citrus fruits, kiwi and melons. These nutrients have been shown to lower the risk and severity of gum disease.
- Exercise regularly to banish “bad” bacteria and maintain a healthy weight. (Excess body fat can be a source of inflammation.)
- Ensure a good intake of calcium from dairy products and green leafy vegetables. Research links low levels of calcium (less than 500 mg a day) to more severe periodontal disease.

Nutritional Supplement Treatment Options

Folic Acid Rinse - 5 ml of a 0.1% solution used as a mouth rinse BID. A 0.1% solution of folic acid used as a mouth rinse (5 ml BID for 30 to 60 days) has reduced gum inflammation and bleeding in people with gingivitis in double-blind trials. The folic acid solution is rinsed in the mouth for one to five minutes and then spit out. Folic acid was also found to be effective when taken in capsule or tablet form (4 mg per day), though in another trial studying pregnant women with gingivitis, only the mouthwash—and not folic acid in pill form—was effective. However, this may have been due to the body's increased requirement for folic acid during pregnancy.

Phenytoin (Dilantin) therapy causes gum disease (gingival hyperplasia) in some people. A regular program of dental care has been reported to limit or prevent gum disease in people taking phenytoin. Double-blind research has shown that a daily

oral rinse with a liquid folic acid preparation inhibited phenytoin-induced gum disease more than either folic acid in pill form or placebo.

Vitamin C - 300 mg daily. People who are deficient in vitamin C may be at increased risk for periodontal disease. When a group of people with periodontitis who normally consumed only 20–35 mg of vitamin C per day were given an additional 70 mg per day, objective improvement of periodontal tissue occurred in only six weeks. It makes sense for people who have a low vitamin C intake (e.g., people who eat few fruits and vegetables) to supplement with vitamin C in order to improve gingival health.

Vitamin C and Flavonoids - 300 mg of vitamin C, plus 300 mg of flavonoids daily. For people who consume adequate amounts of vitamin C in their diet, several studies have found that supplemental vitamin C has no additional therapeutic effect. Research, including double-blind evidence, shows that vitamin C fails to significantly reduce gingival inflammation in people who are not vitamin C deficient. In one study, administration of vitamin C plus flavonoids (300 mg per day of each) did improve gingival health in a group of people with gingivitis; there was less improvement, however, when vitamin C was given without flavonoids. Preliminary evidence has suggested that flavonoids by themselves may reduce inflammation of the gums.

Vitamin D – 400 – 2000 i.u. daily. Vitamin D has been found to have anti-inflammatory effects and may reduce susceptibility to gum disease. A study by the Boston University evaluated the association between vitamin D status and gingivitis. They analyzed data from 77,503 teeth in 6700 people in the third National Health and Nutrition Examination Survey and found that people with higher blood levels of vitamin D were less likely to experience bleeding gums during gingival probing.

Sun exposure is one of the most important sources of vitamin D, because UV rays from the sun trigger the synthesis of vitamin D in skin. The National Institutes of Health Office of Dietary Supplements suggests 10 to 15 minutes of sun exposure twice a week, however the further away from the equator you live, the more polluted your city, and the more cloud cover there is, the less likely that this sun exposure will be sufficient. Look for at least 200 IU in a multivitamin.

Coenzyme Q10 - 50 to 60 mg daily. Preliminary evidence has linked gingivitis to a coenzyme Q10 (CoQ10) deficiency. Some researchers believe this deficiency could interfere with the body's ability to repair damaged gum tissue. In a double-blind trial, 50 mg per day of CoQ10 given for three weeks was significantly more effective than a placebo at reducing symptoms of gingivitis. Compared with conventional approaches alone, topical CoQ10 combined with conventional treatments resulted in better outcomes in a group of people with periodontal disease.

Hyaluronic Acid - Apply five times per day for one week or BID for three weeks. Hyaluronic acid is an important connective tissue component in the gums. Double-blind studies of topical hyaluronic acid treatments have shown that applying either a gel BID or a spray five times per day to the gum tissues helps reduce bleeding tendency and other indicators of gingivitis. However, plaque removal is still necessary for best results, and one study found that adding weekly topical hyaluronic acid treatments to a single session of scaling and root planing did not make a

significant difference in healing. No research has investigated whether hyaluronic acid supplements that are swallowed are effective for treating gingivitis.

Pycnogenol - 6 pieces chewing gum per day containing 5 mg each.

In a double blind trial, people with gingivitis chewed six pieces daily of a gum, each containing 5 mg Pycnogenol. While a group chewing gum without pycnogenol experienced continued gum bleeding and plaque formation after 14 days, the pycnogenol group had less gum bleeding and no additional plaque formation.

Calcium – 500mg BID. Some, but not all, research has found that giving 500 mg of calcium BID for six months to people with periodontal disease results in a reduction of symptoms (bleeding gums and loose teeth). Although some doctors recommend calcium supplementation to people with diseases of the gums, supportive scientific evidence remains weak.

Caution: Calcium supplements should be avoided by prostate cancer patients.

Vitamin E – 400 i.u. daily. Vitamin E helps in the healing and restoration of damaged gum tissues.

Botanical Treatment Options

Neem - Apply a gel containing 2.5 to 5.0% extract BID. In a double-blind trial, 1 gram of neem leaf extract in gel BID was more effective than chlorhexidine or placebo gel at reducing plaque and bacteria levels in the mouth in 36 Indian adults. A similar trial found neem gel superior to placebo and equally effective as chlorhexidine at reducing plaque and bacteria levels in the mouth.

Tea tree oil - Tea tree oil has proven antibiotic properties. A topically applied tea tree oil gel was evaluated in a double-blind placebo-controlled study involving 49 people with severe chronic gingivitis. They were told to brush twice a day and were assessed after 4 and 8 weeks. The group that brushed with tea tree oil had a significant reduction in the degree of gingivitis and bleeding. However, tea tree oil gel did not reduce the amount of plaque.

Use only commercial tea tree toothpaste, not tea tree oil.

Other herbs:

A mouthwash combination that includes sage oil, peppermint oil, menthol, chamomile tincture, expressed juice from echinacea, myrrh tincture, clove oil, and caraway oil has been used successfully to treat gingivitis. In cases of acute gum inflammation, 0.5 ml of the herbal mixture in half a glass of water TID is recommended by some herbalists. This herbal preparation should be swished slowly in the mouth before spitting out. To prevent recurrences, slightly less of the mixture can be used less frequently.

A toothpaste containing sage oil, peppermint oil, chamomile tincture, expressed juice from *Echinacea purpurea*, myrrh tincture, and rhatany tincture has been used to accompany this mouthwash in managing gingivitis.

Of the many herbs listed above, [chamomile](#), [echinacea](#), and [myrrh](#) should be priorities. These three herbs can provide anti-inflammatory and antimicrobial actions critical to successfully treating gingivitis.

For further information, contact:

Tracy S Gates

Director, PURE BIO LTD.

01403 730342

info@purebio.co.uk