Diagnosis: **Chronic Inflammatory Periodontal Disease**

Gum disease is a low-grade chronic bacterial infection also called periodontal disease or pyorrhea. While everyone has bacteria in their mouths, not everyone develops gum disease. There are identifiable risk factors that can make it more likely for the bacteria in your mouth to result in destructive gum disease. We now know that due to these risk factors some patients can clean their teeth and visit the dentist religiously and still have gum problems.

Over time, food and bacteria tend to collect between the teeth and gum. If this debris is not adequately removed, the bacteria migrate deeper under the gumline. In a susceptible patient, a space or "pocket" forms between the tooth and gum. Once these pockets of bacterial form below the gumline, you cannot reach them even with good toothbrushing and flossing.

The bacteria multiply and cause the gum cells to release a variety of substances that aggravate and inflame the gum tissues. The gum tissue and then the supporting bone are slowly destroyed. If enough bone tissue is destroyed, the teeth loosen and are eventually lost.

Gum disease rarely causes pain or any symptoms since the infection readily drains up through the gum. Often you cannot tell you even have gum disease until the gum is inspected and checked for pockets. **It’s like having termites in your house.** Above the ground the house looks fine, but the foundation is slowly being destroyed without you even knowing it. It’s the same way with gum disease. Just because it doesn’t hurt doesn’t mean all is well. Unlike looking for termites, we do not need to wait until damage has been done to tell if you have gum disease. We can detect gum disease early and prevent or repair its damage. You can keep watch also. Bleeding is a strong indicator of gum inflammation. Healthy gums do not bleed at all when brushed or flossed. **If you have any gum bleeding when you clean your teeth, your gums are inflamed.**

We now know that this ongoing bacterial infection in your mouth can have far reaching effects elsewhere in your body. When the gums are chronically inflamed, these bacteria can gain entrance into your bloodstream and spread to other parts of your body. Gum disease increases your risk for heart disease. Gum disease has been linked to pulmonary infections and gastric ulcer reinfection. Gum disease in diabetics makes control of blood sugar more difficult. Gum disease during pregnancy increases the risk for a pre-term, low birth weight baby. The American Academy of Periodontology’s website (www.Perio.org) has patient-oriented information concerning the increased risk for other health problems when gum disease is allowed to persist.

The progression of gum disease can be halted if the bacteria and debris are removed from these pockets. Traditionally, gum treatment consisted of cutting the diseased gum away with the hope that what would remain would heal and be healthy. Fortunately, a variety of new techniques have allowed us to successfully treat chronic gum infections much more conservatively. Removing large amounts of diseased gum and then "packing" the gums is a thing of the past. That’s a welcome relief to patients.

We are innovative in our treatment protocols. Our foundational approach is to use the techniques that will most efficiently eliminate the inflammation in your mouth to resolve. Your oral and overall health are at stake!

For more information go to:  
www.Perio.org  
OUR OFFICE PROTOCOL AT MAINTENANCE VISITS

DIAGNOSIS

1. Med history review:
   - Any necessary precautions due to medical conditions?
   - Look up any drugs of which you are not familiar and define them on the health history sheet
   - Determine if there are interactions between patient drugs and drugs we use?
   - Are there any drugs that increase patient’s risk for perio disease?

2. Risk assessment and counseling
   - Discuss the patient’s answers on their Risk Assessment Form
   - Transfer pertinent risk information to charting
   - Send marketing letter to physician?

3. Soft tissue (recession) and extra oral exam

4. Previous treatment history

5. Radiographic review
   - Scan left to right six times looking for:
     1st interproximal caries
     2nd occlusal caries
     3rd crestal bone
     4th root surfaces and furcations
     5th root apices
     6th overall view (any other pathology)

6. Mobility/occlusal check
   - Use two instrument handles to determine if any abnormal mobility is present
   - If pathologic mobility is noted, determine if it is due to:
     1. Bone loss (reduced bone support)
     2. Occlusal trauma
     3. Periodontal inflammation

7. Periodontal assessment sextant by sextant
   - We probe for five bits of information at each site:
     1. Inflammation – is there any BOP or other signs of inflammation
     2. Probing depth – has it changed?
     3. Debris quality and quantity (tactile and visual)
     4. Subgingival contour - Is site maintainable and accessible by you and by patient (are there any debridement difficulty factors such as deep pockets, pockets in inaccessible areas, furcations, subgingival margins, contoured root surfaces)
     5. Assess patient’s pain tolerance – do you need local anesthetic

8. OH assessment at problem spots
   - Due to correctable patient inability?
   - Due to local factors?

9. Caries exam

10. Esthetic/functional exam

11. Present diagnosis and treatment

12. Discuss treatment, alternatives, risks and benefits
PATIENT HEALTH HISTORY

Your name_________________________________ Today's date________________________________

Your regular dentist is_______________________ Your physician is______________________________

Ever been a patient here before? □ YES □ NO Your current age______________________________

(Check all that apply)

Have you ever had an adverse reaction to:

☐ Local Anesthetics/Novocain ☐ Codeine ☐ Antibiotic __________________________

☐ Other_________________________ ☐ Aspirin/Advil ☐ Latex

Do you take:

☐ Blood thinners (e.g. Coumadin, Plavix, etc.) if yes, date and score of most recent INR ______________

☐ Any other medications, vitamins or supplements, if so, please list:

<table>
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<th>Name of medication</th>
<th>What condition you take it for</th>
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(List any additional meds you take on separate sheet)

What is your level of anxiety/stress/fear when going to the dentist? □ None □ Mild □ Mod □ Severe

Other Medical conditions (Check all that apply)

☐ Asthma if yes, where do you keep your inhaler?________________________

☐ Bleeding problems ☐ Epilepsy ☐ Prosthetic heart valve ☐ Artificial joint

☐ Hepatitis ☐ Tuberculosis ☐ HIV/AIDS ☐ Thyroid Disease

☐ Cancer ☐ Chemo/radiation ☐ Sleep apnea ☐ Steroid Use

☐ Kidney Problems ☐ Psychiatric therapy ☐ Change in health in last year ☐ Any Addiction

☐ Breathing/COPD ☐ Heart Disease ☐ Vertigo ☐ Cold Sores/fever blisters

Gum disease has been linked with an increased risk for many chronic diseases. Eliminating gum disease is especially important to the oral and overall health of the following patients: (Please check all that apply)

☐ Tobacco user

Tobacco users are more likely to develop gum disease which is more severe and more difficult to eradicate. Gum disease itself has recently been linked with an increased risk for heart disease. Since tobacco users are already at an increased risk for heart disease (and since gum disease only worsens that risk) it is vitally important for tobacco users to do whatever is necessary to eliminate gum disease.

☐ Current Tobacco user → What form (cig, pipe, chew, etc). ______________________

How much/day______________ For how long___________

☐ Previous Tobacco user → When did you quit__________

☐ Diabetes

Diabetes is a well-known risk factor for gum disease. Research is confirming that when left untreated gum disease makes it harder for you to control your blood sugar. Elimination of gum disease can improve your blood sugar control reducing your risk for the serious complications.

How is your diabetes control? □ Good □ Fair □ Poor

Date of last A1c_________What score?______________

Who is your diabetes Doctor___________________
Some people are genetically prone to developing gum disease even if they take decent care of their mouths.

Do you have any family history of gum disease?  □ Yes  □ No  □ Don’t know

Stress is a well-known risk factor for gum disease.

Is your stress level too high?  □ Yes  □ No

Life altering events (loss of job, divorce, death in family, moving to new location, etc.) can be particularly strong factors for gum disease. Are you currently going through and life altering events?  □ Yes  □ No

There is a bi-directional connection between rheumatoid arthritis. If you have arthritis you are at an increased risk for gum disease. Emerging research suggests that eliminating any gum disease and then keeping it at bay can lessen the crippling effects of arthritis.

Have you ever been diagnosed with Rheumatoid Arthritis?  □ Yes  □ No

Being overweight is now recognized as a strong risk factor for gum disease. Obesity and gum disease are both risk factors for heart disease and diabetes. Thus, if you are over your ideal weight it is vitally important for you to eliminate any gum inflammation to lower your risks for more serious health problems.

We can calculate your weight status by using Body Mass Index (BMI)

List your current weight__________________  \[ BMI = \frac{703 \times \text{weight}}{\text{height}^2} \]

List your current height__________________

18.4 or below  Underweight
18.5 to 24.9  Healthy weight
25.0 to 29.9  Overweight
≥30.0  Obese

All patients please complete the following (check all that apply)

□ Heart disease/risk factors for heart disease (family history of heart disease, ↑ cholesterol, ↑ blood pressure
□ Spouse with gum disease (Gum disease may be transmissible, family members should be screened for gum disease)
□ Taking Dilantin, Ca+ Channel Blockers, or Immunosuppressants for organ transplantation
□ Previous bouts of gum disease  □ Family history of Alzheimer’s disease
□ History of gastric ulcers  □ Respiratory disease
□ Kidney Disease  □ Family history of colon cancer

FEMALES  Are you:  □ Pregnant  □ Nursing  □ Taking birth control pills

□ Ever diagnosed with breast cancer?  □ Family history of breast cancer?  □ Post-menopausal?

Do you have osteoporosis?
□ Yes
□ No →  Have you ever been tested for osteoporosis?  □ Yes  □ No

Ever taken Fosamax, Fosamax Plus D, Actonel, Boniva, Didronel, Skelid, Aredia, Bonefors, or Zometa for osteoporosis or for any other reason?  □ Yes  □ No
The least important thing we did today was clean your teeth.

Stop coming to us just to get your teeth cleaned! You should be seeing us regularly since only with our help can you keep oral inflammation to a minimum over your lifespan. That’s really important. Here’s why…

Dentistry has actually known for some time that if you have inflammation, cleaning the teeth will make them feel good day or two but will have no effect on eliminating the underlying inflammation. Medical research is confirming inflammation anywhere in the body is a significant factor in of the chronic diseases of aging (heart disease, diabetes, cancer, Alzheimer’s disease). It turns out that the mouth is significant source of inflammation when gum disease is present.

Gum inflammation rarely causes any symptoms - most people who have gum inflammation do not even know it. Gum inflammation occurs when microscopic bacteria, in the form of a biofilm, collect below the gum line beyond where your toothbrush can reach. Left unchecked, this biofilm causes the silent inflammation in your mouth that can lead to other serious health problems.

While everyone has mouth not develops gum inflammation. There are identifiable risk factors that make some people more susceptible to gum inflammation. We know that it takes about 3-6 months for the inflammation-causing biofilm to reform underneath the gum line. Thus, if you have gum disease risk factors it is even more important for you to partner with us on a regular basis to determine if any gum inflammation has developed and then to do what is necessary to eliminate it.

Partnering with us over your lifespan to keep oral inflammation to a minimum will pay dividends to your oral and overall health.
Dear Dr. Lang,

Our mutual patient, William Dan Stinson (dob 12/10/1950), is being followed in our office for chronic inflammatory periodontal (gum) disease. While gum disease results in bone loss and tooth loss, emerging research suggests that the ramifications of untreated gum disease are even more significant.

Bacteria under the gum line induces a local response which includes the release of mediators of inflammation including TNFα. Inflammatory mediators of oral origin spill into the blood stream daily when gum disease is present. It turns out that the mouth can add significantly to overall systemic inflammatory burden. We now have strong evidence that persistent gum disease makes it harder for patients with diabetes to control their blood sugar. There is impressive evidence of improved HbA1c when gum disease is eliminated.

As you know, patients with diabetes are already at increased risk for periodontal disease. If gum disease is not adequately treated, that patient’s blood sugar control can be adversely affected. Thus, the level of surveillance for periodontal disease among patients diagnosed with diabetes should be high.

Periodontal disease is often described as a "silent disease" similar to hypertension. Most people who have it do not even know it. Evaluation of the gum tissues for evidence of inflammation in the tissues below the gumline is necessary to determine if gum disease is present. Gentle probing below the gumline at several sites around each tooth is the only way to determine if subgingival inflammation exists.

The International Diabetes Foundation and the American Academy of Periodontology guidelines both state that patients with diabetes or risk factors for diabetes should have their periodontal health evaluated yearly to maximize the management of their blood glucose. You may want to consider referring your patients who have not been able to achieve an adequate level of control to us so that we can eliminate any oral contribution to their systemic inflammatory burden. Simply asking your patients if they visit the dentist regularly or even if they brush and floss may not be sufficient to determine if there is any oral inflammation present.

If you would like further information, please do not hesitate to contact me.

Warmest Regards,
Timothy G Donley DDS MSD

P.S. Kindly forward a copy of the patient’s most recent HbA1c.
You have been diagnosed with chronic inflammatory periodontal disease (ICD-9-CM Code 523.40) and you need more than a routine cleaning.

The regular tooth cleaning that is done during your normal dental visits is intended to remove any bacterial plaque, stain and tarter (calculus), from above the gum line. For patients that have no below-the-gum issues a regular cleaning is appropriate. In your case, since we noted below the gum line issues, a regular cleaning may make the teeth feel smooth for a few days but it will not help with the gum disease at all. Everyone has bacteria in their mouths, not everyone develops gum disease. There are identifiable risk factors that can make it more likely for the bacteria in your mouth to result in destructive gum disease. We now know that due to these risk factors some patients can clean their teeth and visit the dentist religiously and still have gum problems.

It is good we caught this whew we did! Over time, food and bacteria tend to collect between the teeth and gum. If this debris is not adequately removed, the bacteria migrate deeper under the gum line. In a susceptible patient like you, a space or "pocket" forms between the tooth and gum. Once these pockets of bacterial form below the gum line, you cannot reach them even with good tooth brushing and flossing.

Some patients need a more advanced level of cleaning, often referred to using the old term “deep cleaning.” The point of deep cleaning, done many years ago and unfortunately still done in many offices today, was to give everything a few good scrapes, remove as much of the tartar below the gum, and then hope for the best. While the calcified plaque and tartar certainly should be removed, it is the microscopic bacteria (called biofilm) that also has to be removed. **Removal of all biofilm requires a bit of skill and talent.** Without adequate removal, the biofilm leads to long standing inflammation which has been linked with a very real, increased risk for other serious health problems like heart disease, diabetes, rheumatoid arthritis and Alzheimer’s disease.

We are going to schedule you for a “periodontal debridement visit.” We figure out which sites are affected, what the root surfaces are shaped like at those sites and then we make sure we are 100% thorough in removing all of the bacteria at those sites, not just the calculus. We also assess your risk factors and make customized recommendations to help you get inflammation in your mouth to a minimum throughout your life.
Weighing in on Obesity and gum disease.

Measuring your height and weight may seem out of place in a dental office. It shouldn’t. Research has confirmed that obesity is a strong risk factor for gum disease. When you are overweight your body over-produces inflammatory mediators – substances that cause you to be at increased risk for heart disease, diabetes and a whole host of other diseases. Some of these inflammatory mediators make it easier for gum disease to develop.

So, if you are overweight, you are at increased risk for gum disease and other serious diseases. But, the story gets even more interesting. We know now that gum disease itself can increase your risk for other serious diseases. Thus, in your case it’s a double whammy. You are already at increased risk for gum disease. If that gum disease is not eliminated and then kept at bay it will only increase your risk for heart disease, diabetes and other quality-of-life robbing diseases.

You are well aware that diet and exercise is important if you are overweight. You probably also know that these lifestyle changes can be difficult. One thing you can do to reduce your overall risk is to make sure any inflammation in your mouth is eliminated and then kept at bay. Watching and waiting can be dangerous in your case – things can get worse in a hurry. We may have to treat your gum disease more aggressively than patients who are not overweight.

We are concerned about your oral and overall health. We weigh you to help you gauge and manage your risk for gum disease and for other serious diseases. We can also offer suggest easy nutritional changes that can further reduce your risk for gum disease and other diseases.

We may recommend seeing you more frequently than twice a year. We know through solid research that it takes about 2-3 months for bacteria to reorganize and cause disease. Since it is easier for bacteria to lead to problems in your case we may need to see you more frequently to make sure that we eliminate any small flare-ups before they turn into bigger problems.

**Body Mass Index (BMI)**

Body Mass Index (BMI) is a number calculated from a person's weight and height. BMI provides a reliable indicator of body fatness for most people and is used to screen for weight categories that may lead to health problems.

Your BMI is___________________

**BMI Categories:**

- Underweight = <18.5
- Normal weight = 18.5–24.9
- Overweight = 25–29.9
- Obesity = BMI of 30 or greater

For more info: www.cdc.gov/healthyweight
Dental care is no longer just about cavities, your smile or whether you floss or not.

It’s About inflammation.

- Inflammation is at the root cause of many of the chronic diseases of aging.
- The mouth is a significant source of that same inflammation if you have gum disease.
- You can have gum disease and not even know it.

At every visit, ask if you have any gum inflammation.

It is more important than you think.