

## Occlusal (Bite) Disease

by Gary DeWood, DDS, MS

Occlusion is the coming together of teeth, a meeting of two surfaces made of the hardest stuff in your body. You probably haven't devoted a lot of thought to making those surfaces move against each other because, for most of us, it just happens.



Thankfully, your brain is able to coordinate thirty-two teeth and dozens of muscles without telling you what it's doing. When you're enjoying dinner with your favorite person, this is a very good thing. When you're sleeping soundly and grinding your teeth away, it's not so good. After all, our teeth are supposed to last a lifetime.

Teeth are negatively affected by three diseases: decay (cavities), periodontal (gum) disease, and occlusal (bite) disease. Most of us are acquainted with the signs, symptoms, and treatment of the first two, probably from personal experience.

Dentists are highly trained in the diagnosis and treatment of decay and periodontal disease. Through education and experience, the doctor is able to look into the future and recommend appropriate treatment to minimize the effects of these diseases by dealing with them as early as possible.

Occlusal disease does not always present itself so obviously. Wear, sensitivity, cracks, loose teeth, breaking teeth, sore muscles, painful jaw joints, headaches – these and more can be the effects of occlusal disease. In its early stages, an obvious injury, like a broken tooth, often hides the underlying cause.

Doctors who study at The Pankey Institute learn and develop skills in recognizing the signs of occlusal disease and in providing appropriate treatment to halt, and often reverse its



effects. Recognizing occlusal disease as early as possible increases the probability that you will have young teeth at an elderly age. Much of the bridgework, the crowns, and the repairs that adults experience might be avoided if the signs of occlusal disease were recognized and addressed in the early stages.

Your doctor incorporates evaluation of the signs and symptoms of occlusal disease into a comprehensive evaluation, often through the use of study casts (models of your teeth) and occlusal (bite) analysis. Your doctor knows that looking into the future means providing you with all information about what's happening today that will impact your teeth five, ten, twenty and more years from now.

Occlusal Disease therapy commonly begins with a "bite splint." This hard acrylic appliance is fabricated to fit snugly over either your upper or lower teeth. It becomes a temporary perfect bite for you.

Wearing the bite splint is a time of discovery for both you and your doctor. You will experience what a comfortable difference a stable, solid bite can make on your teeth, your muscles, and your jaw. It is very likely that many of the signs and symptoms of occlusal disease will diminish or even disappear. How long this takes depends on your situation and the signs and symptoms with which you start.

Following a new bite evaluation, your doctor may ask permission to reshape teeth so they move smoothly against each other and fit together in the same solid position that you felt with the bite splint.

In rare cases where the joint has been badly damaged,

the bite splint may not achieve the desired results. When this occurs, advanced joint imaging and consultation with a specialist may be necessary to address the changes in the joints.

Whatever is recommended, the best dentists will be sure to spend time ensuring that you have a clear understanding of why it is prescribed, what to expect, and a clear picture of the anticipated outcome. They also will welcome your questions and concerns.

Keeping your teeth in maximum comfort, function, and esthetics for your entire lifetime depends on you. Seeing and addressing the signs and symptoms of the disease processes that work against that goal depends on what your dentist knows and sees. Together you can be an unbeatable team that keeps occlusion working for your health and not against it. Have a nice dinner. ■



*A splint helps you feel the effect small changes have had on your bite over time, as well as what it could feel like with appropriate therapy – therapy that can slow down the aging of your teeth.*

*Wearing a bite splint is relaxing. Patients with muscle tension and pain report dramatic relief.*

**Have you ever had  
raspberry seeds stuck  
in your teeth?**

**Well, I have. (Turn the page...)**

## *Small Changes... Big Difference*

*by Gary DeWood, DDS, MS*

Do you like raspberries? I do. Have you noticed how those little seeds get in your teeth and change how your bite feels? I mess around with my tongue, a toothpick, my toothbrush, sometimes my finger until they're gone and I can bite my teeth together normally again. It just feels so good. I've noticed the same reaction in patients when I return harmony between their jaw joints and their bite.

The human jaw joint (the temporomandibular joint or "TMJ") is unique in your body. It rotates, it slides, and it does both at the same time. It does all this on one side or on both sides simultaneously.

Small changes in the way teeth interact are accounted for in the movement of your jaws by muscle memory. You learn to work around things because the differences are very small and change very slowly (unlike the raspberry seeds that cause change quickly). These changes are caused by many things including fillings, grinding, clenching, gum disease, habits, and injuries, to name a few.

Because these changes occur over a span of years, the differences never feel abnormal to you. Sometimes they only become evident when a tooth hurts, becomes loose, or breaks. You're surprised! Everything was fine, why did this happen all of a sudden ... on Sunday ... or the day before we were leaving for vacation!?

Dentists such as yours, who study at the Pankey Institute, have spent substantial time looking at and looking for the earliest signs of these changes. That begins at your first visit. A comprehensive oral health evaluation includes study of the relationship between your teeth and your jaw joints, and the relationship between your upper teeth and your lower teeth.

You may be completely unaware of overworked muscles (they're usually tender when pushed on or squeezed),



cracked teeth (they usually don't hurt until the crack gets way inside), or a shift in your jaw as your teeth come together (you've trained yourself to make the teeth hit where most of them touch each other). When you become aware of a problem the solution may be quite different from what would be appropriate had it been discovered earlier.

If you have suffered significant dental problems, you don't need me to tell you about the problems. The signs are pretty easy for you to see (and feel). Your dentist is looking for the signs that foretell the problems.

Raspberry seeds are quite small unless they are lodged on the chewing surface of a tooth. They feel absolutely boulder-like then. You can imagine that, for you to remain unaware of changes that are occurring in your bite, they must be pretty small. You're right. The problem is that they add up, and as they add up, they feel normal to you. That's why you're surprised.

Casts, or models, of your teeth, when appropriately studied with all the information noted during your comprehensive evaluation, can give your dentist information that confirms the signs. They also provide an opportunity to plan the necessary actions to correct and reverse the changes.

What I've noticed is my patients' amazement at how good their bite feels when these changes are corrected. They have "that look" on their faces. You know the look, the "no more raspberry seeds on my teeth and it feels good" look.

They say they can't believe how their bite feels. They report a feeling they could not have imagined, but like the raspberry seeds being gone, they know when it happens. It feels so good, and that feeling is a sign that functional harmony has been achieved – a feeling and a fact that improves the likelihood of lifelong oral health. ■



*From the pages of*  
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*A newsletter for the  
patients of Pankey Institute  
trained dentists*

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## **YOU AND YOUR BITE**

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