

Oklahoma Center for
Implants & Periodontics

Periodontal Health in Oklahoma

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Patient's lives are changed everyday because we focus on premiere service with the highest quality of implant and periodontal treatment offered today.

Our emphasis is on Comprehensive Periodontics, Soft Tissue Grafting, and Dental Implants

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In This Issue

Cardiovascular and Periodontal Disease

Implant Failure Case

Women, Hormones and Periodontal Disease

You and Your Health

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Chronic Inflammatory Disease

It would be an understatement to say the human body is an incredibly complex organism. Right now your brain is actively processing the words you are reading, your lungs are taking in oxygen, and your heart is pumping that oxygen rich blood, all without your conscious effort. The way in which our bodies function is mind boggling. A seemingly infinite number of biochemical interactions take place between the different organ systems at any moment. It is amazing how all these systems are intertwined.

Unfortunately, it isn't just the good interactions that are connected. A significant amount of research in the medical community is now being focused on how seemingly different disease processes are related. In particular they are looking at

inflammatory diseases such as; rheumatoid arthritis, chronic obstructive pulmonary disease, atherosclerosis, inflammatory bowel disease, and periodontitis. We are now beginning to understand that the inflammation associated with these diseases has systemic implications.

Inflammation is the first response of our immune system to trauma or infection. It is the initial step in healing. Defensive cells in our tissues sense trauma and release chemicals that lead to the five cardinal signs of inflammation: redness, swelling, heat, pain, and eventual loss of function. The inflammatory response is meant to be a protective mechanism. However in chronic inflammatory diseases such as Cardiovascular Disease (CVD) and periodontitis, our bodies are unable to quickly repair

Continued on Page 2

Failing Implants

Treating failing implants is one of the most difficult tasks in dentistry, and unfortunately we are starting to see a lot more of these cases. Many factors can cause implants to fail. Peri-implantitis and improper occlusion are two of the most common.

Due to an implant's lack of a periodontal ligament, they do not have the ability to flex like normal teeth. If the implant occlusion is off, even slightly, major problems can arise. I check the occlusion each time an implant patient comes in for a maintenance visit – although the implant can't move, teeth around implants

can. I also strongly recommend a night-guard to each of my implant patients.

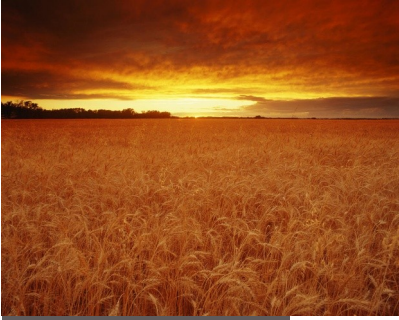


Figure 1

A patient presented with a chief complaint of soreness on the upper right. She had two implants placed about 1 year ago, figure 1. She explained that her bite never felt "quite right" since the crowns had been cemented on the implants. She also noticed that the tooth in

Continued on Page 5

Cont...CVD and Periodontitis



“In chronic inflammatory diseases such as CVD and periodontitis...our inflammatory response actually becomes destructive to host tissue.”

the problem. There is a shift in the cellular process and our inflammatory response actually becomes destructive to host tissue.

Atherosclerotic CVD results from the accumulation of low-density lipoprotein (LDL) within the lining of our blood vessel walls. The development of these atherosclerotic plaques leads to significant health problems, including increased blood pressure, stenotic arteries, blockage of blood vessels, heart attacks, and strokes.

As we all know, periodontal disease is an inflammatory disease triggered by oral bacteria and characterized by attachment. The destruction of tissue is caused by an interaction between bacteria and the host response. If left untreated, the body will eventually sacrifice the teeth to prevent a local infection from becoming systemic and life threatening.

So, what’s the common denominator between these two problems? Inflammation. Regardless of the site, the body responds to injury in the same way. Although the immune system was once believed to be the only a vital defense against infection, it is now recognized as an active participant in many chronic diseases.

A direct causal relationship between periodontitis and CVD has not been established. However, multiple studies point out some interesting facts. Moderate to severe periodontal disease causes an increase in systemic inflammation, as measured by certain proteins in the blood. Treatment of periodontitis not only reduces clinical signs of the disease, but also reduces levels of these systemic inflammatory mediators. Another remarkable fact is that many of the same Gram negative organisms often associated with severe periodontal disease can be found in atherosclerotic plaques.

The association between periodontitis and CVD has received considerable attention. The results of current research, however, have varied greatly ranging from no causative relationship to strong causative connections between the two diseases. Reasons for discrepancies in the results of the research include variations in study populations, including differing ages, ethnicities, and geographical locations.

Research into the relationship between periodontitis and CVD is ongoing. The take home message is problems with the gums can affect other parts of the body.

Patients diagnosed with moderate to severe periodontal disease should be informed that there may be an increased risk for atherosclerotic CVD associated with periodontitis. Furthermore, if the patient has not been seen by a physician in the last 12 months, they should be referred for medical evaluation.



Ask Dr. Henderson...

Q: Can you talk about how the implant overcomes (or does it) the nature of the biological width?

A: An implant doesn’t overcome the biologic width, it resets it. The biologic width is going to be present whether there is a

tooth present or an implant. The body has to set up this relationship in order to preserve the health and integrity of the mouth. The biologic width of an implant is altered because there are different non-living components to factor in, but it is present. You will typically find deeper pocketing around implants because of the biologic width, and it depends on the implant fixture platform placement as it is related to adjacent teeth.

Send your questions to Robin@OkPerioImplant.com

Women, Hormones, and Periodontal Disease

A woman's health needs are unique. At specific times in life, extra care is needed for example maturity changes, puberty or menopause, and special health needs, such as menstruation or pregnancy. Did you know your oral health needs also change at these times?

While women tend to take better care of their oral health than men do, women's oral health is not markedly better than men's. This is because hormonal fluctuations throughout a woman's life can affect many tissues, including gum tissue.

A study published in the January 1999 issue of the *Journal of Periodontology* reports that at least 23 percent of women ages 30 to 54 have periodontitis (an advanced state of periodontal disease in which there is active destruction of the periodontal supporting tissues). And, 44 percent of women ages 55 to 90 who still have their teeth have periodontitis.

Puberty

During puberty, an increased level of sex hormones, such as progesterone and possibly estrogen, causes increased blood circulation to the gums. This may cause an increase in the gum's sensitivity and lead to a greater reaction to any irritation, including food particles and plaque. During this time, the gums may become swollen, turn red and feel tender.

As a young woman progresses through puberty, the tendency for her gums to swell in response to irritants will lessen. However, during puberty, it is important to follow a good at-home oral hygiene regimen, including regular brushing and flossing, and regular dental care. In some cases, a dental professional may recommend periodontal therapy to help prevent damage to the tissues and bone surrounding the teeth.

Menstruation

Occasionally, some women experience menstruation gingivitis. Women with this condition may experience bleeding gums, bright red and swollen gums and sores on the inside of the cheek. Menstruation gingivitis typically occurs right before a woman's period and clears up once her period has started.

Pregnancy

Women may experience increased gingivitis or pregnancy gingivitis beginning in the second or third month of pregnancy that increases in severity throughout the eighth month. During this time, some women may notice swelling, bleeding, redness or tenderness in the gum tissue.

In some cases, gums swollen by pregnancy gingivitis can react strongly to irritants and form large lumps. These growths, called pregnancy tumors, are not cancerous and are generally painless. If the tumor persists, it may require removal by a periodontist.

Studies have shown a relationship between periodontal disease and pre-term, low-birth-weight babies. Any infection, including periodontal infection, is cause for concern during pregnancy. In fact, pregnant women who have periodontal disease may be **seven times** more likely to have a baby that is born too early and too small! Advise patients if they are planning to become pregnant, be sure to include a periodontal evaluation as part of prenatal care.

oral health conditions that affect pregnant women. They may experience red, bleeding and swollen gums. Women who use oral contraceptives should know that taking drugs sometimes used to help treat periodontal disease, such as antibiotics, may lessen the effect of an oral contraceptive.

Menopause and Post-Menopause

Women who are menopausal or post-menopausal may experience changes in their mouths. They may notice discomfort in the mouth, including dry mouth, pain and burning sensations in the gum tissue and altered taste, especially salty, peppery or sour.

In addition, menopausal gingivostomatitis affects a small percentage of women. Gums that look dry or shiny, bleed easily and range from abnormally pale to deep red mark this condition. Most women find that estrogen supplements help to relieve these symptoms.

Bone loss is associated with both periodontal disease and osteoporosis. Research is being done to determine whether the two are related. Women considering Hormone Replacement Therapy (HRT) to help fight osteoporosis should note that this may help protect their teeth as well as other parts of the body.

Steps to Protect Oral Health

Careful periodontal monitoring and excellent oral hygiene is especially important for women who may be noticing changes in their mouths during times of hormonal fluctuation. To help ensure good oral (and overall) health, be sure to:

See a dental professional for cleaning at least twice a year.

See a periodontist if noticeable changes or problems arise with the gum tissue, which may include:

Bleeding gums during brushing

Red, swollen or tender gums

Gums that have pulled away from the teeth

Persistent bad breath

Pus between the teeth and gums

Loose or separating teeth

A change in the way the teeth fit together when biting

A change in the way dentures fit

Keep dental professionals informed about any medications you are taking and any changes in health history.

Brush and floss properly every day.

Women who use oral contraceptives may be susceptible to the same

Continued on Page 4

Cont... Women and Hormones

Oral contraceptives

Since estrogen circulating in the blood can negatively feed-back to reduce circulating levels of FSH and LH, most oral contraceptives contain a synthetic estrogen, along with a synthetic progestin. Even in men, the major hormone involved in LH feedback is estradiol, not testosterone.

Hormone replacement therapy

As more fully discussed in the article on hormone replacement therapy, estrogen and other hormones are given to postmenopausal women in order to prevent osteoporosis as well as treat the symptoms of menopause such as hot flashes, vaginal dryness, urinary stress incontinence, chilly sensations, dizziness, fatigue, irritability, and sweating. Fractures of the spine, wrist, and hips decrease by 50-70% and spinal bone density increases by ~5% in those women treated with estrogen within 3 years of the onset of menopause and for 5-10 years thereafter.

Before the specific dangers of conjugated equine estrogens were well understood, standard therapy was 0.625 mg/day of conjugated equine estrogens (such as Premarin). There are, however, risks associated with conjugated equine estrogen therapy. Among the older postmenopausal women studied as part of the Women's Health Initiative (WHI), an orally-administered conjugated equine estrogen supplement was found to be associated with an increased risk of dangerous blood clotting. The WHI studies used one type of estrogen supplement, a high oral dose of conjugated equine estrogens (Premarin alone and with medroxyprogesterone acetate as *PremPro*).

In a study by the NIH, esterified estrogens were not proven to pose the same risks to health as conjugated equine estrogens. Hormone replacement therapy has favorable effects on serum cholesterol levels, and when initiated immediately upon menopause it may reduce the incidence of cardiovascular disease, although this hypothesis has yet to be tested in randomized trials. Estrogen appears to have a protector effect on atherosclerosis: it lowers LDL and triglycerides, it raises HDL levels and has endothelial vasodilatation properties plus an anti-inflammatory component.

Research is underway to determine if risks of estrogen supplement use are the same for all methods of delivery. In particular, estrogen applied topically may have a different spectrum of side-effects than when administered orally, and transdermal oestrogens do not affect clotting as they are absorbed directly into the systemic circulation, avoiding first-pass metabolism in the liver. This route of administration is thus preferred in women with a history of thrombo-embolic disease.

Estrogen is also used in the therapy of vaginal atrophy, hypoestrogenism (as a result of hypogonadism, castration, or primary ovarian failure), amenorrhea, dysmenorrhea, and oligomenorrhea. Estrogens can also be used to suppress lactation after child birth.

Breast cancer

About 80% of breast cancers, once established, rely on supplies of the hormone estrogen to grow: they are known as hormone-sensitive or hormone-receptor-positive cancers. Suppression of production in the body of estrogen is a treatment for these cancers.

Recently researchers have discovered that the common table mushroom has anti-aromatase properties and therefore possible anti-estrogen activity. Clinical trials have begun in the United States looking into whether the mushroom can prevent breast cancer in people. A recent study has highlighted the importance of this research. In 2009, a case-control study of the eating habits of 2,018 women, revealed that women who consumed mushrooms had an approximately 50% lower incidence of breast cancer. Women who consumed mushrooms and green tea had a 90% lower incidence of breast cancer.

Hormone-receptor-positive breast cancers are treated with drugs which suppress production in the body of estrogen. This technique, in the context of treatment of breast cancer, is known variously as hormonal therapy, hormone therapy, or anti-estrogen therapy (not to be confused with hormone replacement therapy). Certain foods such as soy may also suppress the proliferative effects of estrogen and are used as an alternative to hormone therapy.

"Hormone replacement therapy has favorable effects ...when initiated immediately upon menopause it may reduce the incidence of cardiovascular disease, although this hypothesis has yet to be tested in randomized trials."



Cont...Implants

the very back was sensitive to hot, cold, and biting pressure. We flapped the area to evaluate the bone supporting the implants. As



Figure 2 needed root canal treatment and had poor crown to

you can see from the surgical photo, figure 2, the facial bone is almost completely gone and about 70% of the implants are exposed...not good.

We decontaminated the implant surfaces with chlorhexidine, peroxide, and topical antibiotics, and grafted with bone and connective tissue. Because #3

root ratio, it was removed and will be replaced with an implant after healing.

I saw this patient for her 1 month post-op and she is healing well, but the jury is still out on the final results. There is a reasonable chance that the implants may still need to be removed.

Peri-implantitis, or periodontal disease around implants, is fairly common and is another major contributor to implant loss. Implants can develop gum problems just like teeth. This can be prevented by good oral hygiene at home and regular professional cleanings every 4-6 months.

More Effective Exercise Behaviors ~ An excerpt from *The Healing Prescription*

In a recent study, Colorado State University researchers measured how long fat continues to be burned after brief periods of exercise. Participants exercised for two minutes than rested for one minute. They continued this cycle for 20 minutes. The researchers found that participants continued to burn fat at a high rate 16 hours after exercise. This is because during exercise, you “key in program changes” that affect your metabolism over the next several days.

Endurance athletes typically have body fat percentages ranging from 10-20%, higher than most other athletes. Body builders, for example, who do bursts of intense, very

short duration exercise are quite lean, a body fat percentage of 4-8%.

If you want to lose fat and maintain your heart, lungs and muscle, exercise in short bursts. This will mainly use energy from carbohydrates stored in muscle rather than fat. Carbs are capable of burning energy at a much higher rate. You will then burn much more fat for energy during the recovery period as you replenish the carbs.

By doing this, you teach your body it needs more energy stored in muscle for fast access. And you teach it that storing energy as fat is inefficient because you never exercise long enough to make good use of the fat during exercise.

Outside the Office ~ Team Member Highlight

Living in Oklahoma for the last 23 years doesn't stop Patti from enjoying the smaller things Oklahoma has to offer. Spending time with family and friends on simple day trips or weekend get-aways is one way she relaxes outside her busy schedule as the office financial coordinator.

She has two sons, two stepdaughters and six grandchildren. Her youngest son just started his first year in college so life at home is a little quieter.

She loves cooking, movies, and traveling. Two of her granddaughters live close by so she spends time with them teaching them how to cook or going on short road trips. Patti likes to stay on the move, just say “Go” and she's off.

When recalling her favorite day trip with the girls' to the Orr Family Farm she said they stayed four and a half hours and rode ponies, a carousel, a train and raced cars through a “huge maze.” Sounds like Patti might have enjoyed it just as much as the girls.



In her other spare time she stays close to home remodeling her house, one room at a time. Patti finds great joy in the simple things in life.



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Robin Henderson, DMD, MS

Our mission is to give the most accurate information available about Dental Health. Unfortunately, there is a lot of misinformation out there and we would like to set the record straight. We are Committed to improving the foundation of a patient's smile.

Name

Address

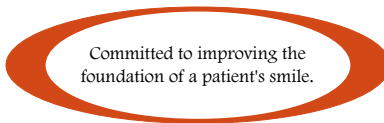
City, State Zip



Chris Poore, DDS, MS

We would like to answer your questions and perhaps share some of our observations we see on a daily basis through this newsletter and online. It doesn't have to be all business, hopefully we can have some fun too.

C h e c k u s o u t :
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Breakfast at Henderson's

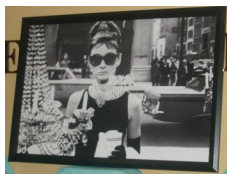
From the Editor...

Once again the Fall breakfast meeting at Remington Park did not disappoint. For those who attended the Spring Fling in May, they received a special invitation for a free CE themed *Breakfast at Henderson's*.

Eighty hygienists came and many dressed the part wearing tiaras and pearls. For the three best dressed, Sara Lyon, Deana Smithblond and Alisha Spiwak, they were surprised with little blue boxes, a genuine gift from Tiffany's!

Dr. Chris Poore started the meeting with an overview of grafting procedures. Only hygienists can eat breakfast and see surgery pictures and not bat an eyelash.

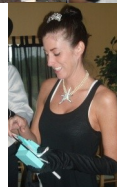
Our featured guest speaker, Pam Hughes, flew in from California, "the fire capitol of the nation" as



she named it, to a very cloudy and cold morning in Oklahoma.



She spoke on Women's Aging Complexities and the Oral Health Connection. She covered such topics as heart health, cancer, diabetes, the affects of aging and osteoporosis to name a few. Helpful information for us given most attendees were women but also helpful to share



with the females in our life. Thanks to Crest/Oral B's Jimmy Simms and Janelle Ware for helping us make the presentation possible. Kori Levine won the door prize donated by Crest/Oral B, a Smart Guide electric toothbrush.



Dr. Henderson is listening and is not done supporting his "favorite dental people." We are planning the Spring Fling on May 7, 2010 to be held at the Reed Center in Midwest City. More information will follow in the next newsletter or you can check us online at www.everythingdentalhygiene.com.