Problem Solvers 24 Medical Conditions in Dentistry Part 2 Synonyms: diseases, dental treatment problems, systemic disease in dentistry.

Many dental conditions can influence overall body or systemic health. It is important to go to the dentist often so that dental disease can be diagnosed and treated but as well to help prevent the spread of infection from the mouth to other places within the body. This article will identify more medical problems and how it can influence your dentistry.

I have gum disease, is it true that this can increase my risk of a heart attack?

Periodontal disease can affect your heart. There are currently several theories as to how gum disease can cause heart problems. The first is that the bacteria in our mouths can get into the blood from weakened oral health and a break down in the connective tissue in the mouth. These bacteria can get to the fatty deposits or plaques in the coronary blood vessels and lead to a build up or clot formation, which can obstruct blood flow. This coronary obstruction can stop nutrition and oxygen from getting to the heart and a heart attack may occur.

Another theory is that arteries can swell from the endotoxins found in plaque and this may lead to restriction of blood flow and heart attack or stroke. Whatever the cause it has been found that people with active periodontal disease have twice the likelihood of suffering a heart attack over people without gum disease.

The good news is that periodontal disease can be treated! Seeing your dentist for a diagnosis and treatment can help regain oral health.

Is there an association between gum disease and other systemic disease?

Yes the same theories that postulate that inflammation from periodontal disease can lead to heart problems also led to research that shows that inflammation from oral conditions can increase the likelihood of other inflammatory conditions like Alzheimer disease and diabetes. While there is a lot of research in this field, it is an easy condition to treat, which will improve overall body health.

## Osteoporosis:

The most common disease affecting bones is osteoporosis. This is a condition that affects forty percent of postmenopausal women in the United States. It is found twice as much in women as in men. It is estimated that 1.3 million fractures occur every year as a result of osteoporosis. The most important problem from this condition is when patients are treated with Bisphosphonate therapy.

Bisphosphonates are a group of drugs that are used to improve bone density in patients with osteoporosis. They work by suppressing and reducing bone resorption. Using this drug for long periods of time can cause problems from oral surgery procedures. These complications are called osteonecrosis which is a lesion that is associated with pain, tissue inflammation, and bone wasting and can be very difficult to treat.

I have been on Bisphosphonates and need a tooth pulled, what should I do?

Your dentist will discuss this with your physician and oral surgeon. The protocol for treatment may involve checking your CTx level which is an indication of bone turnover.

If your CTx (C-telopeptides) value is 300-600pg/ml it is considered normal and there is no risk for osteonecrosis according to the literature.

If it is 150-299pg/ml there is none to minimal risk.

If it is 101-149pg/ml it is a moderate risk level.

If your CTx value is less than 100 the risk of osteonecrosis is high.

This is a controversial measurement for risk factors and all treatment should be evaluated and discussed with your physician, oral surgeon and dentist so that proper informed consent can occur prior to undergoing a surgical procedure. Your dental/medical team may opt to remove the nerve in your tooth (see root canal procedure) and cut the tooth off at the gumline and leave the root alone to avoid the possibility of BRONI or bisphosphonate related osteonecrosis of the jaw.

I am on a blood thinner called Coumadin. Do I need to stop this prior to dental work?

Not without consulting your physician. The use of a blood thinner to prevent heart attacks or strokes usually will outweigh the need to stop the medication to decrease post operative bleeding. The most important thing the dentist will need to know is what your INR score (a measurement that helps determine how you clot) is to make sure your values are in the therapeutic range for surgery.

The INR is the international normalized value. A normal INR is 1.0. Most people that are being treated to thin their blood will have an INR of 2.0-3.0 and people with artificial valves may have a number that is higher. Your dentist will call your physician to discuss these numbers before any complex surgery is undertaken. It is important to let your dentist know if you are on a blood thinner or aspirin therapy.

I take supplements can they cause increased bleeding before dental extractions?

Yes a few of the supplements that have been found to increase bleeding are: Vitamin E, St. John's Wort, Ginseng, Ginger, Fish oil Feverfew, Dong Quai, Chamomile, Gingko and Garlic.

If I get nervous, can I have a few drinks before I go to the dentist? That's really a bad idea!

Alcohol can impair judgment. The dentist cannot truly educate you if you are under the influence so you are cheating yourself from learning all the facts about your care. In addition to this you may have increased bleeding and delayed healing.

## Smoking:

Can I smoke before or after dental work?

Smoking is a terrible addiction. It leads to worsening of periodontal disease and bad breath. I tell patients that smoking is like taking two steps forward and a giant step back toward the successful treatment of periodontal disease. The blood flow in the bones of the jaws decreases with smokers and that may lead to a decreased success rate for smokers that undertake implant therapy.

Smoking can stain white fillings and lead to the build up of plaque and calculus more readily on teeth. If that doesn't help convince you to seek out a smoking cessation program then you should know that smoking could lead to oral cancer and tumors of the mouth, throat, tongue, jaws and connective tissues.

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