



CAMBRA and CariFree Communication Tools

Over the years, our practices have found that it has been helpful to have some easy explanations and use analogies to introduce the CariFree System to their patients as a new treatment paradigm. We have compiled what we believe to be some of the most effective analogies with regards to risk assessment, treatment recommendations, the cost of the products, etc. Please feel free to use these as you see helpful in communicating with your patients to build value for this standard of care you are now providing.

Introducing the CariFree System

“We have a new screening test where I can take a sample of the plaque from a couple of your teeth, and we can then tell whether the predominant bacteria in your mouth are the acid-producing types that cause cavities. This allows us to assess your risk for getting cavities and make preventive recommendations.”

Caries Risk Assessment vs. Cardiovascular Disease Risk Assessment

A great analogy to use with patients with regard to caries risk assessment is to liken it to what their medical doctor has been doing for years in terms of assessing their risk for cardiovascular disease. While the CariFree System uses the Caries Risk Assessment Form and CariScreen Susceptibility Screening Meter, your medical doctor reviews your health history, takes your blood pressure and uses a prescription form. We all understand that if your blood pressure is high, it doesn't mean that you have ever had a heart attack or stroke, or that you ever will. It does, however, mean that you are at higher risk for cardiovascular disease and your doctor would be prudent to make some preventive recommendations in terms of diet, lifestyle, and perhaps medication, to lower your risk. This is precisely what we are doing in dentistry with the CAMBRA approach and the CariFree System. We can now evaluate risk factors for dental caries, and make preventive recommendations with the goal of lowering the incidence of cavities and creating more predictable results for the dentistry we do.

Nail-in-the-Tire Analogy Illustrating Cavity Detection vs. CAMBRA

Let's take a look at another analogy in terms of the old surgical management model compared to the new medical management model which differs expressly with regards to the idea of detection versus diagnosis. Previous to the CariFree system, all of our modalities used in the dental office have been for detection of cavities, or finding holes in teeth. Whether you are looking at an x-ray, doing a clinical examination with an explorer, or even using a Diagnodent, all of these modalities are for detecting holes in teeth, which would be like taking a look at your car and determining whether or not there is a nail in your tire.

Diagnosis, in terms of what we are looking to do with the CariFree System, is ideally one step back in the preventive chain. Diagnosis would be like taking a look in your driveway to see if there are any nails there. Furthermore, risk assessment would be to actually evaluate the quantity of nails in your driveway, so as to determine your risk of getting a nail in your tire.

Traditionally in dentistry, we have focused on improving methods and techniques for repairing damage. If it were my mouth, I would want to find a dentist who was not only great at repairing the damage, because there certainly is a need for that, but who would also reduce my risk of it happening again, by working to reduce my risk factors and treat my

caries infection. So, in the analogy, we have to not only patch the hole in the tire, but sweep the nails out of the driveway if we want to prevent repairing holes over and over again.

Understanding the Caries Balance

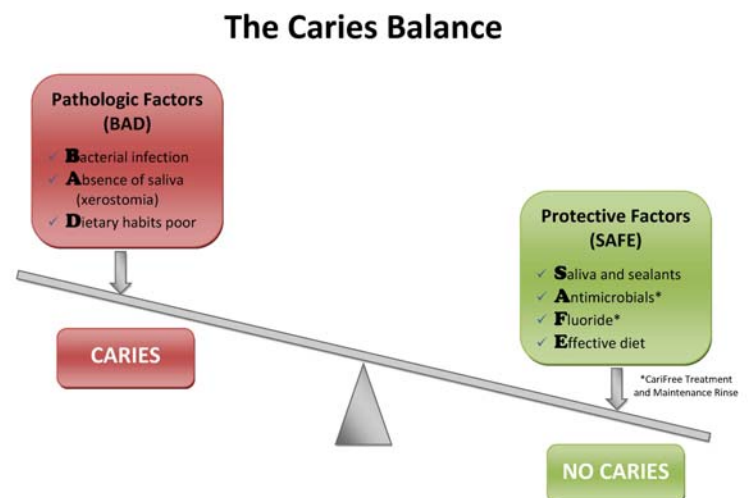
A good understanding of the Caries Balance will be very helpful, not only in talking to your patients, but in interpreting your results and treatment outcomes. As you begin to screen your patients, you will notice that some of your patients who appear to be low risk, based on their history of lack of decay, are actually at risk once you evaluate pathologic versus protective factors. But, whether a patient is experiencing decay is not a good indicator of whether they have the caries infection, but rather is an indicator of whether or not their pathologic factors are OUTWEIGHING their protective factors. A great example of this is the patient described here who is also a dental hygienist. She hadn't had a cavity in years, had great homecare, and would have appeared to be low risk. She got in a car accident, and had a muscular neck injury for which her doctor prescribed Flexeril, a muscle relaxant we sometimes even use in dentistry. Now, notice that one of the pathologic factors weighed in the Caries Balance is absence of saliva, or xerostomia. Visit our website at www.carifree.com to reference a list of over 3700 medications that are associated with xerostomia. It is actually a large percentage of our patient population that is on one of these medications ranging from anti-histamines, anti-depressants, blood pressure medications, etc. Flexeril is one of the xerostomia-producing medications. She had been on this medication for 4 months at which time she had her teeth cleaned and new radiographs taken. She had 4 new interproximal cavities that were all the way through the enamel. When she saw the radiographs she was in total disbelief. She hadn't had a cavity in years, she knew how to take care of her teeth, and to her knowledge, she hadn't changed anything! She is a perfect example of someone who had an undiagnosed and untreated caries infection and when one risk factor changed, her caries balance shifted and now her pathologic factors outweighed her protective factors and she expressed signs, ie. cavities, of her caries infection.

Truly understanding the idea of this Caries Balance will greatly help you in making an accurate diagnosis and recommending appropriate therapies to reduce your patients' risk of getting cavities.

Weeds-in-the-Lawn as Compared to the Caries Infection

We can compare CAMBRA and what is occurring in a cariogenic biofilm to weeds developing in what was initially a green healthy lawn. A healthy lawn is made up of a good mixture of desirable grasses, which equates to a healthy biofilm. If weeds, which equate to bad bacteria, are allowed to establish themselves and are not controlled, they will eventually predominate and lead to an unattractive lawn, or an unhealthy or cariogenic biofilm. Also, if the soil is not fertilized or the pH in the biofilm is allowed to drop, mosses and acid-loving weeds will establish. If those weeds are allowed to establish, imagine the effort now required to re-establish a healthy weed-free lawn.

Mowing the lawn, which equates to brushing and flossing, does not get rid of the weeds. To control the weeds we need to use a weed spray which compares to the anti-microbial CariFree Treatment Rinse. However, only simply spraying the



weeds will not guarantee a conversion of that lawn, similar to a biofilm. More than one cycle of treatment may be necessary.

Fertilizer also has to be used to promote the growth of new grass (good bacteria) and decrease the acidity of the soil. Within this analogy the fertilizer represents this new approach to help change a pathological biofilm to a healthy one by changing the oral environment to one that promotes the survival of good bacteria. To regain control of the lawn, several cycles of treatment may be needed as we have discussed. Once healthy desirable grasses or a healthy biofilm have been re-established, the lawn will need continual, constant maintenance, like fertilizer, (CariFree Maintenance Rinse and Boost) to prevent the weeds (cariogenic bacteria) from regaining control.

Ways to Gain Compliance with the Treatment Rinse

It can be helpful to tell patients that the Treatment Rinse is going to treat the infection they have in their mouth that causes cavities. So, not unlike antibiotics prescribed for any other infection, there are some downsides. When your medical doctor prescribes antibiotics for a sinus infection, you still take them even though you know they might give you diarrhea or an upset stomach. So, yes, the Rinse doesn't taste great, but it is a medication, it's necessary, and it's only temporary. You can instruct your patients that they can rinse with water or spray Boost immediately after the use of the Treatment Rinse, as it is working on contact. These will likely be helpful recommendations as not everyone enjoys the taste of the Treatment Rinse. In fact, this is one of the most important things to prepare your patients for. The Treatment Rinse doesn't taste good and it produces a very strong sensation in the mouth, not unlike the burning one might experience with other anti-microbial mouth rinses. It's like putting five Altoids in your mouth at one time and jumping in a pool! If you tell your patients this rinse is going to be terrible, then most of them end up reporting that "it wasn't THAT bad." If you don't prepare them for this rinse, you are really going to struggle with getting compliance.

Cost of Prevention vs. Cost of Treatment

The cost of prevention is low in relation to the cost of dental caries and the resulting restorations that may be needed. A good rule of thumb if you have difficulty with making clinical judgments as to risk and treatment is. . . when in doubt, TREAT. If a patient were to be screened, diagnosed as at risk, put on the 3 month treatment cycle, re-screened after completion and moved to maintenance products, these would be their estimated costs:

CariScreen	\$10-\$50	vs.	Single Surface Composite Filling	\$170
Fluoride Varnish	\$30		Two Surface Composite Filling	\$210
Treatment Kit	\$70-\$249		Posterior Crown	\$1000
Reassessment CariScreen	\$10-\$50		Posterior Root Canal Therapy	\$850
Prevention Kit	\$45-\$150		Posterior Surgical Extraction	\$350
			Implant with Crown Restoration	\$2500
Total cost of medical management of dental caries	\$165-\$529 + any additional months required		Total cost of progressing treatment due to dental caries without intervention	\$5081

CariFree Rinses vs. Surgical Intervention

If you are having problems with compliance or educating the patient on this new model of prevention rather than the surgical or "drill and fill" model, it can help to compare the pros and cons of using these rinses to having anesthesia and a drill used. For at risk patients, be able to explain to them that they can take the next 6 months to use a series of Rinses and have re-assessment appointments, OR they can have an appointment in 6 months where you will take out the needles and the drill, because that is the most probable future outcome if their infection continues to go untreated.

Fixing the Problems Before Rebuilding

If you own a house and it has a termite problem, you aren't going to call the carpenter and invest money repairing the house until you call the exterminator to fix the pest problem. The same idea can be applied to your oral health; it doesn't make sense to invest money repairing the damage of the bacterial caries infection, by placing fillings and crowns, before you treat the infection and get rid of the cavity-causing bacteria.

Environmental Factors Affecting the Population of Bacteria

If you have a roof that is covered with moss, the environmental factors surrounding that roof, which would be sunlight, rain, and temperature, are all adequate to support the growth of moss. As opposed to having a roof that doesn't have any moss on it, those environmental factors wouldn't align to support that growth. This same idea can be applied to whether the oral environment supports the growth of a healthy versus a cariogenic biofilm. Obviously, in the mouth these environmental factors are different and they include things like how much saliva is present, how frequently the pH is being lowered, how often cleaning is taking place, and are fluoride or other antimicrobials being used.

Case Acceptance

One good way to gain case acceptance is to, before you prescribe the products, ask your patient two simple questions:

- 1) Is it okay with you to continue getting cavities and need more fillings and crowns at each appointment?
- 2) Do you want to keep your teeth forever?

If the answer is no to the first and yes to the second question, then there should be no question as to whether they will go through the CariFree Treatment Program and purchase the recommended products. They have just asked you for help and you have the solution. You have now just greatly increased your chances for case acceptance by giving your patients what they *want* vs. telling them what they *need*.