

**When conventional dentistry is necessary**  
**John Sorrentino, DDS**

(Note from Will and Susan Revak of OraWellness: We respect Dr Sorrentino's appreciation of the role of diet and nutrition in creating or destroying oral health. Here Dr Sorrentino shares his perspective on the role of conventional dentistry, particularly of the root canal procedure. We want to state up front that we choose to view the root canal procedure from a more distant, whole body view and see no place where root canals are the optimal choice in dentistry. We offer this report from Dr Sorrentino to you so you know that there is no 'one right way'. We all must find our own path to greater oral health.)

In some respects the Internet is the wild west of information. There is no guarantee that the subject matter being discussed is scientific fact or opinion. This is certainly true of the Primal and Paleo blogs. Many come to them and read because they have found conventional medicine has failed them. Met with success, they drink in everything but this does not mean everything stated is true. An example of this is the current thinking on flu vaccines. Most in the Paleo/Primal community, myself included, shun these. Does this mean all vaccines are all bad? I don't think so. Vaccines eradicated small pox and vastly lowered morbidity and mortality rates in the twentieth century. The problem now is that there now are too many and for less serious issues than death or lifetime disfigurement. While I believe a holistic approach to dentistry is the ideal approach for prevention, it sometimes fails to provide adequate treatment to an already existing problem. Look at issues with a critical eye and be open to the fact that sometimes a conventional approach may be the correct choice.

In the Palo/Primal community this most often comes up in regards to root canals. All teeth are hollow inside. Inside, completely surrounded by hard tissue is the nerve chamber. Unlike the nerves of your hand that can transmit sensory information such as touch, hot, cold, and pressure the only signal that the nerves inside your teeth can sense is pain. So if you hit the nerve with hot, cold, pressure, or any other stimuli, the signal that your central nervous system receives is pain. Since it is surrounded by hard tissue, much like the brain, an insult that causes inflammation of this tissue needs to be relieved or will die and abscess.

The nerve chamber is feed, depending on the tooth, by nerves and capillaries running into it from one to five canals. The pressure inside the capillaries forces fluid out and since teeth are porous (more like marble than granite) it makes a positive pressure flow (1) from inside the tooth to out. This mechanism is under hormonal control at the level of the parotid gland and aids in keeping the tooth surface clean of plaque. Sugar, particularly sucrose, can interfere with this signaling and shut this system down. (2) Since plaque can now readily form the decay process can start.

This is where you need to step in if you wish to reverse the decay. Most conventional dentists will recommend fluoride treatments, however everything Dr. Weston Price talks about in terms of reversing decay is true at this level. We even have an instrument that can measure the amount of mineralization. It is called a DiagonoDent. (3) If one of my patients wants to treat decay by attempted remineralization, we follow it so that we know if it is working or not. Since most Americans are not Paleo/Primal or think that one little piece of cake won't make much difference this often fails. If the decay progresses to the nerve, the nerve becomes inflamed and a decision has to be made. That is the true reason dentists want to jump in at this point and restore the tooth. It is to save the patient from his or her own bad habits.

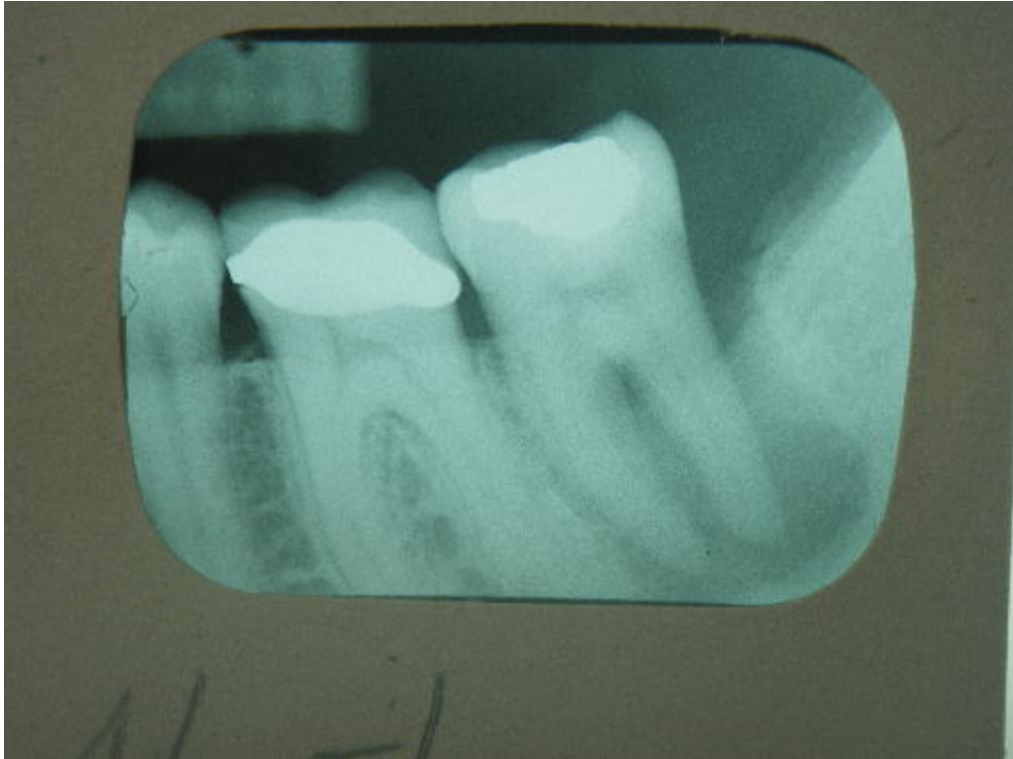
This is not the only mechanism of inflammatory stress on a nerve. In school we played basketball and one of the med students was nicknamed "Elbows Epstein" and he was responsible for more than one root canal central incisor. You are playing and bang! Inflammation, secondary to trauma occurs. If it happens to you or a loved one do you really want to extract a front tooth on a 21 year old when there are other options? Techniques have improved immeasurably since Dr. Price's day. Read the Paleo/Primal blogs and some will tell you no root canals. Others such as implants, bridges, and partial dentures can cost many times more. Dentistry has many choices but now it is you in the hot seat. Extractions are irreversible and the most disfiguring things that a dentist can do to you. It can cause your teeth to shift, open new surfaces to decay or even present an esthetic challenge. What do you want to do?

My advice is to get the root canal if the following criteria are met:

- There is an opposing tooth.
- There is adequate bone to support the tooth in the gum.
- There is enough tooth structure left to restore the tooth to function.

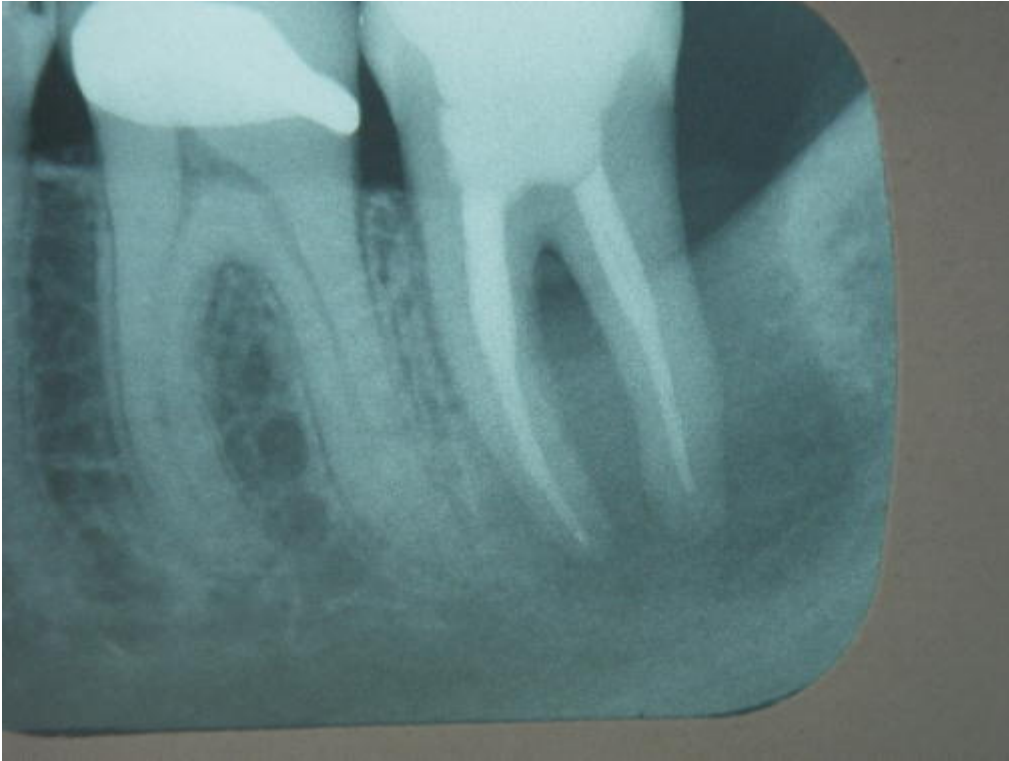
Dr. Price was operation under something called the "Focal Infection Theory." (4) This has been discredited. (5)(6) The current scientific thinking is that if the canal space can be cleaned and completely filled that, with few exceptions, the body will clear the infection.

Here is a typical case, note that there is no decay present:



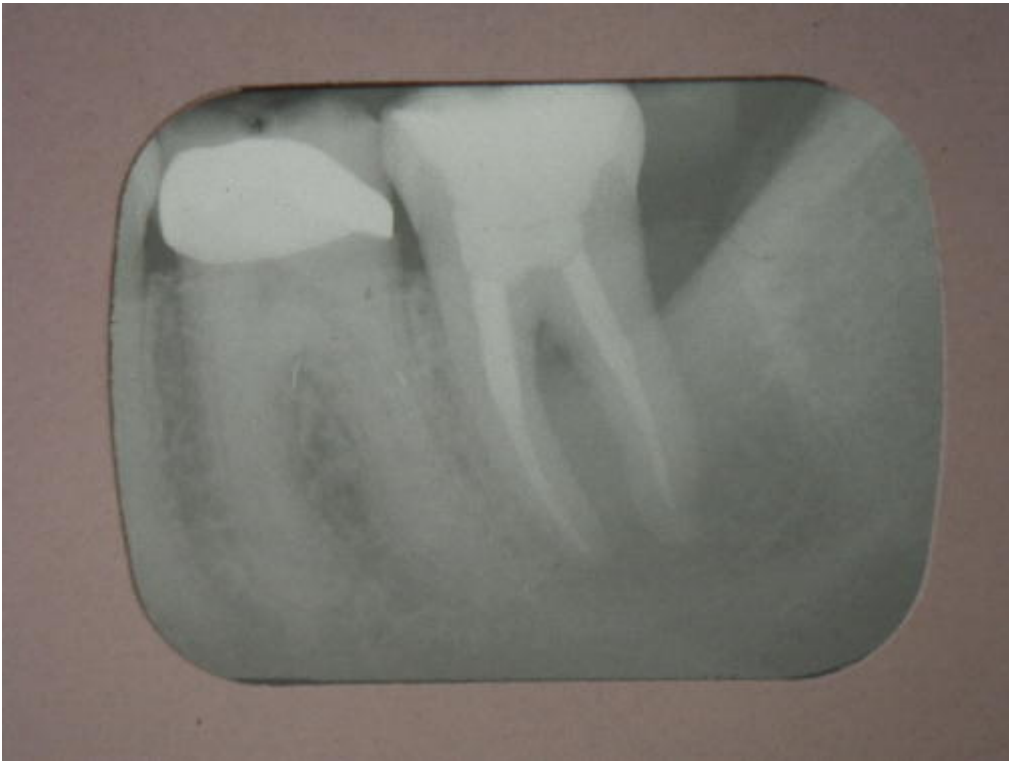
Notice the black “halo” around the back root of the last tooth? This is an abscess. It is a bacterial infection. It causes your immune system to mount a response, causes an inflammatory response in your body. If you think of your immune system as a fire department this is a call that they don’t have to make. In other words it is a stress on your system. In this case there was a 10-millimeter pocket on this tooth. Remember normal is 0-3 millimeters.

Here is the completed root canal:



Notice the filling material going to the tip of each root. There is also a build up to hermetically seal the biting surface of the tooth. The goals of modern root canal therapy are to thoroughly clean and seal the tooth. Done properly and your immune system can help your body achieve sterility of the tooth. It is true that the centrifugal fluid flow cannot now occur but properly isolated from the immune system a success rate of over 95% is possible.(6) This root canal was done in November 2011.

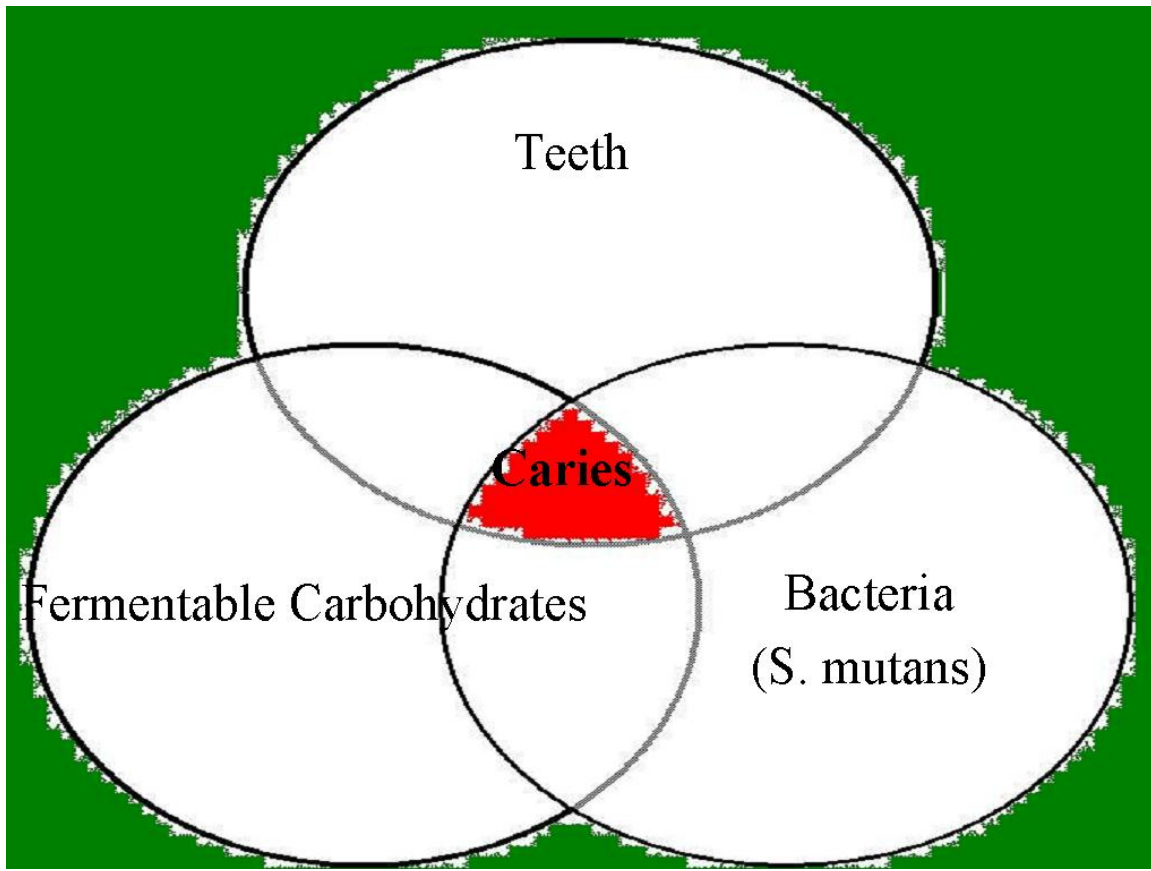
Here is how it looks in April 2012:



The bone has filled in and the halo is disappearing. The 10-millimeter pocket is now 2 millimeters. The best way to avoid having to make the choice of root canal or extraction is prevention. I always recommend a sugar free and low carbohydrate approach to eating but when prevention fails or trauma causes a tooth to abscess it is a choice you may have to make. With proper care this tooth can now be maintained for a lifetime.

It is a fact that most of the American population are sugar burners, or medically speaking, glucoadapted. If you are Prima/Paleo fat burner, you are what is called ketoadapted. This means that there is a lot less glycation going on in your body and your inflammatory status as measured by your hemoglobin A1C will be lower. This alone would suggest that a root canal would be more likely to success in a ketoadapted individual.

Inflammatory status works hand-in-hand with your nutritional status and the choices that you make. If you ever read my blog (8) you will see one of my first posts is titled “How to Eliminate Tooth Decay.” I talk about the three determinates of tooth decay and you will see this diagram there:



Caries is the scientific name for tooth decay. Decay is a three-legged stool. Teeth, fermentable carbohydrates, and specific bacteria, that's all it takes. Since the work of breaking starches into sugars starts in your mouth due to the effects of salivary amylase it is not just sugars but any starch as well. We all know that carbohydrates are not an obligate nutrient and merely by removing them from the diet we should be able to remove that leg and bring the stool of decay crashing down.

Until now modern dentistry has been concentrating on the other two legs. Brushing and improved oral hygiene keeps the bacterial counts low. Fluoride, despite its faults, does make teeth more resistant to decay. Now it is time to eliminate decay the way nature intended it to be done, by reducing sugar and starch consumption to physiologic levels. I call this carbohydrate restriction as primary prevention. This is what I teach and if you practice it your dental problems will be few if any at all.

#### References

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