



The Advantages of Metal-Free Dentistry

The perfect restoration for teeth would be mother natures own enamel. That is what we are trying to get close to. Metal fillings, metal inlays and metal crowns have done well in the past, but they have disadvantages, and we are always looking for something better. The new porcelains and porcelain filled resins are a big step closer to Mother natures enamel.

The worst of the metal fillings by far are the **mercury/silver fillings**. They are over half mercury, which remains in its liquid state in the filling and evaporates out over the years exposing the patient to a chronic daily dose of poisonous mercury vapor. Mercury is the most toxic of non-radioactive metals. As if that were not enough, the mercury fillings corrode. Corrosion is expansive which cracks and splits teeth. Most crowns that people have on their teeth were required because of damage done to the teeth by a previous mercury filling.

There was a time when mercury fillings were the most useful and affordable, but not today. Today there are metal-free filling materials called **composites**. These are porcelain filled resins, and they do not corrode. That means they do not cause electric currents in the mouth by electrolytic corrosion. They don't expand and crack teeth. They don't leak, and they bond to the tooth and seal the tooth. They are not black like a corroded mercury filling. Composites remain white, tooth colored and invisible in the tooth. Composites are more insulative, and expand and contract with the tooth during temperature changes. And did I say they just look good?

Many people are allergic to metals used in **dental alloys**. Alloys are the mixture of metals that are cast into inlays and crowns. It is estimated that over 10% of the population is allergic to nickel which is common in dental alloys. This can make the gums around the tooth red and irritated. Porcelains are often baked to metal crowns for improved esthetics, yet will show a dark metal at the gum line. On the other hand, pure porcelains and filled resins are very biocompatible, and virtually invisible.

Another metal-free consideration is that cements that are useful in cementing metal crowns and inlays are soluble in saliva and can wash out from under crowns and inlays, there by leaving room for decay. Resins that bond metal-free restorations to the teeth are insoluble.

The bottom line is that nothing is perfect, but things do keep getting better. Today we have dentistry that is more bio-compatible, natural looking, and beautiful.