

HAWAII OR A CAP? HMMMM!

Dear Dr. McCrummen:

I just broke a back tooth that has a big old silver filling. Surprisingly, it doesn't hurt. I am told it needs a cap but I don't want to pay so much, especially near Christmas. Why the high cost? I was planning a week in Hawaii! Can't it just be filled? Why didn't my last x-rays show it was cracked? G.J.

Our natural molars can normally withstand biting pressures up to 40,000 pounds per square inch. After filling only a third the width of the tooth, a molar easily loses over 1/2 of its chewing strength. A "big old filling" often leads to a *crown* (cap) in the future. Refilling it, with an even larger filling, can mean more unwelcomed expenses and frustrations later when it breaks, or the tooth breaks again.

The old metal filling simply sat in the hole (cavity) that was created after removing the decay. It did not stick to the tooth or provide support for the chewing cusps. The sides of the tooth flex during chewing, a crack forms, and the tooth eventually breaks. Also, metal fillings can swell with heat (hot drinks), shrink with cold (ice cream), and can change shape and crack from chewing forces, which can all lead to a cracked tooth.

Sharp, sudden pain upon biting can be an early symptom of a crack, but pain is not always a symptom, as in your case. A crack is often under a filling where dentists cannot see. Cracks most often occur from front to back. Since x-rays go through from cheek side to tongue side they usually cannot show a crack. As soon as a crack is seen or felt a *crown* should be considered.

Your tooth was originally stressed due to a cavity, and it was stressed by the surgical procedure to remove the decay and fill the cavity. Your tooth was weak, has now cracked and broken, and it likely has more micro-fractures. It will be stressed more by filling it again, be more weak with a larger filling, and it will likely break again. All of these stresses can kill the tooth and lead to the additional need of root canal therapy or loss of a major chewing tooth. A crown can help you.

A *crown* is strong and solid, and can last over thirty years if taken care of properly. Some call it a "cap", like you did, because it covers (caps) the tooth. Its purpose is to hold all of the weak parts together, protect the tooth, and seal out oral bacteria so you can eat normal foods in comfort.

A *crown's* expense is related to the precise surgical procedure, extra training, and expertise needed to prepare the tooth properly, the well-trained staff, high quality materials and special equipment needed, time reserved for two appointments, a laboratory fee to make it with gold metal and/or porcelain, and many other factors. A *crown* is a prosthesis, custom made for each tooth, to fit right, function well, and look nice. The better, more precise the lab, the more expense. A cheap crown usually leads to more time and money spent to replace it when it fails.

A crown can be a long-lasting investment in your comfort and health. The benefits can last much longer than your week in Hawaii, and allow you to eat comfortably when you are there and many years after. All susceptible teeth should be protected from cavities with sealants so fillings and crowns will be less likely needed in the future. Ask your dentist about this easy, inexpensive preventative treatment.

Without strong teeth you may be stuck with eating Poi.