

SHINY MERCURY DIMES

Dear Dr. McCrummen: When I was young my dentist would put mercury on a dime as a reward for being a good little patient. Is that still being done? Was it dangerous to play with? Is it a safety problem for dental workers to use it? Are silver fillings dangerous? Please write about mercury. Are there better fillings? C.R.

Those that used a mercury-filled thermometer as kids likely remember their parents' constant warnings about it being poisonous if they bit down and broke it. A silver filling is not like having liquid mercury in the mouth. For many years, silver powder was mixed with liquid mercury which created an "amalgam". Sometimes the metal mixture would be too soft to use as a tooth filling so the dentist or assistant would squeeze the excess mercury out with a "squeeze cloth". This would make it firm enough to place in the tooth, and it would squeak when the dentist packed it into the hole. Today, many dentists that still use silver fillings have pre-made capsules with the correct mixture.

Silver fillings are approximately half silver and half mercury. When mixed together a soft mass of metal is formed that soon hardens. At that point the mercury is bound up with the silver and is rendered harmless. Patients are asked not to chew on a new silver filling for a day to reduce the risk of breaking before it fully hardens. These have been used for many years and are still being used worldwide, though there are better materials and choices now. The use of silver fillings is diminishing and is most common in third world countries, in poor communities, and for free or discounted dentistry. Some dental insurance plans only pay for silver fillings to keep their payments (losses) down, and will not cover the better materials. The better filling materials cost the dentist much more to provide, are more technique sensitive, require different instruments, and take more time.

Despite the bad press, and concern with silver-mercury fillings in our mouths, there have been many official studies that show they are not harmful. Negativity comes from poorly done studies and assumptions. Mercury is used safely in many forms under different names. The American Dental Association, World Health Organization, MS Society, and many other organizations accept the continued use of amalgams and do not recommend the removal of silver fillings for health improvement or prevention of disease or conditions.

Mercury levels found in the body are mainly from the air, the food we eat, and especially some specific types of fish. Even our Flathead Lake "lake trout" have high levels of mercury. This is from naturally occurring mercury in the soil, water, and run-off. Most people, especially pregnant women, should avoid or limit the intake of certain fish known to carry high levels. One study showed that there was more mercury in one tuna-fish sandwich than 5 new fillings. Some tuna is OK. Studies have shown no higher mercury levels in people with many silver fillings, compared to people with no silver fillings.

There is some concern with dental office personnel exposure to mercury and its vapors each day, not the patients that are seen occasionally. Mercury mixed with bare hands was not safe, and spillage into the carpets occurred in the days of old that led to vapors which office personnel would breathe daily. Placing mercury on dimes was a popular novelty years ago. The small exposure to the child was likely harmless, but we know more about elemental mercury now and would not do that. People used to drink liquid mercury to cure disease up to about 100 years ago, and we know that was harmful. "Quicksilver" was worshiped by royalty for many centuries, and large pools of it have been found in Chinese tombs. The term "Mad Hatter" came from the people who went crazy from dipping hats in vats of mercury to shape them.

If you have the choice I recommend the more advanced fillings, but not replacing old ones for fear of mercury. Many dentists no longer have silver filling materials in their offices.