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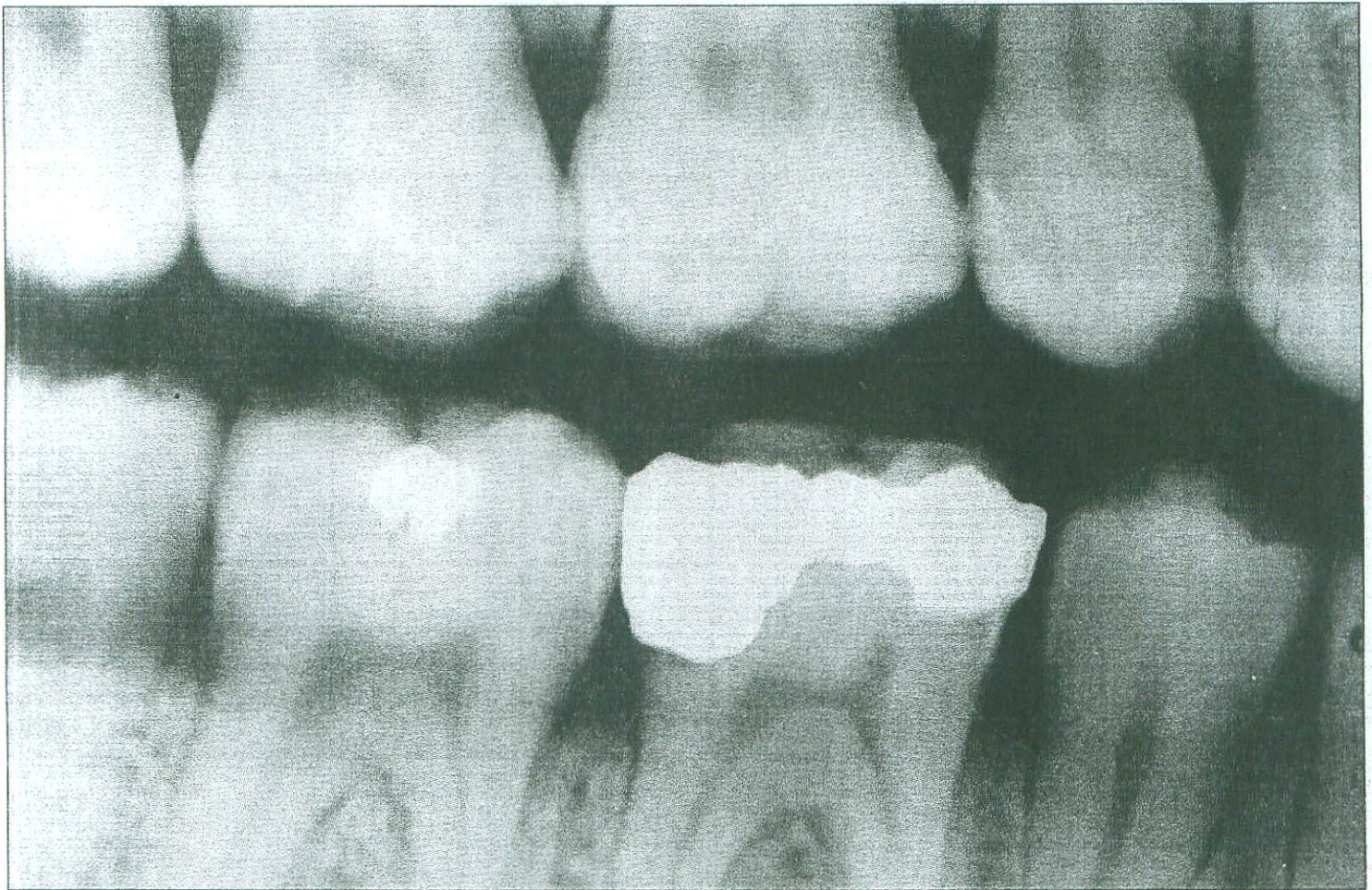
Elsewhere

SUNDAY, DECEMBER 11, 2005



CHICAGO

Are your teeth toxic?



Getty Images/Kourosh Behbahani

Those bright spots on this dental X-ray are fillings. Some people are having old fillings removed and replaced with mercury-free options.

The mercury in 'silver' fillings would be hazardous waste in a river—yet it's sitting in your mouth

By Julie Deardorff | Tribune health and fitness reporter

A professional musician from Arlington Heights suffers from mysterious rashes and lip blisters. A dental hygienist in Hoffman Estates battles migraines. And a social worker in Prospect Heights is diagnosed with multiple sclerosis.

All three tried treating their ailments using a controversial method: by having dentists remove and replace their so-called "silver" amalgam tooth fillings, which contain about 50 percent mercury. And all three

swear they experienced life-changing health improvements.

Their personal testimonies are part of what makes dental amalgam, the silver lining for hundreds of millions of American mouths, one of the most divisive issues in dentistry. Though it's one of the oldest materials in oral health care—used by people of all ages for the last 150 years—anti-mercury groups are pushing the startling message that mercury residing in the mouth can leach into the body and cause illness.

"I thought my career was over," said

Arlington Heights' Matt Comerford, now a trumpet player with the Lyric Opera who was suffering from painful sores along his gums. He began investigating the metals in his mouth and eventually had nine silver fillings replaced with a mercury-free alternative material.

"Within a week [of having the amalgams replaced], everything healed," Comerford said.

Amalgam, most dentists admit, is crude

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Mercury-free options for teeth

By Julie Deardorff

Tribune health and fitness writer

A major debate surrounding silver (mercury) amalgam fillings is whether they cause the teeth to crack, creating the need for root canals and other major surgery. Lincoln Park dentist Gerilyn Alfe believes they do, just one reason she has embraced mercury-free alternatives to amalgams for the last decade.

"I don't think ripping metal fillings out of everyone's mouth is a good practice," said Alfe of Chicago Smile Spa. "But if they're starting to deteriorate or fracture, I will replace them with bonded, tooth-colored aesthetic fillings."

The use of silver fillings has dropped nearly 40 percent since 1979, thanks in part to better oral care that decreased the overall frequency and size of cavities. Better diagnostics allow dentists to find cavities earlier, when they are much smaller and easier to restore with alternative materials, including porcelain inlays or onlays, and tooth-colored fillings, or composites.

Porcelain inlays or onlays are ceramic or glasslike fill-

ings and crowns. They are popular because "they are bonded to the tooth structure, extremely strong and many people can expect 15 to 20 years service with it," said Peter Dawson Boulden of Aesthetic Dentistry of Atlanta.

The American Dental Association, which says it doesn't promote the use of one restorative material over another, says porcelain is highly resistant to wear but can rapidly wear opposing teeth if its surface becomes rough. They may fracture under "heavy biting loads." And it's important to find a dentist with good technique because the strength depends greatly on the quality of the bond to the underlying tooth structure.

Tooth-colored fillings, another common option, are made from durable plastics called composite resins. First introduced in the 1960s, they've undergone continual improvements in durability, color stability and esthetics. Tooth-colored fillings are actually bonded to teeth; silver/amalgam fillings are not bonded to teeth.

"The technique behind bonding actually strengthens

a tooth because the bonding locks in so tightly to the inside walls of the tooth through tiny micro pores," said Chris Kammer of the Center for Cosmetic Dentistry in Middleton, Wis., a mercury-free practice.

But composites aren't for every tooth. They work best in small restorations and low-stress areas and might not be effective with a large cavity or for the chewing surface of a back tooth. They also cost more because they take longer to place.

Unightly amalgams are still considered the most durable and the best choice for large restorations. But amalgam is metal and X-rays cannot penetrate through it, said Dr. Parviz Azar-Mehr, a Prosthodontist and Professor of Clinical Dentistry at the University of Southern California. That means X-rays might not pick up decay under the amalgam filling, and "it can lead to even worse problems than the original cavity the amalgam was meant to treat," said Azar-Mehr, who recommends that silver fillings more than 15 years old be replaced with crowns or tooth-colored fillings.