



*J. Peter St. Clair, DMD*

## Brighter Smiles

### DENTAL AMALGAM UPDATE

I have written on this subject before but I wanted to update you on the latest research published in the most recent *Journal of the American Dental Association* (JADA).

Dental amalgam, or silver filling material, composed of 50 percent mercury (yes, the same material in the old thermometers you stuck in your mouth which have not been used in years) has been around for over 150 years. The February issue of JADA's cover story entitled, "Neurological outcomes in children with and without amalgam-related mercury exposure", is a seven year study concerning the controversy of whether or not amalgam has detrimental effects on brain development in children.

This cracks me up. In the abstract it says, "Although large-scale, randomized trials involving children have been completed and their results demonstrate an absence of neurobehavioral effects from clinical

exposure to mercury amalgam, neurological findings from such studies have not been reported." What does this mean? Unless I'm reading this wrong, it means that the authors of this study concluded that they found no behavioral differences over seven years in children but because the "neurological findings have not been reported" they can't report as to whether or not there are actual changes that occur in the brain. Is seven years even long enough to evaluate this?

In the same article there is a report that Norway and possibly Sweden have joined a list of other countries which have banned the use of dental amalgam. According to the report, the main reason for the ban is because of environmental concerns. There was no mention of neurological concerns.

Dental amalgam has been around for a long time. From a dental restorative perspective it is a good long-lasting material. It is inexpensive, it is easy to use, and it is ugly. Because it is not around that long in children's teeth you do not see the effects that it has on teeth as the material breaks down over time. As the material breaks down it corrodes, expands and contracts, and causes cracks in teeth, which often causes the teeth to break and/or become symptomatic to temperature or biting pressure.

I usually base my decisions in clinical practice on research and scientific data reported in peer-reviewed literature, but this continues to be an exception. If I were to base my decision on using dental amalgam solely on research, I guess I would probably still be using it. Published studies continue to report no ill-effects on the use of dental amalgam but they also

continue to hint on more research needed. As countries add to the list of banning the material, dental amalgam is still widely used in this country.

I am not and cannot say that it is "bad" to use this material in dentistry. What I can say though is that I wouldn't put it in my own kid's mouths.

Dr. St. Clair maintains a private dental practice in Rowley dedicated to health-centered family dentistry. If there are certain topics you would like to see written about or questions you have please email them to him at [jpstclair@dentalhealthforlife.com](mailto:jpstclair@dentalhealthforlife.com). You can view all previously written columns at [www.dentalhealthforlife.com](http://www.dentalhealthforlife.com).

