

Is Mercury Toxicity an Autoimmune Disorder?

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Autoimmune Disorders

The diagnostic arena now occupied by autoimmune disorders provides us with terms that could best be described as "alphabet soup". Such problems include RA (rheumatoid arthritis), HT (Hashimoto's thyroiditis), HAD (human adjuvant disease), ALS (amyotrophic lateral sclerosis or more commonly, Lou Gehrig's disease) and MCTD (mixed connective tissue disease).

Should we now add MT (mercury toxicity)?

These conditions plus others, such as Crohn's disease, Raynaud's disease, systemic candidiasis, diabetes, and even Alzheimer's disease are now believed by many to be autoimmune disorders. When patients are afflicted with such disorders, they come into their physician's office with all, or some, of these symptoms:

- Generalized morning stiffness
- Skin rashes
- Dry eyes and mouth
- Joint pain
- Immune dysfunction
- Axillary lymph node swelling
- Subcutaneous nodules (skin bumps)
- Neurological symptoms (ringing in ears, burning and numbness sensations)
- Chronic fatigue
- Depression and/or environmental sensitivities

The clinical assessment usually shows a connective tissue disorder, the result of the immune system attacking the tissues of the body. The immune elements of T-lymphocytes, B-cells and "PAC-man" Cells, instead of attacking bacterial, viral and yeast fungal invaders, attack the cells of the thyroid (HT), joint surfaces (RA), peripheral vascular bed (Raynaud's) or the skin cells with patches across the nose and cheeks (lupus erythematosus).

There are no simple answers for this perplexing group of problems, yet insights are beginning to arrive on the clinical horizon that may indicate why T-cell mediated lesions are developed and a screening questionnaire has been developed to help assess this problem (see Mercury/Toxic Metal Sensitivity Questionnaire). Patients who score more than five "yeses" should be referred to a dentist familiar with "silver" amalgam removal.

A Mercury Filling By Any Other Name

Any filling in the mouth that looked silver when it was new and is gray or black now is probably 50% mercury, the rest being copper, silver, tin, and zinc. There are numerous amalgam mixes on the market. They have names like Dispersalloy, Spheralloy, Sybralloy, and Tytin. The mercury content ranges from 43 to 54%. Although these fillings are commonly called silver fillings because they look silver for the first few days of the eight to twelve years they survive in the average human head, mercury fillings would be a more accurate label (And speaking of accurate labels, the origins of the word mercury are both interesting and provocative. Mercury was the God of Commerce in the Roman Empire and meant fabrication, trickery, thieving and slight-of-hand.) In this article the more formal term "amalgam" is used. The name "amalgam" reflects the ability of mercury to bind or amalgamate powdered silver and other metals into a hard filling.

Studies About Mercury Pathologies from Around the World

Evidence that these fillings give systemic pathology as well as periodontal disease exists. In one study it was observed that when 50 subjects without amalgams were compared to 51 subjects with amalgams, there was greater incidence of problems in the latter group. They experienced greater incidence of chest pains, tachycardia, anemia, fatigue and tendency to tire easily. They also had significantly higher blood pressure, lower heart rate and lower hemoglobin levels.

A study in Canada has shown that pregnant sheep with new silver amalgams have elevated levels of mercury in their fetuses within two weeks of placement of the fillings. Further studies on monkeys showed the same findings. These studies were done by Vimy, Takahasi and Lorscheider at the University of Calgary, Faculty of Medicine.

In addition to the reports from the United States, Canada and Japan, European researchers have observed many adverse reports concerning amalgams. On February 18, 1994, mercury fillings were banned in Sweden for children and youth 19 years of age because evidence showed them to be a trigger of autoimmune disorder.

Although mercury fillings have been widely used in the decades since, research demonstrating that such fillings are safe has yet to be done. Research that has been done and reported in scientific literature demonstrates that:

1. Mercury escapes from fillings in the form of vapor created by chewing. It then enters the bloodstream and is delivered to all parts of the body, including the brain. (A recent autopsy of an 82-year old woman from St. Paul with confirmed Alzheimer's disease had studies done by the Mayo Heavy Metals Lab. Brain tissue examination showed 5.3 UGIG mercury (53 times the normal levels). The pathologist reported "neurofibrillary tangle" in the brain sections that are common in such patients. She had multiple amalgams.)

2. People with mercury fillings have higher levels of mercury in their urine, blood and brain than people without fillings.

The European community had significant developments in the availability and use of mercury amalgam fillings when:

- Degussa AG, the largest producer of dental amalgams in Germany announced it would no longer provide mercury amalgams because of pending and future lawsuits. This was based on a German Federal Court ruling that dentists who use such amalgams face legal liability.
- A series of studies by Dr. Catherine Kousmine of France, who reported that illnesses like MS and chronic polyarthritis, both autoimmune diseases, are triggered by silver amalgams. This is outlined in her book, *La Sclerose et les Plaques Est Guérissable* (Multiple Sclerosis is Curable).
- A study of MS from Great Britain reports that the highest incidence of MS is found in Northern Ireland and the Scottish Islands of Orkney and Shetland. They also have the highest incidence of dental cavities and dental amalgam fillings. This provides more suspicion that mercury is a possible link to autoimmune dysfunction.

History of the Debate about Mercury

French dentists were the first to mix mercury with various other metals and plug the mixture into cavities in teeth. The first mixtures, developed in the early 1800's, had relatively little mercury in them and had to be heated to get the metals to bind. In 1819, a man named Bell in England developed

an amalgam mix with much more mercury in it that bound the metals at room temperature. Taveau in France developed a similar mixture in 1826.

When amalgams were introduced to the US in 1833 by two French entrepreneurs, the Crawcour brothers, amalgam use was denounced by a substantial number of American dentists. So strong was the opposition to amalgams that the American Society of Dental Surgeons, formed in 1840, required its members to sign pledges promising not to use them. It is an intriguing historical note that the common term for mercury in Germany in those years was "quick silver". The German pronunciation for "quick" is "quack". Thus, those dentists who used mercury were called "quacks". This term has now come to mean anyone who is an "ignorant pretender to medical skill" (The Random House dictionary of The English Language).

Guilty of "Malpractice for Using Amalgam"

In 1848, the Society found 11 of its New York members guilty of "malpractice for using amalgam" and suspended them. Internal debate over this issue led to the demise of the Society in 1856. Its successor organization, the American Dental Association, sought to unite dentists and, in its early days, did not take a stand on the issue of amalgam safety. The Encyclopedia Britannica reports that "amalgams were not altogether in good repute until after 1895", which suggests that the ADA was supporting the use of amalgams by then.

Despite the efforts of a few researchers in this country and Europe to call attention to the dangers of mercury fillings, most notably a German chemist named Dr. Alfred Stock who published numerous articles prior to World War II, and Hal Huggins, a Colorado dentist who has spoken out against amalgams for the last 20 years, debate about the safety of mercury fillings remained muffled until recently.

The Dental Establishment VS. 60 Minutes

The amalgam safety debate was revived in this country first by a 1989 Environmental Protection Agency declaration that amalgams are a hazardous substance under the Superfund law, and then a December 1990 broadcast of a program by "60 Minutes" that presented a devastation critique of amalgams. The program created a stir throughout the country. "Switchboards lit up at the state dental societies, dental schools, and the American Dental Association," said Consumer Reports. The American Dental Association got calls from two dozen reporters. The publicity was the apparent cause of the following activity in 1991: an FDA hearing; a conference sponsored by the National Institute of Dental Research; and a call for a review of the research by the US Public Health Service.

The dental establishment was furious with CBS. In the January 7, 1991 edition of its newspaper for "the irresponsible ways in which viewers were led to the conclusion that amalgam fillings are unsafe". To the contrary, said the ADA, "scientific evidence...suggests mercury amalgam is safe to use". The ADA newspaper published statements by Dr. Harold Loe, director of National Institute of Dental Research, criticizing CBS for having "an obvious bias" against amalgams. Dentists all over the country received information packets from the ADA, including copies of the ADA newspaper and a 1986 article from Consumer Reports. The ADA also promoted its message in a two-minute video news release sent to 700 TV stations on December 17, 1990, on its weekly radio show on December 18, 1990, and in its journal, the Journal of the American Dental Association.

The 1986 article by *Consumer Reports* pooh-poohed those who criticize the use of mercury in fillings. The article concluded: "Dentists who purport to treat health problems by ripping out fillings are putting their own economic welfare ahead of their patients' welfare... Except for a few people with a genuine allergy to mercury we know of no one who's been harmed by them." *Consumer Reports* published a similar article in May of 1991 which the ADA and the MN Dental Association have also distributed widely. This article criticized research showing that silver-mercury fillings are unsafe and concluded that "amalgam fillings are still your best bet."

"60 Minutes" and the anti-amalgam movement have other critics besides the ADA and *Consumer Reports* - they include the Arthritis Foundation, the Multiple Sclerosis Society, and the ultra-right Accuracy in Media - but no one has more credibility on this issue than the ADA and Consumer Reports. For that reason, it is important for anyone trying to understand this issue to understand the arguments of these two organizations and why their arguments fail. The positions of the ADA and *Consumer Reports* are strikingly similar. They cite the same sources to reach the same conclusion - that critics have not shown conclusively that mercury amalgams are unsafe.

Conclusion

It is our conclusion that mercury toxicity is an autoimmune disorder. This was summarized recently in an article in *Advance magazine*. Its wide range of symptoms can only be accounted for by multiple adverse effects on the immune system, nerve tissue and connective tissue in general. The Mercury/Toxic Metal Sensitivity Questionnaire has now been tested on over 200 patients and will serve as a warning/alert to clinicians when patients have scores of "yes" in five or more of the questions. Such patients should then be referred to dentists with special knowledge of mercury amalgam removal and replacement with nontoxic composites and dental materials.

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Keith W. Sehnert, MD , is in private practice in Minneapolis. He has written or co-authored 14 books and over 200 scientific papers in the field of medical self-care and nutrition. His most recent book is titled *Beyond Antibiotics*.

Gary Jacobson, DDS , is founder of the Airport Dental Clinic near the Minneapolis-St. Paul International Airport and has worked closely with the Huggins Diagnostic Center in Colorado in the field of dental detoxicology. He lectures on the dangers of mercury toxicity and has worked with hundreds of patients with this problem.

Kip Sullivan, JD, is research director for COACT, a citizen organization that works on economic issues in St. Paul. He has suffered numerous health problems including colitis. He had 15 amalgams removed by Dr. Jacobson in 1991 and his "colitis was gone within 2 months". Over the next three years, numerous other symptoms that "first appeared in my teens and twenties have disappeared."

From the *Townsend Letter for Doctors and Patients* Aug/Sept 99