

Biological and Mercury Free Dentistry

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Mercury Free Dentistry:

It is not possible to mention safe dentistry without mentioning the name of the champion of this field of science, Dr. Hal Huggins. Dr. Huggins introduced the problem of dental amalgam mercury poisoning to the public in the early 1980s.

Dental amalgam was introduced for the first time in Paris, France in 1832. In that same year the first case of multiple sclerosis appeared — in Paris, France. Later that same year a new variety of leukemia appeared, need I say — in Paris, France. Thus began the long sordid history of the use of mercury ("silver") fillings (i.e. amalgams) in human beings.

The people especially at risk for mercury toxicity are dentist who place amalgams and their patients who receive those amalgams. Dr. Huggins himself has MS but has lived asymptotically with it for over two decades due to application of his research — a marvelous and inspiring example of the dictum: doctor, heal thyself.

In spending time with Dr. Huggins the first thing I learned was the simple secret of avoiding dental plaque. "Brush with salt" he said, "it will kill the harmful bacteria in 24 hours and you will not be paying to have plaque removal and tooth polishing." Astoundingly simple! No dentist had ever mentioned this little secret to me. Now I simply put a couple pinches of salt on a wet toothbrush and brush.

The next thing out of the oracle's mouth was about his study of the cerebrospinal fluid (CSF) in people with MS before and after amalgam removal. Protein electrophoresis is a lab technique for isolating and identifying proteins in solution. The CSF of people with MS contains proteins which have not been identified in previous research. After amalgam removal these proteins disappear from the CSF. It seems clear that these proteins are released by tissue breakdown induced by mercury toxicity. This explains the consistently good results obtained by amalgam removal when carried out by the Huggins protocol. This and other material is presented in Dr. Huggins new book *Uninformed Consent*, released in early 1999.

Almost every person has at least one dental amalgam. Many people have many dental amalgams, a literal mouthful. The dental profession was at war with itself for many years after the introduction of dental amalgam in 1832.

As a dentist, one's choice is to think for oneself, examine the evidence and follow conscience or blindly hide behind the cover of the American Dental Association (ADA) whose official position until recently was that mercury, although a toxic substance when outside the mouth, somehow magically becomes no problem once inside the mouth. If they admit to the scientific truth of the matter, the law suits will make the tobacco industry suits look like a cake walk. As in any profession, the percentage of people who choose to think for themselves is very small. It is much easier to make no waves, collect the money, and go home.

Research shows that 43 micrograms of mercury comes off of each square centimeter of amalgam in water every 24 hours. In the absence of any specific detoxification methods, it is possible to excrete around six (6) micrograms in 24 hours. Therefore, a person with only around three amalgams is absorbing 37 micrograms of mercury every day. Where does this mercury go? Most of it is inhaled. That is what I said, inhaled.

Mercury sublimates (transforms from solid to gas) easily, goes directly to your lungs and is absorbed into the blood stream. When it arrives in the liver, that organ does what it knows to do to detoxify a poison, it is methylated, that is a methyl group (-CH₃) is attached to it.

Unfortunately, in the case of mercury, this makes it more toxic by a factor of 100. Methylated mercury easily passes into the cells of the body, especially lipid cells including those of the brain, and the cells do what they know to do to protect the rest of the body, they selflessly seal the mercury inside themselves. And there it remains until those cells breakdown at which time it enters the next generation of cells, and so on for the rest of your life.

Intracellular mercury interferes with enzyme function and this disturbs protein synthesis and energy production. This interferes with cell reproduction, causes fatigue, and lowers body temperature, usually more than the thyroid can compensate for. So, people with mercury toxicity are typically tired and have lowered body temperature. Anything less than 98.6 E ° F is abnormally low. In my practice I see people in the 97s, 96s, some even in the 95s. When mercury enters the thyroid gland it lowers the effectiveness of T3 by blocking its action at the cells' receptor sites.

In the extreme, Mercury toxicity can lead to a horrible death. This has come to be called Minimata's disease after a community in Japan which consumed fish contaminated by industrial toxins containing mercury.

145 people were killed in the 1970s as well as many household pets. At the end the person or animal loses all coordination and shakes violently. They become unable to feed or care for themselves in any way.

Dental mercury poisoning is not this severe, but many dentists develop a tremor after a lifetime of mercury exposure. Also, dentists lead the list of professionals in depression, suicide, and most famously in the area of poor financial judgment. This most surely is the result of mercury toxicity. Yet, when you ask the typical dentist about mercury amalgam toxicity, you get the party line: "It is no problem."

Dr. Huggins technique calls for galvanic testing of mercury amalgams before removal. Then no more than one quadrant (i.e. upper left, upper right, lower left, or lower right) is removed at one setting and one setting lasts no more than two hours unless using intravenous sedation. The first quadrant to be removed is the one with the strongest negative galvanic (electrical) charge found in a single amalgam. Before the second quadrant is removed the entire mouth is retested with the galvanometer and the remaining quadrant with the strongest negative charge found in a single amalgam is removed next, and so on. Special ventilation and suction techniques along with ion generators are used to remove as much mercury as possible and thus avoid inhalation by patient and doctor.

Many people, including MS patients, experience abatement of symptoms almost immediately. In the most dramatic of cases, wheelchair bound MS patients stand up and walk right away. This may be hard to believe, but is well documented.

Mercury amalgam removal, however, is not the same as mercury removal. The head of the monster has been removed, but the body remains. Mercury is still located in all cells of the body and a detox procedure is necessary to remove a sufficient amount to allow the immune system to recover. It is important not to engage in crash detoxification procedures. If the mercury is brought out too fast, illness will be the result. It must be brought out with patience. The old medical rule of thumb "Start low and go slow" applies here. Dr. Huggins recommended detox is DMSA given at a dose of 15 mg. Mon.-Wed.-Fri. perhaps for years. He states that all the mercury will not be removed, ever, because we live in the industrial age, but that a critical mass can be removed and allow return of full health. Personally, I have found larger doses of DMSA can be tolerated and removal requires only one to eight months depending on the total body burden — which is determined by the DMPS Challenge Test.

A search of the web for literature references produces overwhelming agreement for Dr. Huggins assertions. No-one who takes science seriously can doubt that dental amalgam mercury poisoning is a serious health problem. In case a dentist tells you mercury is no problem, present him or her with the following references and ask if he/she believes in the value of the scientific literature. If that person does not want to look at the evidence or expresses an uninformed, perhaps emotional opinion, then find an intelligent, thoughtful dentist. Here is the acid test for an informed conscientious dentist: if that person will install metal in a human being, move on in your search for a dentist. Here is the question to ask: "Will you use dental amalgam to repair cavities?" If the answer is "Yes," move on to the next phone number.

Root Canals:

An equally important insult to human health is the invention of the root canal procedure. The "canal" is the passage way for the artery, vein and nerve which supply the tooth. Each root has a canal leading from the pulp to the tip of the tooth from which artery, vein and nerve pass into the jaw.

It is an admirable and noble thought to keep one's own teeth if possible. When the blood supply fails to a tooth and the tooth dies, the system for cleansing the tooth from the inside is lost. It may be possible for the tooth to remain in the jaw if the canal is drilled out and filled. While it may be true that the main canal can be drilled out, sterilized and filled, there is no way to do this procedure on the 70 or so canaliculi which branch off from the main canal. Invariably bacteria are trapped in these canaliculi and there they and their descendants remain for the rest of your life. They are necessarily anaerobic bacteria since they are in a space without a fresh supply of oxygen. They produce substances which are toxic on an order of magnitude 1000 x the toxicity of botulinum toxin. Their toxins can cause a variety of illnesses from heart disease to arthritis. References 68-75 will substantiate these assertions.

Conclusions

It seems clear from these considerations that the use of mercury and root canals in dentistry are simply offensive to good dental profession ethics. Until these two procedures are banished from the practice of dentistry, as a consumer, you should never allow a dentist to persuade you to have either of these procedures. If you have so called "silver" fillings (52% mercury) or root canals, you are best advised to have them removed as soon as possible in the interest of treatment of whatever disorder you may have now and in the interest of prevention of whatever disorder you may develop in the future from these toxic conditions.

Here in summary form are the essential assertions of mercury and root canal free dentistry accompanied by literature references in cases where there can be any argument. I am indebted to Dr. Robert Gammal and Mr. Leif Hedegard for the organization of this information.

1. Dental Amalgam contains about 50% Mercury. (undisputed)
2. Mercury has been scientifically demonstrated to be more toxic than Lead, Cadmium, or even Arsenic. (undisputed)
3. Mercury leaves dental amalgam continuously throughout the lifetime of the filling.(7)
4. Mercury vapor is the main way that mercury comes out of amalgam.(31)
5. Mercury vapor is absorbed at a rate of 80% through the lungs into the arterial blood. (31, 55)
6. Mercury is cytotoxic. i.e. it kills cells (undisputed)
7. There is NO harmless level of Mercury Vapor Exposure. (63)
8. Mercury from amalgam binds to -SH (sulfhydryl) groups. These exist in almost every enzymatic process in the body. Mercury from amalgam will thus have the potential of disturbing all metabolic processes. (25, 33,60).
9. Mercury from amalgam is transported freely via the blood.(19,34,35,)
10. Mercury vapor is absorbed directly into the brain. (34, 55a)
11. Mercury from amalgam will result in a slow build up of mercury in body tissues. (20,26, 34)
12. Mercury crosses the blood brain barrier. (34,55a)
13. Mercury is implicated in the pathogenesis of Alzheimer's Disease. (67,68)
14. Mercury from amalgam is stored in the fetus and infant before the mother. (20,61)
15. Mercury from amalgam is stored in the breast milk and the fetus up to 8 times more than the mother's tissues. (18,19)
16. Mercury (Mercury Vapor / Methyl mercury) crosses the placenta.(18, 31)
17. Mercury Crosses into breast milk.(18,31,61)
18. Mercury will severely reduce reproductive function.(2, 3, 4, 20, 22, 24, 31, 37,38, 39, 40, 41, 49)
19. Mercury rapidly depletes the immune system.(27,34,35,42,43,44,45,46,47,48,60)
20. Mercury will induce a number of Auto Immune Diseases.(27,34,35,42,43,44,60)
21. Mercury will cause an increase in number and severity of allergies.(1,34,60)
22. Mercury from amalgam is stored principally in the kidneys, liver and brain. (1,20,31)
23. Mercury from amalgam (shown in animal experiments) causes kidney damage.(59)

24. Mercury from will cause a 50% reduction in Kidney filtration as shown in a study of sheep after amalgam placement.(59)
25. Methyl Mercury is 100 times more toxic than elemental Mercury. (undisputed)
26. Mercury from amalgam is methylated in the mouth.(51,53,54,)
27. After chewing, Mercury Vapor levels will remain raised for at least another 90 minutes. (1,15,16,18,47)
28. Mercury from amalgam will migrate through the tooth.(25,27,30)
29. This rate of migration is increased if a gold crown is placed over a tooth filled with amalgam. (27,30)
30. Teeth are living tissue and are a part of our bodies. (undisputed)
31. Teeth have a massive communication via blood, lymph and nerves with the rest of the body.(34)
32. Mercury from amalgam is absorbed into the body at a rate of 3 to 17 mcg / day. (WHO 1991 Criteria 118)
33. Mercury release is increased by; increases in temperature, friction & increase in electrical currents.(28,31,56)
34. Mercury from amalgam will enter the body as elemental mercury, inorganic mercury, vapor, charged mercury ions.
35. In the Brain, Mercury from amalgam is stored preferentially in the Pituitary Gland and Hypothalamus.(20,34)
36. Micro-Mercurialism is principally characterized by Neurological symptoms.(34)
37. Mercury is transported along the axons of nerve fibers.(33,34,50)
38. Mercury from amalgam may be stored in every other cell in the body. Each area affected will produce its own set of symptoms
39. Mercury binds to hemoglobin in the red blood cell thus reducing oxygen carrying capacity.(1,16,17,21,26,35)
40. Mercury damages blood vessel reducing blood supply to the tissues (micro-angiopathies).(34)
41. Amalgam fillings produce electrical currents which might be injurious to health. These currents are measurable in Micro Amps. The Central Nervous System (Brain) operates in the range of Nano-Amps this is One Thousand times less than a Micro Amp.(28)
42. Dissimilar metals in the mouth [eg Gold & Amalgam] will produce higher electrical currents.(19,30)
43. Mercury from amalgam (shown in animal experiments) will induce Antibiotic Resistance and Mercury resistance in bacteria in the mouth and Gastrointestinal tract.(58)
44. Brain levels of mercury are in a direct linear proportion to the number of Surfaces of amalgam fillings in the mouth.(1,19,25)
45. The level of Mercury, in brain tissue of fetus's, new born, and young children, is proportional to the number of amalgams in the mother's mouth.(61)
46. Mercury will cause single strand breaks in DNA.(41,42)
47. Mercury levels in the body can not be assessed by either blood or urine levels. (26)
48. Mercury from amalgam fillings is the single greatest source of dietary mercury for the general population. (W.H.O. Criteria 118., 1991).
49. Dental personnel are severely effected by exposure to mercury. (3,13,49)

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