For Immediate Release

NEW EVIDENCE CORRELATES CHRONIC FATIGUE WITH COMMON DENTAL MATERIALS

EXECUTIVE SUMARY

Chronic fatigue now affects a large percentage of the general public. A 20% increase has been noted in the past 20 years. There must be reasons. The Toxic Element Research Foundation has investigated this problem for the past ten years. Mercury escaping from common "silver" colored fillings, combining with hemoglobin at its oxygen carrying site, limits oxygen transport and has been suggested as a potential causative factor. So, why not get rid of the silver-mercury fillings? That sounds simple enough. However, improper filling removal has been shown to upset the system resulting in onset of new diseases.

Mercury from fillings has also been related to interfering with the primary energy molecules called heme and ATP (adenosine triphosphate) formation. Mercury interference monitored by studying "porphyrins" found in the urine point to mercury as the culprit. The molecule heme is supposed to become either hemoglobin or stimulate the formation of ATP which supplies most of the entire demand for energy in the body. Mercury interference causes porphyrin, the precursor to heme formation, to be excreted in the urine. Result? Lower energy for all body reactions as well as interference in maintenance and repair of worn out tissues.

Mercury also has an affinity to bind to thyroid hormone rendering it available to be counted in blood tests, but inactive as far as function is concerned. Increased energy can be observed within a week in many clients, but, more importantly, the problem could have been avoided by not placing the world's most popular tooth filling material – dental silver-mercury amalgam.

CHRONIC FATIGUE – AS A RESULT OF DENTAL FILLINGS

With 63.1% of 1320 clients in 1988 reporting the presence of chronic fatigue, and that being one of their most aggravating problems, that figure, by 2009, has grown to over 90%. That much increase makes it a top consideration to be investigated as to possible contributors to that condition. We would all like more energy, wouldn't we? What if that could be achieved – or better yet – prevented in the first place?

Recognition of the problem is far beyond epidemic proportions. Chronic fatigue led to an almost decade of investigation. Epidemic, by definition is greater than 5% of the population. By way of contrast, 'endemic' approaches involving almost the total population. The following is the story of how this complex problem is approaching endemic proportions that has a simple solution. One can monitor blood changes related to dental material and determine what changes need to be instituted.

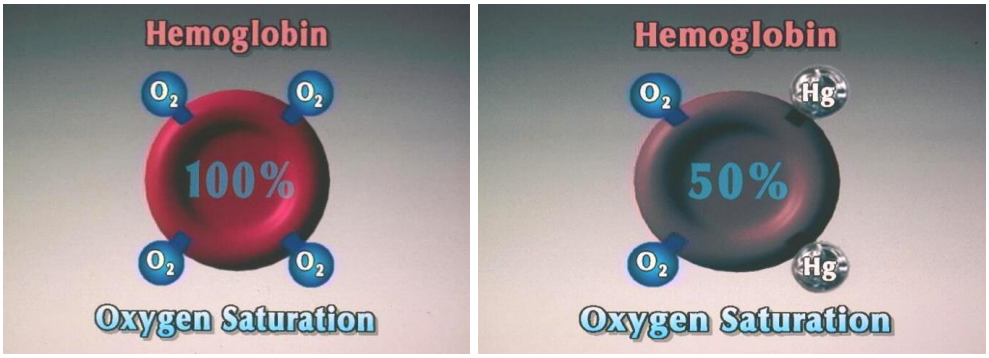
What is "energy", anyway? Basically, it is the utilization of oxygen, although that's not the whole story. So where does oxygen come from? Air. Air contains 19 to 21% oxygen depending on whether you live at sea level or on top of a high mountain. Can you absorb oxygen from air more efficiently? Yes, by altering the cell membrane's ability to absorb. But this involves removing the interferences to the activity of that cell membrane.

What other major factors are involved? How much oxygen a red blood cell can transport for one thing. Looking deeper, how much oxygen can hemoglobin molecules within the red blood cells transport? Here was found a frequently overlooked, but controllable factor. It involved a primary concept of physics. Two objects cannot occupy the same space at the same time.

Hemoglobin molecules contain 4 "binding sites", or seats upon which oxygen is carried. Oxygen is picked up in the lungs by hemoglobin molecules within the red blood cells, and then transported throughout the body. When passing a tissue that is lacking adequate oxygen, oxygen jumps

off of its hemoglobin binding site and runs to supply energy to the needy tissue. Hemoglobin with empty seats then returns to the lungs via veins, and gulps down more oxygen for the next trip.

Unless! Herein lies the origin of the basic problem. Mercury escapes from "silver" colored dental amalgam fillings 24/7. That mercury can go from the fillings, via inhalation, directly into the lungs where it can enter red blood cells and look around for a seat on the hemoglobin bus. Mercury likes those seats, and can stay on that seat until that particular hemoglobin molecule reaches the end of its life span (120 days total life span of a red blood cell). During this time, no oxygen can ride on that seat (binding site). A blood test for hemoglobin may show adequate numbers of hemoglobin molecules, but fails to report that not all the seats are saturated with oxygen. There are 4 binding sites per hemoglobin molecule. Say that 2 of those sites are filled with long term mercury atom passengers. That means that you are carrying only half the amount of oxygen that you should be carrying. Like being a quart low on blood. Do you think you might notice that? That could definitely contribute to chronic fatigue.

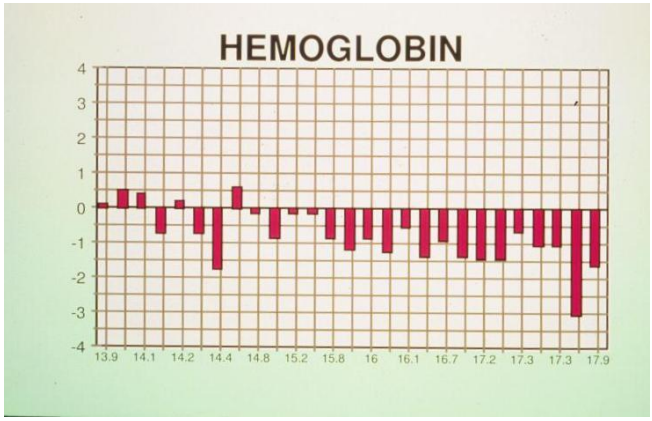


Can that process be reversed to provide more space for oxygen? Yes, it can. How? By removing the source – dental silver mercury amalgams. Well, sort of. If one just has mercury amalgam fillings removed randomly, and replaced with a 'white' filling high in aluminum compounds, it was found that within 6 months, 63% of those people developed a disease they did not have prior to amalgam removal. Not a good trade off.

Another interference to oxygen transport appeared. Silver-mercury amalgam fillings (50% mercury by weight) are like tiny batteries. The combination of 5 metals and 16 corrosion products in a single filling generate electrical current in an electrolyte like saliva.

If fillings are removed "sequentially", that is, the negative charged fillings removed first, and then the positive electrically charged fillings removed next, the hemoglobin levels responded. Responded? Yes, but not always in the way expected.

The hemoglobin levels often dropped dramatically.



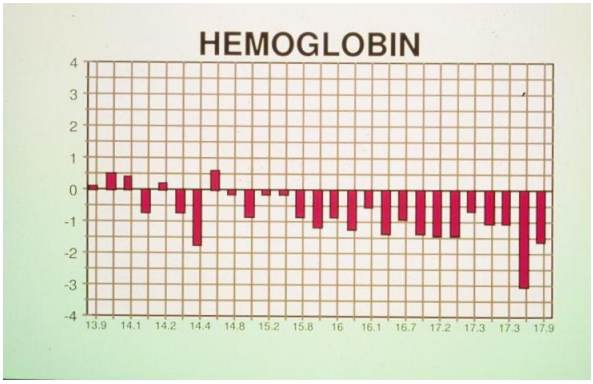
When the change line drops below the starting point, there are less red blood cells than initially.

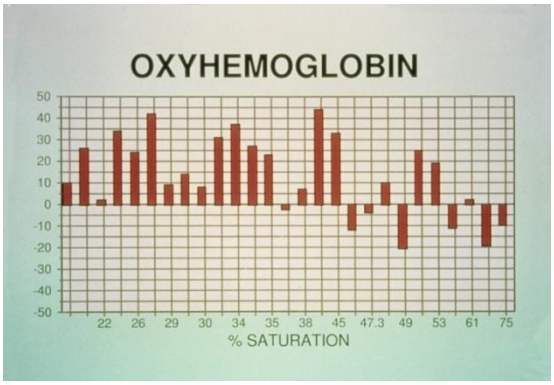
What happened to these people? Surprisingly, their energy levels went UP. Logic would suggest that less red cells would mean less oxygen transport.

How in the world can energy levels go up when oxygen transport goes down? It didn't make sense, but, remember, the body has innate wisdom. What wisdom was missing? It took another 2 years to find that another test – called oxyhemoglobin – actually measured the amount of oxygen saturation. At first, failure plagued the studies, until it was found that VENOUS saturation, not arterial needed to be observed. How much was left over after general house-keeping duties was what was important.

Conventionally, oxyhemoglobin is tested on ARTERIAL blood. This shows the "full tank" version of blood oxygen, not how much was being used for living at rest. That was the missing data needed.

When sequential removal – negative current fillings removed first – was used, the body somehow selectively dumped large amounts of mercury-laden red blood cells, leaving a higher percentage of oxygen-laden hemoglobin.





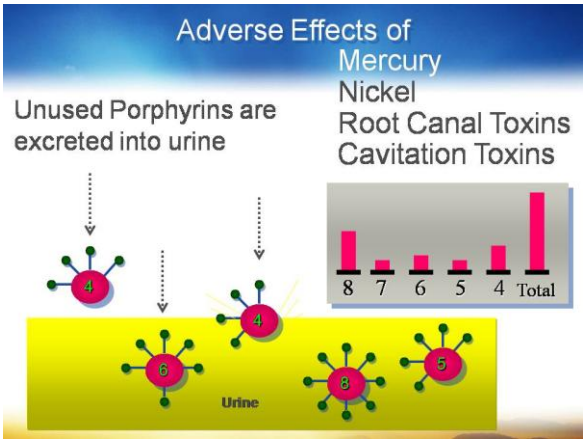
Simultaneous tests showed that mercury excretion in the urine was increasing as hemoglobin went down and oxyhemoglobin went up. Do the math. It all added up. The body was selectively getting rid of red blood cells contaminated with mercury, while the overall concentration of oxygen was increasing due to higher saturation of brand new, uncontaminated red blood cells. More reason to eliminate placing silver-mercury fillings in humans. Within a few weeks, the hemoglobin level went back up, and even more energy appeared as more hemoglobin carried even more oxygen.

All this led to another in-depth investigation – where does hemoglobin come from? A sort of where do babies come from of the blood chemistry world. That led to a world of big words, but a greater understanding of the role mercury was playing in chronic fatigue.

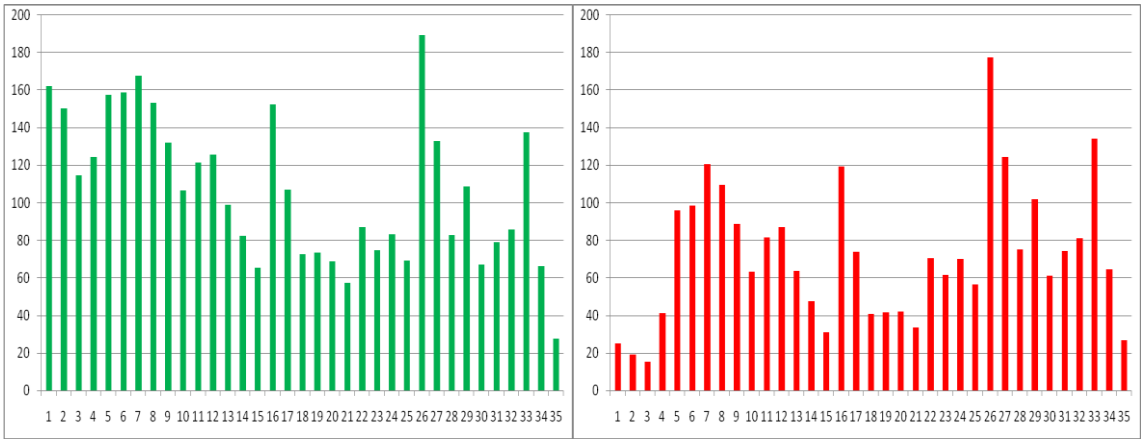
Heme is the active character in this scenario, so what's a heme? Something that combines with globin, obviously, but where does heme come from, and what does mercury have to do with this magical combination? There is a new kid on the

block of investigation, and it's name is "porphyrin". Porphyrin is a molecule that has 8 smaller chemicals attached onto it. Remove all 8 of the side riders, and you have heme. Aha!

Now comes the interference from mercury. As we travel from 8 side riders to 7 to 6 all the way to zero, the resulting compound is called heme -- unless things happen along the way. Should an atom of mercury from a filling side swipe a porphyrin while transforming from 8 to 7 etc, the battered porphyrin is immediately dumped into the urine. There goes your energy – literally down the toilet.



As is seen from the pictures, not only is mercury a source of heme reduction, but nickel (according to dental laboratories is now used in crowns over 85% of the time to replace more expensive gold) does the same thing. Add to the fact that toxins from anaerobic bacteria in root canals and cavitations also cause porphyrins to be excreted in the urine. Does dental revision (removal of all dental toxic materials) create a change here? Let us see.



Before After

It is reasonably obvious that if this much hemoglobin parentage is being forced out in the urine by dental toxins, it is no surprise that chronic fatigue improves dramatically upon proper mercury dental revision.

Low thyroid function is also blamed for low energy levels. Is there yet another connection? Absolutely. Dr. Patrick Stortebecker (MD, PhD) in Stockholm, Sweden did studies in 1962 in which he implanted silver-mercury fillings into dog's teeth. Only he used radioactive mercury as a tracer. He was able to find radioactive mercury in the dog's thyroid glands within less than 4 minutes of filling placement. One may assume that if a mercury filling has been in the mouth over 4 or 5 minutes, there may be a reduced functioning thyroid gland present, or in the making. Mercury binding to thyroid hormones renders them non-functional, but able to be counted as "present" to thyroid test analysis. This is why the tests often show adequate amounts of hormones, but fail to register the activity. Activity is what you feel. Or don't.

No matter whether chronic fatigue is due to mercury from fillings occupying oxygen carrying spaces, mercury causing the precipitation of porphyrins, thus destroying heme, or mercury contaminating thyroid function -- or a combination of all, mercury is not a friend where chronic fatigue is concerned. The Toxic Elements Research Foundation believes it is a correctable problem.

About Toxic Elements Research Foundation

TERF, a non-profit research foundation, is dedicated to stimulating interest in the research community as well as informing the public to become aware of potential problems associated with dental materials and procedures. Informed consent of potential problems makes for better informed decisions by the patient – especially where health is at risk.